
A Submission to the

**Panel Coordinator
Planning Panels Victoria
Department of Sustainability and Environment
PO Box 500, East Melbourne,
Victoria, 8002.**

in relation to the

**Port of Melbourne Corporation
Supplementary Environment Effects Statement
Channel Deepening Project**

from the

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*to: Panel Coordinator,
Planning Panels Victoria,
Department of Sustainability and Environment,
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Please find attached a submission from the SCUBA Divers Federation of Victoria (SDFV) in relation to the Port of Melbourne Corporation Supplementary Environment Effects Statement (SEES) for the proposed Channel Deepening Project (CDP).

The SDFV was a member of the Project Stakeholder Advisory Committee (PSAC) and we are well versed with aspects of the project. We are also aware of the polarized views within the community in relation to the identification and treatment of the environmental risks associated with the project. We are not aligned with any particular community or business faction, and our submission is made on an independent basis.

The SEES is a vast document, although well structured. However, we are compelled to protest against the unreasonably short time of the Public Exhibition. We suggest the short time frame for scrutiny of the SEES as simply unnecessary, and well outside community expectations.

In summary, the SEES describes the CDP design in detail and provides an assessment of the environmental risks. However, we recognise that there is considerable subjectivity in the cost-benefit considerations in the SEES, particularly in relation to environmental impacts. Our conclusion is that as a society, we lack the tools to properly measure project value against true environmental costs, and therefore we can not objectively reconcile acceptable levels of the cost-risk nexus. In our submission, we propose, (as we did to PSAC), that the Proponent be subject to an Environmental Bond as surety against design and protection regimes biased towards lower project costs.

We articulate our thinking in our submission. We trust that our views will be considered in the honest and open spirit in which they are given.

We thank you for the opportunity to comment.

Dr John M. Hawkins,
Chairperson, and
Vice-President – Statutory
SCUBA Divers Federation of Victoria, Inc.

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Introduction

This is a submission from the SCUBA Divers Federation of Victoria (SDFV) in relation to the Port of Melbourne Corporation (PoMC) Supplementary Environment Effects Statement (SEES) for the proposed Port Philip Bay Channel Deepening Project (CDP).

About us and our interest

The SDFV is an affiliation of non-commercial recreational SCUBA diving clubs and associations throughout Victoria. We are a volunteer organisation and we have been providing peak-body representation of the interests and community values of recreational divers since 1964. We have conducted an active interest in the CDP since original inception. Recreational SCUBA diving is identified in the SEES as an activity directly affected by the proposed CDP, and the ramifications of the project on the marine environment and our rich underwater heritage are of critical interest and concern to our members.

Our previous position (EES response)

In the SDFV submission to the Environmental Effect Statement (EES), we confined our position to the view that on the *face-value* basis of the information provided (in the EES), we agreed with the conclusion (in the EES) that, in all likelihood, recreational diving would be affected by the proposed CDP on a temporary basis. We voiced our suspicions as to the rigour of rationale underpinning the project and the conclusions in the EES. However, we made no strong comment in relation to the wider environmental risks, principally on the basis that we did not have access to the level of subject-matter expertise needed to confirm or refute the conclusions in the EES. We took the view that the PoMC assessments in the EES could be relied upon, since, as a government instrumentality, balanced objectivity would have been applied under a common-good ethic. The Panel of Inquiry subsequently exposed the deficiencies and disingenuous aspects of the EES, and with it shattered some of our faith in public-service objectivity.

Context of this submission

The SDFV is identified in the SEES as a stakeholder. We were a member of the Project Stakeholder Advisory Committee (PSAC) established by the PoMC after the EES. We have attended all meetings of the PSAC. We are happy to admit that the PSAC forum was very valuable (to us) in terms of exposure to issues in relation to the CDP wider than our diving perspective.

We therefore make this submission in the context of being a member of the PoMC Project Stakeholder Advisory Committee (PSAC) and having an improved understanding of the complexity and details of the CDP compared to our understanding of the EES. That said, the SEES is a vast document with considerable amount of technical content. As a volunteer community group, we do not have the resources to be able to objectively understand and interpret the detailed scientific aspects of the SEES, although we are very much aware of the polarized views in respect to the environment effects associated with the project. In terms of assessment, we are still largely constrained as we were with the considering the EES, although now less inclined to accept claims and assurances at face value.

This submission is made in good faith with the admission that our understanding and point of view may be inadequate or invalid. We apologise in advance if this is the case, and we welcome any future opportunities to improve our understanding and knowledge of the CDP.



The SEES

Our overview

The SEES is a stand-alone document which includes relevant EES information and the new information developed as a result of considering the SEES Assessment Guidelines issued after the Panel of Inquiry report. The Guidelines recommend a structured approach to the (re-)consideration and refinement of project design and environmental modelling, and the use of more robust risk-assessment methodologies. We acknowledge that the Guidelines were not mandatory requirements, although we are aware there is a strong community expectation that the SEES should reflect a well-integrated, reasoned, evidence-based appraisal of the environmental effects of the CDP on the basis of the matters identified in the Guidelines.

In general, we concur with the PoMC claim that the SEES has been prepared in accordance with the SEES Assessment Guidelines. The SEES is well presented as a logically structured and ordered document, with both the purpose and intent of investigations in the context of an evaluation framework clearly articulated. The SEES is a substantial and vast document in both volume and content. The Main Assessment (Volumes 1 to 3) is reasonably accessible (in terms of readability and content), given the technical complexity of the subject matter. By comparison, we found the technical appendices more difficult to access in terms of logical structure, indexing and content threads (given the temporal fragmentation of the reporting). There is much important information in the technical appendices. We harbour the suspicion that the 'un-helpful' compilation of the scientific and technical data has been to deliberately hinder timely scrutiny.

Inadequate Exhibition time

We note that the environmental assessment process lists a period of 'at least 6 weeks' for public exhibition of the SEES (*Attachment 1, page 5*). The SEES document is massive and thus takes time to digest and assess. Indeed, we challenge anyone independent of the Proponent (even the new Panel) to be able to properly consider the SEES on an individual basis in 30 business days. We therefore fail to see why the Public Exhibition period was limited to 6 weeks unless it was designed to thwart serious scrutiny of the SEES. Given the magnitude of the CHP (and the inadequacies of the EES), we can see no downside in allowing a longer public comment period other than delaying approval. If approval is foregone, any argument that the general community can rely on the 'common-good ethic' of public-service departments (*i.e.* authorising agencies) to objectively assess the SEES on merit is moot, and the entire process is merely staged. If approval is not foregone, proclaiming the minimum exhibition time on the basis of avoiding delay should the project be authorised allows for the project to be erroneously approved because of insufficient time to identify inadequacies of the authorizing requirements. We conclude that the exhibition period is inadequate and not in the public interest. We certainly would have found a longer Exhibition period productive in terms of better appreciating the detailed scientific and technical dimensions of the SEES. We have considered the details of the SEES to the best of our ability in the available time.

Our Stakeholder issues

Effects on recreational diving

The SEES identifies that recreational SCUBA diving in Project Areas 3 & 4 will be directly affected by the CDP (*Section 13.13*). The SEES concludes that diving activities will be affected and curtailed in two ways: (i) the loss in water visibility caused by the dredge plume from works in South Channel West and the Great Ship Channel, and (ii) access restrictions to premier dive sites within the Entrance area.



It is determined that the effects on divers will be ‘moderate’ for the duration of the dredging (*page 13-132*). However, we object to the classification of ‘moderate’. We understand its origin, but suggest the subjective and qualitative nature of the social assessment as misleading. The affect on diving activities in the area is ‘definite’, and considerable. The SEES also predicts that there will be a minor effect on divers in terms of loss of site attractiveness in the Entrance area due to rock-fall. All identified impacts are determined to be short-term and localized, with no long-term effects.

In general, we agree with the reasoning in relation to water clarity. In the narrow focus of the social utility impact on divers, we agree with the conclusion in the SEES that diving activities will generally be curtailed or stopped in Project Areas 3&4 on temporary basis during dredging works. However, we suggest that the dredge plume from works in South Channel East will also directly affect diving activities (in Project Areas 3&4) due to poor visibility. We know this because of the effects of previous maintenance dredging in the area. In this context, we suggest that the periods of poor visibility that will curtail and prevent diving activities are likely to be longer than postulated in the SEES. We acknowledge that mitigation steps are proposed (such as dredge scheduling) to reduce the impact of the CDP on diving activities. Given that we believe that reduced access and opportunity will be ‘severe’ to those affected, we encourage the PoMC to further micro-manage access opportunities in the Entrance area to allow recreational diving activities at appropriate times during periods within the indicative schedule.

We accept the rationale for safety and no-dive zones during works in the Entrance. We assume from the ambiguity of the descriptions (*page 13-131*) that a safety zone is in fact a no-dive zone (*i.e.* there are two types of no-dive zones). On this basis, we inquire as to whether the intent of the safety zone is also to act as a no-boating zone, since in the trial-dredging there was a total exclusion zone. If it is, we assume that it will be used on a common-sense basis, and will not prohibit access to dive sites outside the restricted zones. For instance, if the safety zone was to be a no-boating exclusion zone and prevented the safe transversal of the Heads to an alternate dive site, then the impact and effect of the CDP on diving is larger (major?) as one of the assumed mitigation strategies (*i.e.* alternative dive site) becomes ineffective.

We note with some disappointment that in considering the economic and financial impacts on the diving industry (*Section 13.20*), the SEES really only considers the effects in terms of diving business. We agree that commercial providers of SCUBA diving services will be financially disadvantaged by the CDP. However, we point out that the largest proportion of diving in Victoria occurs through private and non-commercial clubs and societies (*i.e.* our constituents). Effects of the CDP identified as directly affecting commercial business also apply to the viability of clubs and associations operating around the Heads area. Clubs need dive activity to survive, and not all clubs can relocate to alternative dive locations, particularly on a sustained basis as would be needed over the duration of the CDP in Areas 3 & 4. The SEES has not identified that clubs believe the CDP will lead to reduce membership recruitment and retention due to significant decreases in local diving activity caused by the CDP.

In summary, SCUBA diving businesses and dive clubs alike operating in the area will be disadvantaged by the works, and we support and encourage measures to mitigate the impact of the project on the entire diving fraternity. We urge the PoMC to consider including as many recreational divers as possible (and not just commercial businesses) if and when considering assistance options.

The claim of no long-term effects on diving

In the language of the SEES, we note the (slight-of-hand) interchange between the effect on diving activities and the effect on (quality of) diving. We concur that diving activities will be directly affected by the CDP, and we agree with the conclusion that the effect of the CDP on diving activities will be temporary, but we hold that the effect will probably last longer than suggested in the SEES.



We hold that this is different from the effect of the CDP on the quality of the diving. We agree that the SEES sufficiently establishes that the CDP will have short-term effects on the quality of diving in the area. However, on the basis of the information provided in the SEES, we do not concur with any interpretation that the SEES has established that the CDP will not have any long-term effect on the quality of diving. In fact, we can not find (in the technical detail) the basis for the conclusion that there will be no long-term effect of the CDP on the quality of diving other than that which extends from the claim in the SEES that 'no long-term effects on the health of the bay have been identified' (*Executive summary, page ES34*). At best, the SEES could propose that it is *unlikely* that there will be any long-term effect on the quality of diving in Project Areas 3 & 4 arising from the CDP.

Our view on the 'integrated' context of the SEES

By our simple logic, the current environmental status of the Bay arises from a relatively long period of complex interactions of the various processes of the Bay (chemical, ecological, environmental, hydrodynamic, *etc*) in the absence of a large and sustained perturbation (such as that represented by the CDP). The SEES provides some models of the complex processes (although a single model is not developed) which are then used to predict or estimate various effects caused by the CDP. The SEES provides no guidance as to the extent (*i.e.* degree) of validity of using separate and representative process models to claim a unified cause and effects picture. For example, turbidity outputs (extracted from hydrodynamic models) were to provide means to assess the plume affect on low-level biotic processes. Yet, separate, unrelated (to the hydrodynamic conditions) laboratory-based experimentation has been used to postulate low-light effects on the food chain caused by a dredge plume. We are also alerted to the admission that the use of modelling is limited due to the general lack of data, and that in the absence of input data for a given effect, reliance on the model output is assumed on the basis that the model output can adequately represent some other parameter (*page 10-11*). We must have some faith in the peer review process undertaken during the preparation of the SEES, but we note the SEES appears to contain a number of self-serving assumptions, interpolations and promotions in the absence of sufficiently suitable data. For instance, a number of hydrodynamic models were sufficiently developed to allow predictions of plume behaviour, and the validity of the model verified by collation of the predicted levels of turbidity with actual turbidity levels measured during the trial dredging. The SEES contains plume modelling in the Yarra river channel, and it is implied that the outputs have been verified by the trial dredge, yet there was no trial dredging in that area (the trial dredging in the north was limited to Port Melbourne Channel).

As far as we can determine, the adequacy and validity (*i.e.* appropriateness) of the modelling is critical to the entire SEES. For instance, the hydrodynamic modelling delivers segment and suspension mass transport predictions, and is the basis the postulating the extent of the works in relation to perturbations in existing environmental conditions and loads. Of particular concern is the espoused risk management regime to address identified environmental issues in relation to the disturbance and relocation of significant amounts of contaminated and toxic material during works in Area 1.

Our view on the risks and uncertainties

We can only have a layman appreciation of the methodologies and means by which the Proponent has assembled an integrated, evidenced-based risk assessment of the environment impacts of the CDP to allow the conclusion (in the SESS) that 'no long-term effect on the health of the bay has been identified'.

In our time on the PSAC we have become aware of the polarized views in relation to claims about 'best practice', risk assessment, and the possible risk management and mitigation regimes associated with the CDP. As we understand it, risk assessment is a handy tool to identify and plan for risk prioritisation, removal or mitigation. However, as far as we can see, risk assessment is no guarantee of prevention. Further, risk prioritisation implies subjectivity in terms of assigning acceptable risk.



In the case of the SEES, (lower) costs are proposed over better environmental outcomes in at least three areas: (i) dredge technology in the Entrance (*page 7-37*), (ii) a jumbo TSHD instead of a midsize TSHD (*page 7-45*), and (iii) toxic and contaminated material handling (*Section ES17 and throughout Section 7*). We appreciate that under contemporary socio-economic conditions, environmental protection is ‘not at any cost’, and the project design is a balance between the costs of works and the degree to which environmental concerns are addressed. Further, we believe it is reasonable for the Proponent to develop rationale supporting lower project-costs options. However, we recognise that there is considerable subjectivity in the cost-benefit considerations in the SEES.

We point out that in the case of the CDP, the Proponent does not face any penalty (before the fact) for an inadequate risk assessment or an flawed environmental risk management regime. That is, there is no consequence on the PoMC if the CDP does damage, and thus devalues, the environment. Therefore, there is no real incentive for the PoMC to act in the best interests of the environment. In fact, we suggest that the lack of direct consequence on the Proponent encourages ‘short-cut’ compromises (albeit on a cost/benefit argument) on the basis that any remedial or restitution costs imposed after the fact can be separately ‘risk’ managed.

The primarily purpose in assessing the SEES therefore becomes one of testing the appropriateness and adequacy of proposed environment protection measures generally, and not just against the narrow framework in which the measures may have been developed. As a community group, we have to trust that the authorizing agencies have the capacity to do this. We have some doubt of this simply because as a society we have no tools (or practice) in properly measuring the *value* of a project which might risk the environment against the future cost of environmental damage (Global warming is an obvious case in point). In the absence of an equivalent way to value project price against true environmental costs, it is not possible to objectively determine which is better - lower project cost, or higher environmental protection - for a project such as the CDP.

Our Environmental Bond idea.

The SDFV presented to PSAC the idea of an ‘Environmental Bond’ as a simple ‘community’ remedy to the inherent ‘risk’ of subjective cost/risk choices in relation to environmental assessments.

We suggest that the community should require the PoMC to post an Environmental Bond as a pre-condition to the project. The Bond should be substantial in relation to the project cost, and is to be forfeited (to the community) in the case of significant environmental damage which could have been avoided by improved (higher cost) project design and risk management. The Bond could not be used to fund remedial or restoration works resulting from the CDP. The Bond could be held for a reasonable period (say 5 years) during which time, ongoing monitoring of the status of the Bay would be used to determine the extent of any longer-term effects of the CDP.

If the SEES is sound, and there really ‘are no long-term effects on the health of the Bay’, the Bond is not at risk. The Bond is not additional cost to the project (save for the argument of foregone interest on the bond value). The Bond merely acts as a surety on the PoMC in relation to their subjective cost/benefit determinations. More importantly, such a Bond would be progressive in societal terms as a precedent in establishing a meaningful nexus between project economics and environmental worth, as well as establishing a new community ‘environment protection’ benchmark to be applied to projects which exploit our shared environmental resources.

We recommend the Panel give serious consideration to the concept.