

9 Summary and Conclusions

This Detailed EIA Report has assessed the potential environmental impacts associated with the proposed development of an Integrated Petroleum Hub and Maritime Industrial Park at Tanjung Piai, Johor, Malaysia. The assessment has covered the impacts arising from the construction and operations of the proposed project, including the reclamation of land, capital dredging, and construction of the marine and onshore facilities and finally the general operations of the Park.

The assessment of impacts is based on a review of the project activities as described by the Proponent and addresses the issues identified during the EIA scoping phase as presented in the revised Terms of Reference. The assessment acknowledges that any development will have effects on the biophysical and socioeconomic environment of both a negative, and in some cases, a positive nature.

The location of this project places it in close juxtaposition to a number of environmentally sensitive areas of which the most notable are the internationally recognised Ramsar mangrove wetlands along the adjacent coastline which are also National Parks or Forrest reserves, seagrass and coral reef habitats to the north and north east, and the nearby rural communities.

The nature of the reclamation is such that it will lead to an irreversible change in the area to be developed. The original physical, biological resources and productivity within the project footprint will be lost permanently and this not only represents a loss of habitat but also an import fishery resource critical to local communities. In addition, the reclamation footprint may also introduce some changes in the associated hydrodynamics and sedimentation processes that may further impact the coastline. The coastline adjacent the project is actively eroding and this is leading to the destruction the mangroves at the seaward fringe within the Ramsar wetlands. It is concluded, however, that the reclamation to create the Park will diminish, if not reverse, this erosional process and facilitate the restoration of the mangrove habitat.

The quantitative risk assessments carried out for the Project has determined that the buffer zone of 300m from the Park boundary is sufficient to accommodate the required safety separation between the Park and other land uses.

Some risks have been identified with respect to maritime navigation and operations but with suitable mitigation measures as proposed the residual risk are considered acceptable.

Most of the residual impacts which remain of moderate significance are socioeconomic impacts due to the loss of fishing grounds, the need to use imported labour and the economic transformation of the region from a rural (agriculture and fishing) to an urban and industrial economy. Although the impacts to these directly affected group of stakeholders is potentially high, given the predominantly positive response of the local inhabitants and fishermen to possible compensatory mitigation measures, the overall socio-economic impacts are assessed as of moderate significance. In addition, the Project will result in a number of strong positive impacts that will benefit the government and people of Johor on a broader scale.

In conclusion, the DEIA study has found that, with the incorporation of the recommended mitigation measures and implementation of an Environmental Management Plan, and an associated Corporate Social Responsibility program the Project can be implemented with acceptable environmental impacts and risk.

