

Maintenance Dredging at Port of Townsville

Authors : Mohamed Jadtager, Julie Lovisa, Nagaratnam Sivakugan

Abstract : The Port of Townsville conducts regular annual maintenance dredging to maintain depths of its harbor basin and approach channels for the navigational safety of the vessels against the natural accumulation of marine sediments. In addition to the regular maintenance dredging, the port undertakes emergency dredging in cases where large quantities of sediments are mobilized and deposited in port waters by cyclone or major flood events. The maintenance dredging material derived from the port may be disposed at sea or on land in accordance with relevant state and commonwealth regulations. For the land disposal, the dredged mud slurry is hydraulically placed into containment ponds and left to undergo sedimentation and self-weight consolidation to form fill material for land reclamation. This paper provides an overview of the maintenance dredging at the Port of Townsville and emphasis on maintenance dredging requirements, sediment quality, bathymetry, dredging methods used, and dredged material disposal options.

Keywords : consolidation, dredged material, maintenance dredging, marine sediments, sedimentation

Conference Title : ICOHE 2014 : International Conference on Ocean and Harbour Engineering

Conference Location : Melbourne, Australia

Conference Dates : December 11-12, 2014