

10.0 SUMMARY & CONCLUSIONS

10.1 INTRODUCTION:

Chennai Port is one among the twelve major ports in the country and 2nd largest Port in terms of cargo handled. This gateway port for all cargo has completed 130 years of glorious service to the nation's maritime trade. Chennai Port is located at latitude of 13° 06' N and longitude of 80° 18' E on the southeast coast of India and in the northeast corner of Tamil Nadu. The Port serves the geographical regions of Tamil Nadu, Pondicherry, South Andhra Pradesh and parts of Karnataka and has now emerged as hub on the east coast of India. Major commodities being handled at the Port are Containers, Automobiles Exports, POL and general cargo items. Though it is about 600 nautical miles away from the international maritime route, because of its location, proximity to market, competitive pricing, safe and secure operations this is one of the preferred ports for the trade.

10.2 PROPOSED PROJECTS:

The Chennai Port proposes to develop/improve of Infrastructure facilities as per Business Plan (Master Plan). The proposed developments in Chennai Port envisage the following:

- Improvement to the existing Jawahar Dock (East) Berths for handling bulk cargoes – modernization
- Improvement to the existing Bharathi Dock-II berth for handling bulk cargoes – Modernization
- Relocation of existing Sand trap and Capital Dredging –Change in location
- Development of Multi level car parking facility (5000 cars) –New
- Development of Coastal Terminal (1MTPA) at northern sheltering arm at east of Bharathi Dock turning circle – new
- Development of Dry dock facility in the Boat Basin/Timer Pond area –New
- Development of Storage sheds and tank farms as per the land use plan of the Chennai port -new

10.3 KEY RECOMMENDATIONS:

10.3.1 Impact during construction phase and their mitigation:

- The proposed project would require significant amount of construction material. During construction phase, runoff from these sites would increase soil erosion from such sites. If such sites are left untreated after excavation of construction material, then rainwater is likely to get stored in these sites, which are then likely to serve as breeding habitats for mosquitoes.
- A total quantity of dredged material likely to be generated in the proposed project has been estimated as 5, 43,100Cum will be generated due to improvement or development of existing facility and creation of new facilities. The dredged material would be disposed at designated site.
- Vehicular movement for the transportation of construction material and operation of construction equipment in the area is likely to increase temporarily during the construction period. However, the vehicular pollution is not expected to lead to any major impacts on ambient air quality could be one of the possible sources of incremental air pollution during the construction phase.
- Proposed project is likely to have adverse impacts of marine ecology and benthic flora & fauna. There are no sites to ecological significance in and around the project area.
- Some of the locals will get direct employment in project construction activities or indirect employment due to mushrooming of allied business activities.

10.3.2 Impacts during Project Operation Phase and their Mitigation:

- Vehicular movement for the transportation of cargo is likely to increase during the operation phase. The entire operation would be handled in closed conveyor system. Thus, no major impact on air pollution is envisaged.
- Solid waste in the proposed project could be generated mainly from three sources viz., office waste, domestic waste and waste from cargo handling etc. This could comprise packaging, polythene or plastic materials. It is proposed to be routinely collected and are disposed at a designated solid waste disposal site.

- Escapements of bulks such as bulk cargo and container cargo during unloading is not expected to cause any serious impact, as they are non-toxic
- Recommendations of the International Convention for the Prevention of Pollution from ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78), shall be implemented to prohibit all ships from discharging wastes at sea. MARPOL 73/78 requires that ships retain all the wastes on board until reaching port.

10.4 GREENBELT DEVELOPMENT:

The main objective of green belt development is to provide a barrier between the source of pollution and the surrounding area. Green belt development around the various project appurtenances is proposed, this will go a long way to protect environment and mitigate pollution levels in the area. Development of green belt shall also prevent soil erosion and washing away of the topsoil besides helping in stabilizing the functional ecosystem, make the climate more conducive and restore water balance.

10.5 PORT AREA EMERGENCY RESPONSE PLAN

A detailed plan for oil and chemical spill is being implemented at Chennai Port. Likewise, a Disaster Management Plan for implementation in the event for various natural and manmade hazards too has been formulated and is under implementation. The same shall be implemented for the proposed projects as well.

10.6 ENVIRONMENTAL MONITORING PROGRAMME

Monitoring is an essential component for sustainability of any developmental project. The summary of Environmental Monitoring Programme for implementation during project construction and operation phase is given in chapter -6 of this report.

10.7 CONCLUSIONS

The project is likely to entail impacts on various aspects of environment during construction and operation phases. A comprehensive Environmental Management outlining various measures for amelioration of adverse impacts has been suggested. Likewise, a detailed Disaster Management Plan for implementation in the event of various emergencies and hazards too is under implementation at Chennai Port.