87th MEETING

TAMIL NADU STATE COASTAL ZONE MANAGEMENT AUTHORITY

Date: 14.01.2016 <u>Venue:</u>

Time: 11.00 A.M. Chamber of the Principal Secretary to

Government,

Environment and Forests Department,

7th floor, Secretariat, Chennai - 600 009

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THE TAMIL NADU STATE COASTAL ZONE MANAGEMENT AUTHORITY - 87th MEETING

Date & Time: Venue: Chamber of the Principal Secretary to

Government,

14.01.2016 - 11.00 A.M. Environment and Forests Department.,

7th floor, Secretariat, Chennai - 600 009.

AGENDA ITEM NO.01: Confirmation of the minutes of the 86 th meeting of the Tamil Nadu State Coastal Zone Management Authority held on 30.09.2015.

The 85 th meeting of the Tamil Nadu State Coastal Zone Management Authority was held on 30.09.2015 and the minutes were communicated in letter no. P1/1044/2015 dated 05.10.2015 (Copy enclosed) of Director of Environment. It may be confirmed.

MINUTES OF THE 86 th MEETING OF THE TAMIL NADU STATE COASTAL ZONE MANAGEMENT AUTHORITY HELD ON 30.09.2015

AGENDA ITEM NO.01: Confirmation of the Minutes of the 85 th meeting of the Tamil Nadu State Coastal Zone Management Authority held on 24.08.2015.

The minutes of the 85 th meeting of the Tamil Nadu State Coastal Zone Management Authority held on 24.08.2015 communicated in Letter No.P1/1044/2015 dated 27.08.2015 of the Director of Environment, were confirmed.

AGENDA ITEM NO.02: Report on the follow up action taken in respect of decisions taken during the 85 th meeting of the TNSCZMA.

The Member Secretary briefed the members about the action taken by the Department of Environment on the decisions taken during the 85 th meeting of the Tamil Nadu State Coastal Zone Management authority held on 24.08.2015.

AGENDA ITEM NO.03 Presentation on restoration, conservation and management of mangroves along the coast of Tamil Nadu by Dr. M. V. Selvam, Director, Coastal System Research Programme, MSSRF.

Dr. V. Selvam, Director, Coastal System Research Programme, MSSRF made a power point presentation on their activities on the coastal areas for the restoration, conservation and management of mangroves.

After the discussions and deliberations the Authority emphasized that the need for the restoration of degraded forests in Pitchavaram and Muthupet Reserve Forest may be included in the Integrated Coastal Zone Management Plan (ICZMP) of Tamil Nadu and a component shall be included to restore mangroves to an extent of 2000 hectares in 5 years between 2016 -2021, at a rate of around 500 hectares per year.

Further, the Authority suggested that the concerned departments shall take suitable measures for the conservation of mangroves in the fragile areas.

AGENDA ITEM NO.04 Discussion and deliberations on Oil Spill Management Plan for Chennai Region and Tuticorin Region

The Chairman spelt out the context for this Agenda. The intention is to have a comprehensive strategy bringing all the stakeholders to handle any eventuality in case of a major oil spill disaster of the coast of Tamil Nadu.

The following stake holders attended the discussion:

- 2) Capt. M.K. Sinha, Chennai Port, Chennai 2. Capt. A.K. Gupta. GM., Kamarajar Port, Ennore, 3. Capt. Amit Kapoor, VOC Port., Tuticorin 4. Col. Gopi Menon, L &T port, Kattupalli 5. Thiru Ganesh Prasad, DGM., Indian Oil Company Ltd., (I OCL), Chennai 6. Thiru Unni. K.S., DGM., Hindustan Petroleum, Chennai 7. Thiru R. Chidambaram, CPCL. 8.. Commandant (JG) M.K. Bhat, Coast Guard, Chennai Region 2. Thiru R. Natarajan, Shipping Officer., Tamil Nadu Maritime Board.
- 3)After the detailed presentations by individual Ports and deliberations, the Authority resolved to request all the Port Trusts to prepare a Comprehensive Oil Spill Management Plan suitably incorporating the mechanism to detect the oil spill for their areas since none of the Ports have a Comprehensive Oil Spill Management Plan, which is in consonance with the National Oil Spill Disaster Contingency Plan of the Ministry of Shipping and Surface Transport, Government of India.
- 4) The Authority resolved to nominate the Tamil Nadu Maritime Board to prepare a contingency plan for oil spill management and to devise a common strategy for monitoring and managing the oil spills in all the major Ports and adjacent landscapes of the State.
- 5) It is ensured that during conducting the mock drills the TNPCB officials should be present.

- 6) Continuous monitoring of the flora and fauna should be done involving a reputed Institute and the same should be shared with TNSCZMA.
- 7) It was decided that TNPCB will study the best practices of other major ports and present the results to the TNSCZMA.
 - 8) After two months a review will be conducted by SCZMA in this regard.

Proposed Construction of 416 tenements in T.S. No. 3, Block No. 32, R.S. No. 619/1 of Ernavoor village, Tiruvottiyur tauk, Thiruvallur district proposed by the Tamil Nadu Slum Clearance Board, Chennai.

The Authority resolved to approve the proposal subject to the following specific conditions.

- a) The proposed constructions should conform to the local town and country planning regulations as modified from time to time, except the Floor Space Index or Floor Area Ratio which shall be as per 1991 level.
- b) Planning Permission shall be obtained from the Chennai Metropolitan Development Authority.
- Consent for Establishment from Tamil Nadu Pollution Control Board should be obtained.
- d) Explore the possibilities of designing eco -friendly elevation.
- e) Premium FSI is not permissible.
- f) There should not be any ground water extraction in CRZ.
- g) Sewage should not be let off into the sea.
- h) Solid W aste Management Plan should be formulated and to be implemented without depending wholly on Corporation of Chennai for this purpose.

- i) Green belt development shall be implemented and site specific plants shall be identified for plantation. No exotic plant species shall be planted. Delonix regia and Samanea saman species shall be removed from the list of trees species indicated for planting as these species fall with slightest wind and hence are not suitable.
- j) Adequate Rain W ater Harvesting structures shall be created for water percolation and to harvest the rainwater to the maximum extent possible.
- k) Sufficient budget allocations shall be provided for the proper maintenance of the project constructions and facilities especially for the maintenance of STPs, green belt and for solid waste management.
- As the threat of sea erosion is high along the coast adjacent to project area, a profile on the aggressive sea erosion shall be evolved and measures to mitigate the adverse impact shall be implemented.

AGENDA ITEM NO:06 Proposed Construction of 31 MLD STP at Sathangadu village, Thiruvottiyur and to discharge treated sewage from STP into the Buckingham Canal.

The Authority resolved to recommend the proposal to the Ministry of Environment Forests and Climate Change, Government of India subject to the following specific conditions:

- a) The treated sewage water shall be re utilized for further beneficial use by the nearby industries, for development of parks in consultation with the Corporation of Chennai, for gardening in and around the project site etc., to the maximum extent and the surplus water may be discharged into the rivers after achieving the PCB standards.
- b) As secondary treatment of sewage water is not fit for reuse, CMW SSB may explore the possibilities of providing alternative primary membrane treatment of sewage water with the adoption of latest methods instead of chlorination.

- c) A continuous monitoring system shall be implemented in consultation with the Tamil Nadu Pollution Control Board. Environmental Engineers shall be appointed to monitor the operation of the STP for implementing the project effectively.
- d) A plan for the continued long term monitoring of quality/ characters of the treated water shall be developed and implemented.
- e) The Authority will review the progress of the work, along with the above reports after a period of two months.

Proposed Construction of 36 MLD STP at Sholinganallur village, Tambaram Taluk, Kancheepuram district and to discharge treated sewage from STP into the Buckingham Canal.

The Authority resolved to recommend the proposal to the Ministry of Environment Forests and Climate Change, Government of India subject to the following specific conditions:

- a) The treated sewage water shall be re utilized for further beneficial use by the nearby industries, for development of parks in consultation with the Corporation of Chennai, for gardening in and around the project site etc., to the maximum extent and the surplus water may be discharged into the rivers after achieving the PCB standards.
- b) As the secondary treatment of sewage water is not fit for reuse, CMW SSB may explore the possibilities of providing alternative primary membrane treatment of sewage water with the adoption of latest methods instead of chlorination. The installation of STPs with latest technology such as Sequential Batch Reactor (SBR) may be explored instead of conventional system.

- c) A continuous monitoring system shall be implemented in consultation with the Tamil

 Nadu Pollution Control Board. Environmental Engineers shall be appointed to

 monitor the operation of the STP for implementing the project effectively.
- d) A plan for the continued long term monitoring of quality/ characters of the treated water shall be developed and implemented.
- e) The Authority will review the progress of the work, along with the above reports after a period two months.

AGENDA ITEM NO.08 Proposed construction of training wall at the mouth of river

Tamiraparani at Punnakayal Village, Tiruchendur Taluk,

Thoothukudi district proposed by Public W orks Department.

The Authority resolved to request the PW D to furnish a comprehensive study report with reference to similar coastal protection works and erosion control measures along the coast adjacent to the project areas, which are under progress or proposed to carry out by PW D and other agencies.

AGENDA ITEM NO:09

Project titled "Protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' proposed by Suganthi Devadason Marine Research Institute (SDMI), Thoothukudi for grant under State Coastal Zone Development Fund.

The Director, SDMRI made a detailed presentation on the progress of work earlier sanctioned in the 81 st meeting. Further he detailed the proposed phase II activities which need to be implemented to restore the sinking Van island and conserve the marine biodiversity of the Van island. This is a pilot project taken up with the technical support of IIT Madras and is a model in the restoration of sinking islands that are rich in corals and sea grass. It would demonstrate to the world the manner in which conservation could support the Livelihoods of fishermen.

After detailed deliberations, the Authority resolved to accept Phase II proposal on the project "Protection of Vaan I sland in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' proposed by SDMRI and permitted to deploy the remaining 3,895 numbers of Artificial Reef (AR) modules at a cost of Rs.

6,96,85,000/ - (Rupees Six Crores Ninety Six Lakhs Eighty Five Thousand only) plus applicable taxes. The Authority also resolved to permit the Member Secretary to Tamil Nadu State Coastal Zone Management Authority to sanction the above financial assistance from the State Coastal Zone Development Fund by following due procedure.

AGENDA ITEM NO.10: Proposed Construction of 400 MLD sea water reverse osmosis desalination plant at Perur village, Thiruporur taluk, Kancheepuram distict proposed by Chennai Metropolitan W ater Supply & Sewerage Board, Chennai - Clearance under CRZ Notification 2011.

AND

AGENDA ITEM NO.11:

Proposed Construction of 150 MLD sea water reverse osmosis desalination plant at Nemelli village, Thiruporur taluk, Kancheepuram distict proposed by Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB), Chennai - Clearance under CRZ Notification 2011.

The Authority resolved to request the CMW SSB to furnish the following reports/documents for further action.

- a) A detailed turtle nesting conservation plan in and around the project areas.
- b) A report on the impact of eco system (flora and fauna) due to the intake and outfall pipelines shall be furnished and the mitigation measures taken on the adverse impacts shall be furnished.

- c) As CMW SSB has already constructed a desalination plant at Nemmeli a report on the functioning of the said plant with reference to the conditions imposed in the Environmental Clearance should be furnished.
- d) Baseline data of the Nemmeli plant, details of the 600MLD plant being constructed by Reliance in Rann of Kutch and other relevant baseline study reports shall be furnished to enable a comparison and obtain learning.

AGENDA ITEM NO. 12:

Proposed construction of "beach resort' at S.No. 354 & 355, Vadanemmeli Village, Chengalpattu Taluk Kancheepuram district proposed by M/s. A.R. Resorts India Pvt. Ltd., Chennai - Clearance under CRZ Notification 2011.

The Authority resolved to recommend the above proposal to the Ministry of Environment Forests and Climate Change, Government of India subject to the following specific conditions:

- a) The total covered area on all floors shall not exceed 33 percent of the plot size i.e., the Floor Space Index shall not exceed 0.33.
- b) The overall height of construction upto the highest ridge of the roof shall not exceed 9 meters and the construction shall not be more than two floors.
- c) Basement, if any, shall be erected after getting NOC duly from the Central Ground Water Authorities.
- d) There should not be any constructions in the No Development Zone i.e., between 0 200 mts., from the HTL of sea. Swimming Pool shall be constructed in development zone viz., 200 500 mts from the HTL of sea.
- e) There should not be any construction for residential purpose.
- f) There should not be any ground water extraction in the CRZ.
- g) There should not be any sea water intrusion due to the project activities and periodical water quality monitoring shall be conducted.

- h) Waste water should be treated in the STP and treated sewage shall be recycled after dis-infection for toilet flushing and green belt development.
- Suitable sludge disposal mechanism shall be evolved for the proper safe disposal of sludge in the project area.
- j) Proper arrangements should be made for the disposal of biodegradable solid wastes generated in the project areas, by providing Organic W aste Converter (OWC).
- k) The possibilities of utilization of solar energy to the maximum extent shall be explored.
- Consent for Establishment from Tamil Nadu Pollution Control Board should be obtained.
- m) The unit should obtain planning permission for their proposed construction from the Department of Town and Country Planning.
- n) Sufficient allocation should be provided for CSR activities.

Construction of shoreline protection structures by the Public Works Department and other agencies – the preparation of comprehensive shoreline protection management plan / Scheme for the coast of Tamil Nadu as per the direction of National Green Tribunal (SZ) – regarding.

The Authority resolved to follow selective limited tender procedure by obtaining technical and financial bids, to select the appropriate agency to prepare Comprehensive Shoreline Protection Management Plan / Scheme for the entire coast of Tamil Nadu.

Preparation of DPR for the project "Management and rehabilitation of coastal habitats and Biodiversity for Climate Change Adaptation and Sustainable Livelihood in Gulf of Mannar, Tamil Nadu" - sanction of financial assistance regarding.

As the proposal relates to Coastal Area Management and sustainable livelihoods of Gulf of Mannar, the Authority resolved to release financial assistance for the preparation of the DPR for the project, from the State Coastal Zone Development fund . The Authority also resolved to permit the Member Secretary to Tamil Nadu State Coastal Zone Management Authority to release at a maximum of Rs.10,00,000/ - (Rupees ten lakhs only) plus applicable taxes., towards the preparation of the DPR for the above project., from the State Coastal Zone Development Fund.

AGENDA ITEM NO 15:

Cancellation of Coastal Regulation Zone (CRZ) - Clearance dated 18.07.2011 granted for construction of Rajakamangalam Fishing Harbour at Neendakarai B village, Agasthessearam Taluk, Kanniyakumari district.

The Authority resolved to prepare the revised CRZ Map of the project area after having consultations with NCSCM and IRS, Chennai and submit recommendations in the matter within three months from the date of receipt of the order No. F. 2 -60/2014-IA-III dated 11 th September 2015 of MoEF & CC., subject to the adjudication of the cases pending in the Hon'ble tribunal and High Court of Chennai.

AGENDA ITEM NO.16: Power point presentation on the activities of Indian Rare Earths Limited (IREL), Manavalakurichi, Kanyakumari district.

Thiru P.K. Jena, Head, MK Plant. Indian Rare Earths Limited (I REL) made a power point presentation on their activities in CRZ, along the coast of Tamil Nadu to the Members of the Authority. After the discussion, the Authority resolved to request I REL to furnish the following documents / reports.

a) The IREL shall allocate sufficient funds for CSR activities and the details shall be furnished.

- b) A detailed study report on the impact of flora and fauna due to the mining activities of the IREL shall be furnished.
- c) A report on the health hazard due to the exposure of monosite while carrying out mining activities shall be furnished.
- d) A detailed report on the activities of IREL with reference to the best practices in Kerala and Orissa shall be furnished.
- e) The impact of the mining activities on the local public shall be furnished.
- **f)** The aesthetic appeal of the beaches should be retained by avoiding artificial sanddunes of greater heights.

Other items with the permission of Chair:

Preparation of Detailed Project Report on Integrated Coastal Zone Management Project (ICZMP) related activities for the coast of Tamil Nadu

As the proposal relates to the preparation of Detailed Project Report on the Integrated Coastal Zone Management Project (ICZMP), the Authority resolved to release financial assistance for the preparation of the DPR for the project, from the State Coastal Zone Development fund . The Authority also resolved to permit the Member Secretary to Tamil Nadu State Coastal Zone Management Authority to release to National Centre for Sustainable Coastal Management (NCSCM), Chennai a sum of Rs.31,00,000/ (Rupees Thirty one lakhs only) plus applicable taxes., towards the preparation of the DPR for the above project., from the State Coastal Zone Development Fund.

SD/-Xxxxxx Dr. H. Malleshappa, I.F.S. Member Secretary, TNSCZMA & Director, Dept. of Environment, Chennai - 15. Sd/-xxxxx
Thiru Hans Raj Verma, I.A.S.,
Chairman, TNSCZMA and
Principal Secretary to Government,
Environment & Forests Dept., Chennai -9

AGENDA ITEM NO.02: The action taken on the decisions of 86 th meeting of the Authority held on 30.09.2015 are given below:

SI.	subject	Action taken	
	Presentation on restoration, conservation and management of mangroves along the coast of Tamil Nadu by Dr. M. V. Selvam, Director, Coastal System Research Programme, MSSRF. Discussion and deliberations on Oil Spill Management Plan for Chennai Region and Tuticorin Region	As resolved action has been taken to prepare a DPR for the restoration of degraded forests in Pitchavaram and Muthupet Reserve Forest through NCSCM., Forest Department & M/s. Care Earth so as to include the same in the ICZMP – phase II for Tamil Nadu. As resolved all the Port have been requested to prepare a Comprehensive Oil Spill Management Plan suitably incorporating the mechanism to detect the oil spill for their areas, in consonance with the National Oil Spill Disaster Contingency Plan of the Ministry of Shipping and Surface Transport, Government of India in letter No.P1/2068/2015 dated 19.10.2015. Further, the Tamil Nadu Maritime Board has been requested to prepare a	
		contingency plan for oil spill management and to devise a common strategy for monitoring and managing the oil spills in all the major Ports in letter No.P1/2068/2015 dated 19.10.2015. The TNPCB has been requested to ensure that during conducting the mock drills the TNPCB officials are present and also to study the best practices of other major ports and present the results to the TNSCZMA in letter No.P1/2068/2015 dated 19.10.2015.	

03	Proposed Construction of 416 tenements in T.S. No. 3, Block No. 32, R.S. No. 619/1 of Ernavoor village, Tiruvottiyur tauk, Thiruvallur district proposed by the Tamil Nadu Slum Clearance Board, Chennai	As resolved Clearance under CRZ Notification 2011 has been issued for the project in Proc. No. P1/2580/2014 dated 08.10.2015.
04	Proposed Construction of 31 MLD STP at Sathangadu village, Thiruvottiyur and to discharge treated sewage from STP into the Buckingham Canal proposed by CMWSS Board	As resolved, the proposal has been sent to Environment and Forests Department, GoTN in Ir. R oC. No. P1/2584/2014 dated 07.10.2015 for taking further action.
05	Proposed Construction of 36 MLD STP at Sholinganallur village, Tambaram Taluk, Kancheepuram district and to discharge treated sewage from STP into the Buckingham Canal.	As resolved, the proposal has been sent to Environment and Forests Department, GoTN in Ir. R oC. No. P1/2510/2014 dated 07.10.2015 for taking further action.
06	Proposed construction of training wall at the mouth of river Tamiraparani at Punnakayal Village, Tiruchendur Taluk, Thoothukudi district proposed by Public W orks Department.	As resolved PWD was requested to furnish a comprehensive study report with reference to similar coastal protection works and erosion control measures along the coast adjacent to the project areas in Ir. No. P1/1418/2014 dated 08.10.2015.
07	Project titled "Protection of Vaan I sland in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' - phase II proposed by Suganthi Devadason Marine Research Institute, Thoothukudi	As resolved Tenders with technical and financial bids, have been called for from the Institutions involving in similar works, to deploy 3,895 numbers of Artificial Reef (AR) modules have been called for in Ir. No.1894/2015/P1 dated 20.10.2015. (subject placed under agenda item no.04)

80 Proposed Construction of 400 MLD As resolved further details have been sea water reverse osmosis called for from the CMW SSB in Ir. No. desalination plant at Perur village, P1/790/2015 dated 08.10.2015. Thiruporur taluk, Kancheepuram (subject placed under agenda item no.07) distict Chennai proposed by Metropolitan Water Supply Sewerage Board, Chennai Clearance under CRZ Notification 2011 Proposed Construction of 150 MLD As resolved further details have been 09 sea water reverse osmosis called for from the CMW SSB in Ir. No. P1/791/2015 dated 08.10.2015. desalination Nemelli plant at Thiruporur taluk, village, (subject placed under agenda item no.06) Kancheepuram distict proposed by Chennai Metropolitan W ater Supply & Sewerage Board (CMWSSB), Chennai - Clearance under CRZ Notification 2011. Proposed construction of "beach As resolved, the proposal has been sent to resort' at S.No. 354 & 355, Environment and Forests Department, Vadanemmeli Village, Chengalpattu GoTN in Ir. R oC. No. P1/2014/2015 dated Kancheepuram 07.10.2015 for taking further action. Taluk, district proposed by M/s. A.R. Resorts India Pvt. Ltd., Chennai - Clearance under CRZ Notification 2011. As resolved Tenders with technical and Construction of shoreline 11 protection structures by the Public financial bids, have been called for from Works the Institutions involving in similar works., Department and other agencies - the preparation Ir.No. P1/Appeal/4/2011 dated 12.10.2015. comprehensive shoreline protection management plan / Scheme for the (subject placed under agenda item no.05) coast of Tamil Nadu as per the direction of National Green

Tribunal (SZ) - regarding.

		.10.
12	Preparation of DPR for the project "Management and rehabilitation of coastal habitats and Biodiversity for Climate Change Adaptation and Sustainable Livelihood in Gulf of Mannar, Tamil Nadu" – sanction of financial assistance regarding.	As resolved NABARD Consultancy Services (NABCONS) has been requested to prepare DPR for the project in Ir. No. JDO/ 810 /2015 -2 dated 13.10.2015. DPR has been received and the same has been sent to MOEF&CC. MOEF&CC has approved the DPR and released Financial assistance.
13	Cancellation of Coastal Regulation Zone (CRZ) - Clearance dated 18.07.2011 granted for construction of Rajakamangalam Fishing Harbour at Neendakarai B village, Agasthessearam Taluk, Kanniyakumari district.	As resolved the NCSCM & IRS have been requested to furnish maps as directed by MoEF&CC in Ir. No. P1/2016/2015 dated 19.10.2015.
14	Power point presentation on the activities of Indian Rare Earths Limited (IREL), Manavalakurichi, Kanyakumari district.	As resolved the IREL has been requested to furnish additional reports/ details in Ir. No. P1/1688/2013 dated 08.10.2015.
15	Preparation of Detailed Project Report on Integrated Coastal Zone Management Project (ICZMP) related activities for the coast of Tamil Nadu	The work has been entrusted to NCSCM. As resolved the NCSCM has been requested to execute MOU to release financial assistance towards the preparation of DPR on I CZMP for Tamil Nadu in Ir. No. P1/1107/2015 dated 12.10.2015 and on the receipt, first installment of the amount has been released. The NCSCM has prepared and submitted the base document on the preparation of DPR on 31.12.2015 and the document has been sent to Environment and Forests, Department with the request to forward the same to MOEF & CC.

Project titled "Protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' proposed by Suganthi Devadason Marine Research Institute, Thoothukudi - Phase I Pilot project - review on the progress of work.

The Suganthi Devadason Marine Research Institute (SDMRI)., Thoothukudi has submitted a Project titled "Protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' for grant under State Coastal Zone Development Fund. The Principal Chief Conservator of Forests & Chief Wildlife W arden, Chennai has recommended the project as immediate necessary action needs to be taken so as to protect the Vaan island from further degradation and submergence.

- 2) The project proposal was placed before the 81 st meeting of the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) held on 27.11.2014. The Authority has accepted the proposal and as per the decision of the Authority M/s Suganthi Devadason Marine Research Institute (SDMRI)., Thoothukudi is carrying out the activities in a pilot scale based on the bathymetry and W ave dynamics of IIT, Madras. Among other things, the pilot project includes the deployment of 705 numbers of artificial reef at a selective locations and also substrate construction and deployment for Coral Rehabilitation works.
- 3) The Director, SDMRI made a power point presentation on the progress of work to the Members of the TNSCZMA in the 85 th meeting held on 24.08.2015. The Authority appreciated the above module and suggested that the module may be highlighted as a case that meets conservation goals while protecting livelihoods of the mariginalised sections of the society in appropriate fora.

- 4) The SDMRI has in his report dated 01.09.2015, indicated that all the entire coral rehabilitation work. i.e., the construction of substrates (concrete frame 600 Nos., and cement slabs 6000 Nos) deployment and transplantation and 256 numbers of AR modules have been constructed.
- 5) Hence a Technical committee consisting of Dr. Jayanthi M., IFS., Additional Director of Environment, Thiru Deepak S. Bilgi, IFS., W ild Life W arden, Gulf of Mannar Marine National Parm, Ramanathapuram, Dr. S. S. Ramakrishnan, Director of Institute of Remote Sensing, Anna University, Chennai, Dr S.A. Sannasiraj, Professor, Ocean Enginering, Department of IIT, Chennai and Dr. S. Srinivasalu, Director of Institute of Ocean Management, Anna University, Chennai have inspected the progress of the works at the project sites on 23.09.2015 at Tuticorin. The Committee has observed that considerable progress has been made in the works. The Committee has also viewed that the complete protection of the island could be ensured if the entire stretches of AR modules has placed as early as possible.
- 6) The Authority has also reviews the work in the 86 th meeting held on 30.09.2015 Further the Director of Environment has inspected the site on 02.01.2016. The SDMRI, Tuticorin has so far deployed 581 AR modules out of 705 AR modules in the Phase I of Pilot scale project and the remaining 124 modules are under construction/installation.
- 7) The above facts are furnished to the Authority for the review of progress of works.

Project titled "Protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' proposed by Suganthi Devadason Marine Research Institute, Thoothukudi - Phase II - Status report regarding.

M/s Suganthi Devadason Marine Research Institute (SDMRI)., Thoothukudi is executing the project viz., "Protection of Vaan I sland in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' in a pilot scale based on the bathymetry and W ave dynamics of IIT, Madras. Among other things, the pilot project includes the deployment of 705 numbers of artificial reef at a selective locations and also substrate construction and deployment for Coral Rehabilitation works and the Tamil Nadu State Coastal Zone Management Authority has approved the above said project in the 8 1st meeting held on 27.11.2014.

- 2) The TNSCZMA in the 86 th meeting held on 30.09.2015 reviewed the progress of work under the pilot scale. After detailed deliberations, the Authority resolved to accept Phase II proposal on the project "Protection of Vaan I sland in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' proposed by SDMRI and permitted to deploy the remaining 3,895 numbers of Artificial Reef (AR) modules at a cost of Rs. 6,96,85,000/ (Rupees Six Crores Ninety Six Lakhs Eighty Five Thousand only) plus applicable taxes.
- 3) However the Authority also resolved to permit the Member Secretary to Tamil Nadu State Coastal Zone Management Authority to sanction the above financial assistance from the State Coastal Zone Development Fund by following due procedure
- 4) As such "Tenders" were called for from the interested parties/ public to carry out the above Phase II works as per. The Tender notice has been published in the All India Edition and State level Tender Transparency Act edition news papers on 4

 th November 2015 through the Director of Information and Public Relations, Secretariat, Chennai at a cost of Rs.1,68,016/ -.

- 5) As per Tender Transparency Act, a minimum of 30 days to be given for submitting Tenders. However 36 days have been given for the submission of Tender documents. The last date for the receipt of Tenders was fixed on 10.12.2015. However only SDMRI has furnished Tender documents.
- 6) The Technical bid was opened on 22.12.2015. The Tender documents have been scrutinized as per the provisions of Tender Transparency Act, by a Technical committee consisting of Dr. Jayanthi M., IFS., Additional Director of Environment, Dr. S. S. Ramakrishnan, Director of Institute of Remote Sensing, Anna University, Chennai, Dr. S. Srinivasalu, Director of Institute of Ocean Management, Anna University, Chennai, Dr. Kanmani, Director of Center for Environmental Science, Anna University and Thiru John Manoharan, Assistant Executive Engineer, Green Squad, Department of Environment. The Technical Committee has accepted the technical documents.
- 7) On the approval of technical documents by the Technical committee, the Financial bid was opened on 29.12.2015 and SDMRI has quoted Rs.6,90,89,500/ to carryout the project under phase II., which was Rs.6.00 lakhs less than the original quoted amount.
- 8) Accordingly, as resolved in the 86 th meeting of the Authority held on 30.09.2015, the work has been entrusted to M/s. SDMRI in letter dated 04.01.2016. M/s. SDMRI has executed the MOU on 11.01.2016 and payments also being released as per MoU to the SDMRI and towards advertisement charges.
 - 9) The above facts are furnished to the Authority for information.

Construction of shoreline protection structures by the Public Works Department and other agencies – the preparation of comprehensive shoreline protection management plan / Scheme for the coast of Tamil Nadu as per the direction of National Green Tribunal (SZ) – status report regarding.

On the Application No. 4/2013 filed by Thiru O. Fernandes regarding the construction of shoreline protection structures by the PW D and other agencies, the Hon'ble NGT (SZ) on 17.08.2015 issued instructions to prepare a Comprehensive Shoreline Protection Management Plan / Scheme for the entire coast of Tamil Nadu especially with reference to erection of Groynes, sea walls and training walls etc. In this connection the PWD was requested by the Department of Environment to prepare the said plan as requested by the NGT.

- 2) Hence a meeting was conducted on 18.09.2015 with the research institutions to finalize an action plan for the preparation of shore protection management plan for the coast of Tamil Nadu with the following experts and they have requested to furnish proposals for the preparation of the said plan. Accordingly the proposals have been received with the cost for the preparation of the said plan., from the following institutions as follows:
- i) Department of Ocean Engineering, IIT, Chennai cost of Rs. 64.98 lakhs
- ii) Institute of Ocean Management (IOM), Chennai cost of Rs.40 lakhs
- iii) National Institute of Ocean Technology, Chennai cost of Rs.1,52,07,600/ -
- 3) The subject was placed before the Authority in the 86th meeting held on 30.09.2015 and due to the vast difference in quoted costs for the execution, the Authority resolved to follow selective limited tender procedure by obtaining technical and financial bids, to select the appropriate agency to prepare Comprehensive Shoreline Protection Management Plan / Scheme for the entire coast of Tamil Nadu.

- 4) Hence quotations for the preparation of above plan, have been called for from various research institutions. However the following three institutions have submitted their technical and financial bids for the preparation of Shoreline Protection Management Plan on 29.10.2015.
- 1. Institute of Ocean Management, Chennai
- 2. Department of Ocean Engineering, Indian Institute of Technology (IIT), Madras
- 3. Centre for Environment, Health and Safety, Annamalai University, Annamalai Nagar, Chidhambaram Tk., Cuddalore dist.
- 5) Further the technical bids were opened on 29.10.2015 and the Technical Committee consisting of the following has evaluated the technical bids on 14.12.2015.
 - a) The Additional Director, Department of Environment, Chennai -15
 - b) The Director, IRS.
 - c) The Director, CES
 - a) Dr. Jayashree Vencatesan, Member, TNSCZMA
 - b) The Assistant Conservator of Forests (Green Squad),Department of Environment, Chennai -15
- 6) The Technical Committee has accepted the technical bids of all the above institutions and hence the Financial bids were opened on 17.12.2015. The LLT has quoted less price viz., Rs.50.60 lakhs with applicable taxes viz., 14.5 % service tax.
- 7) As the National Green Tribunal has posted the matter on 12.02.2016 to report the status of preparation and submission of comprehensive shoreline management plan, the work has been entrusted to LLT, Madras on 29.12.2015.
- 8) The above facts are furnished to the Authority for information. The above action of the Member Secretary, TNSCZMA may be approved and he may be permitted to release the above said contract amount for the preparation of above said plan to IIT, Madras as per the MoU executed with the IIT, Madras, as and when required.
 - 9) The Authority may consider.

AGENDA ITEM NO.06 Proposed Construction of 150 MLD sea water reverse osmosis plant at desalination Nemelli village, Thiruporur taluk, Kancheepuram distict proposed by Chennai Metropolitan Water Supply & Sewerage Board, Chennai - Clearance under CRZ Notification 2011.

M/s Chennai Metropolitan W ater Supply & Sewerage Board (CMW) SSB) has proposed to establish a 150 MLD Sea W ater Reverse Osmosis Desalination Plant at Perur Village, Thiruporur Taluk, Kancheepuram District within the premises of 100 MLD Seawater Desalination Plant at Nemmeli Village, Thiruporur Taluk, Kancheepuram district. The prime purpose of desalination plant is to remove most of the dissolved solids from filtered seawater to make it potable for supplying the Chennai City. The proposed project involves construction of the following activities:

- a) Laying of seawater intake two pipeline
- b) Laying of outfall pipeline
- c) Construction of seawater intake head (offshore construction)
- d) Construction of outfall diffuser (offshore construction)
- e) Construction of seawater sump with pump house
- f) Installation of pretreatment & reverse osmosis system.
- 2) The sea water requirement for the proposed plant will be 18958.33 cu.m/hr (455 MLD). The sea water will be drawn by laying two submarine pipelines. Both the seawater intake heads will be located at a distance of about 1050 m from the shoreline at 10m CD (Chart Datum) water depth. The water from the intake head will be drawn by gravity flow through the submarine pipeline buried 1 m below the sea floor.
- 3) The proposed Desalination plant will have an offshore screen, offshore intake and outfall pipe, onshore screen, lamella clarifier, dissolved air floatation, gravity dual media filter, reverse osmosis system, post treatment, administration building, workshop building, chemicals storage building, product water storage & distribution.
- 4) The backwash and sludge generated at periodic intervals from various treatment units would be discharged into the sea along with brine. The salinity of the return water released into the sea will be 71 ppt, which will have the salinity of the difference of 33 ppt higher than the seawater ambient salinity of 38 ppt. A chlorine

dosage of 3ppm will be given to the drawn seawater and the return water discharged into the sea will have the concentration of around 0.2 ppm. The brine water discharged into the sea will be 12078.33 cu.m/hr (305 MLD). The outfall diffuser will be located at 650 m from the shoreline at the water depth of 7.5 m CD. The outfall will have a multiple port diffuser arrangemtn system with 10 Nos. x 500mm diameter. Limited excavation work will be carried out for construction of Civil structures. Some amount of leveling / grading through cut and fill is required to make the land suitable for construction. The domestic solid waste will be suitably disposed and the sewage generated will be treated and the treated sewage will be used for green belt development.

- 5) The District Coastal Zone Management Authority, Kancheepuram district has recommended the project subject to several conditions.
- 6) The subject was placed before the 86 th Tamil Nadu State Coastal Zone Authority (TNSCZMA) meeting held on 30.09.2015 and the TNSCZMA has requested the following details.
 - a) A detailed turtle nesting conservation plan in and around the project areas.
 - b) A report on the impact of eco system (flora and fauna) due to the intake and outfall pipelines shall be furnished and the mitigation measures taken on the adverse impacts shall be furnished.
 - c) As CMW SSB has already constructed a desalination plant at Nemmeli a report on the functioning of the said plant with reference to the conditions imposed in the Environmental Clearance should be furnished.
 - d) Baseline data of the Nemmeli plant, details of the 600MLD plant being constructed by Reliance in Rann of Kutch and other relevant baseline study reports shall be furnished to enable a comparison and obtain learning.
 - 8) The CMW SSB has furnished the above reports/ details and are enclosed.
- 9) The project site is falling in CRZ III, CRZ I (inter tidal zone) and CRZ -IV (sea water area). The total project cost is Rs. 1089.47 crores. As per CRZ Notification 2011, vide para 4 (i) (a)., para 8 I CRZ I (i) (b) and 8 III CRZ III A (h) & B(v) the above activities are permissible activities. However the project requires clearance from the MOEF., GoI vide para 4 (ii) (h) of CRZ Notification 2011.
 - 10) The Authority may consider.

Proposed Construction of 400 MLD sea water reverse osmosis desalination plant at Perur village, Thiruporur taluk, Kancheepuram distict proposed by Chennai Metropolitan W ater Supply & Sewerage Board, Chennai - Clearance under CRZ Notification 2011.

M/s Chennai Metropolitan W ater Supply & Sewerage Board (CMW SSB) has proposed to establish a 400 MLD Sea W ater Reverse Osmosis Desalination Plant at Perur Village, Thiruporur Taluk, Kancheepuram District at a distance of 600 m in the northern side of the existing 100 MLD Seawater Desalination Plant at Nemmeli Village, Thiruporur Taluk, Kancheepuram district. The prime purpose of desalination plant is to remove most of the dissolved solids from filtered seawater to make it potable for supplying the Chennai City. The proposed project involves construction of the following activities:

- a) Laying of seawater intake two pipeline
- b) Laying of outfall pipeline
- c) Construction of seawater intake head (offshore construction)
- d) Construction of outfall diffuser (offshore construction)
- e) Construction of seawater sump with pump house
- f) Installation of pretreatment & reverse osmosis system.
- 2) The sea water requirement for the proposed plant will be 47791.66 cu.m/hr (1147 MLD). The sea water will be drawn by laying two submarine pipelines. Both the seawater intake heads will be located at a distance of about 1150 m from the shoreline at 10m CD (Chart Datum) water depth. The water from the intake head will be drawn by gravity flow through the submarine pipeline buried 1 m below the sea floor.
- 3) The proposed Desalination plant will have an offshore screen, offshore intake and outfall pipe, onshore screen, lamella clarifier, dissolved air floatation, gravity dual media filter, reverse osmosis system, post treatment, administration building, workshop building, chemicals storage building, product water storage & distribution.
- 4) The backwash and sludge generated at periodic intervals from various treatment units would be discharged into the sea along with brine. The salinity of the return water released into the sea will be 71 ppt, which will have the salinity of the difference of 33 ppt higher than the seawater ambient salinity of 38 ppt. A chlorine

dosage of 3ppm will be given to the drawn seawater and the return water discharged into the sea will have the concentration of around 0.2 ppm. The brine water discharged into the sea will be 31125 cu.m/hr (747 MLD). The outfall diffuser will be located at 750 m from the shoreline at the water depth of 8 m CD. The outfall will have a multiple port diffuser arrangemtn system with 18 Nos. x 600mm diameter. Limited excavation work will be carried out for construction of Civil structures. Some amount of leveling / grading through cut and fill is required to make the land suitable for construction. The domestic solid waste will be suitably disposed and the sewage generated will be treated and the treated sewage will be used for green belt development.

- 5) The District Coastal Zone Management Authority, Kancheepuram district has recommended the project subject to several conditions (Copy enclosed).
- 6) The subject was placed before the 86 th Tamil Nadu State Coastal Zone Authority (TNSCZMA) meeting held on 30.09.2015 and the TNSCZMA has requested the following details.
 - a) A detailed turtle nesting conservation plan in and around the project areas.
 - b) A report on the impact of eco system (flora and fauna) due to the intake and outfall pipelines shall be furnished and the mitigation measures taken on the adverse impacts shall be furnished.
 - c) As CMW SSB has already constructed a desalination plant at Nemmeli a report on the functioning of the said plant with reference to the conditions imposed in the Environmental Clearance should be furnished.
 - d) Baseline data of the Nemmeli plant, details of the 600MLD plant being constructed by Reliance in Rann of Kutch and other relevant baseline study reports shall be furnished to enable a comparison and obtain learning.
 - 7) The CMW SSB has furnished the above reports/ details and are enclosed.
- 8) The project site is falling in CRZ III, CRZ I (inter tidal zone) and CRZ -IV (sea water area). The total project cost is Rs. 2891.70 crores. As per CRZ Notification 2011, vide para 4 (i) (a)., para 8 I CRZ I (i) (b) and 8 III CRZ III A (h) & B(v) the above activities are permissible activities. However the project requires clearance from the MOEF., GoI vide para 4 (ii) (h) of CRZ Notification 2011.
 - 9) The Authority may consider.

Proposed construction of service apartments and convention centre at S.No. 2/3 & 3/2 Kanagam village & S.No. 2/1 of Thiruvanmiyur village, Gunidy - Mambalam Taluk, Chennai proposed by M/s TRIL Info Park Limited, Chennai.

M/s. Tata Realty and Infrastructure Limited (TRIL) has obtained Environmental Clearance for their project - Tril Infor park Limited, a SEZ complex for IT companies, located at S.No. 2/3, 3/2 Kanagam Villge & 2/1 of Thiruvanmiyur village, Guindy Mambalam Taluk, Chennai District. The total project area is 25.27 acres. The applicant has obtained Environmental Clearance under ELA Notification 2006 for the development of the project in 3,75,326 sq.mt. and no development has been proposed in CRZ area originally. The total land area is 1,02,264.50 sq.m.

- 2) Due to change in the modification of product mix the applicant has proposed to construct 112 key service apartments and the proposed blocks consists of 4 basements + Ground + 12 floors. The Floor plate is 1716 sq.m and out of which 988.82 sq.m. falls under CRZ. The proposed built up area in CRZ is 7,489.62 sq.m. Out of 25.27 acres of project area a part of 1.12 (4532 sq.m) acres of land is falling in CRZ and the applicant has proposed to develop the said area for green belt, landscaping in addition to service apartment in CRZ. The applicant has applied for ETA clearance for the built up area of 6,65,760 sq,mt. The site is falling in CRZ -TT on the landward side of existing road and the project cost for the development in CRZ area is Rs.4.50 crores.
- 3) The District Coastal Zone Management Authority for CMDA areas has recommended the project to the TNSCZMA for consideration.
- 4) As per CRZ Notification 2011, vide para 8 II CRZ -II (i) and (ii) buildings shall be permitted only on the landward side of the existing road, or on the landward side of existing authorized structures; As per the amendment issued by MoEF., GoI in notification S.O. No. 1599 (E) dated 16 the June 2015 as para 8 II CRZ -II (ii) buildings permitted on the landward side of the existing and proposed roads or existing authorized structures shall be subject to the local town and country planning regulations as modified from time to time, except the Floor Space Index or Floor Area Ratio which shall be as per 1991 level."
 - 5) The Authority may consider.

AGENDA ITEM NO.09: Any other issues with the permission of the Chair.

(i): Field experience training to selected staff and officers of Environment and Forests Department and Directorate of Environment

It is felt necessary to give some field exposure training to some selected staff and officers of Environment wing of the Environment and Forests Department & Department of Environment who are dealing with environmental related subjects. In order to give them better field exposure they will be taken trip to ecologically sensitive areas, places having mangroves, coral reefs., etc.,

The Government in letter No.651/EC3/2016 -1 Environment and Forests

Department dated 12.01.2016., have requested to arrange for the exposure trip to the western coast of Kerala and Karnataka borders. Hence the area to be covered may include the coastal stretches of Kerala and Karnataka.

The expenditure towards the study tour, which covers expenditure on transportation, boarding, lodging, entry fees and other logistics may be incurred from Tamil Nadu State Coastal Zone Management Authority Development Fund.

The Authority may consider the proposal along with the quantum of financial assistance towards conducting the study tour.

Sd./Dr. H. Malleshappa, I.F.S.
Member Secretary, TNSCZMA &
Director, Dept. of Environment,
Chennai - 15.

Sd./Thiru Hans Raj Verma, I.A.S.,
Chairman, TNSCZMA and
Principal Secretary to Government,
Environment & Forests Dept., Chennai -9

MINUTES OF THE 87 th MEETING OF THE TAMIL NADU STATE COASTAL ZONE MANAGEMENT AUTHORITY HELD ON 14.01.2016

AGENDA ITEM NO.01: Confirmation of the Minutes of the 86 th meeting of the Tamil Nadu State Coastal Zone Management Authority held on 30.09.2015.

The minutes of the 86 th meeting of the Tamil Nadu State Coastal Zone Management Authority held on 30.09.2015 communicated in Letter No.P1/1044/2015 dated 07.10.2015 of the Director of Environment, were confirmed.

AGENDA ITEM NO.02: Report on the follow up action taken in respect of decisions taken during the 86 th meeting of the TNSCZMA.

The Member Secretary briefed the members about the action taken by the

Department of Environment on the decisions taken during the 86 th meeting of the Tamil

Nadu State Coastal Zone Management authority held on 30.09.2015.

AGENDA ITEM NO:03

Project titled "Protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' proposed by Suganthi Devadason Marine Research Institute, Thoothukudi - Phase I Pilot project - review on the progress of work.

The Director, SDMRI made a power point presentation on the progress of work to the Members of the TNSCZMA. The Authority appreciated the works done by the SDMRI and suggested the following:

- a) The AR modules should be developed as per the specification indicated by the LLT Madras based on the wave modeling and also deployed in the designated area.
- b) to engrave serial numbers in the Artificial Reefs and name of the Department of Environment.
- to furnish the details of latitude and longitude with reference to each AR modules deployed in the Sea.

- d) Project will be completed by Jan'2016.
- e) The change in Bathymetry especially in 100 mtrs. GRID has to be evaluated.
- f) Since SDMRI has already completed the substrate construction and deployment of coral rehabilitation works, the Director of SDMRI should ensure the monitoring to assess the status of the substrates and corals installed in the project site periodically and is requested document so as to assess the development and also for comparison.

Project titled "Protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' proposed by Suganthi Devadason Marine Research Institute, Thoothukudi - Phase II - Status Report regarding.

The Authority took note of the Status Report. It placed on record the appreciation of the good work done by the Director of Environment and his team. The Authority directed the Director of Environment to complete the above project expeditiously following due procedure and also directed to document the above project work as a case study and present the same in appropriate national / international fora.

AGENDA ITEM NO:05

Construction of shoreline protection structures by the Public Works Department and other agencies – the preparation of comprehensive shoreline protection management plan / Scheme for the coast of Tamil Nadu as per the direction of National Green Tribunal (SZ) – status report regarding.

The Authority resolved to permit the Member Secretary to Tamil Nadu State Coastal Zone Management Authority to release to LLT, Madras a sum of Rs.50,60,000/ (Rupees Fifty lakhs and Sixty Thousand only) plus applicable service taxes., towards the preparation of comprehensive shoreline management plan., from the State Coastal Zone Development Fund. A presentation may be made by Prof. V. Sundar, LLT Madras during the next meeting.

Proposed Construction of 150 MLD sea water reverse osmosis desalination plant at Nemelli village, Thiruporur taluk, Kancheepuram distict proposed by Chennai Metropolitan Water Supply & Sewerage Board, Chennai - Clearance under CRZ Notification 2011.

The Authority resolved to recommend the proposal to the Ministry of Environment Forests and Climate Change, Government of India subject to the following specific conditions:

- a) The proposed activities should not cause coastal erosion and alter the beach configuration.
- b) Untreated chemical waste generated due to membrane protection activity and the sewage generated should not be discharged into the sea.
- c) The project activity should not affect the coastal ecosystem including marine flora and fauna.
- d) It may be ensured that mercury concentration is not present in the end product.
- e) The proponent should ensure that the saline water shall not gain access into ground while conveying or processing the sea water.
- f) Marine water quality should be monitored at the outfall area every quarter and results sent to Tamil Nadu State Coastal Zone Management Authority.
- g) A system shall be evolved for a close and continuous monitoring during the construction and post construction phases through reputed institutions such as National Center for Sustainable Coastal Management (NCSCM), Anna University, Chennai/NIOT, Chennai / IIT Chennai. Periodical report shall be furnished to the Tamil Nadu State Coastal Zone Management Authority on the site conditions every year so as to take mitigation measures on the event of any adverse impacts on the coast.

- h) The impact on the corals, marine organisms, Turtle nesting etc., due to the above constructions, in long run, should be evaluated and monitored through experts, in which, ecologists should be included.
- i) The activities such as intake pipeline and outfall line and intake arrangement in sea and the pipeline should not cause hindrance to fishing activities and to boat movement.
- j) Marking the intake and outfall pipelines adequately such that fishing vessels and fishermen are made aware of its presence.
- k) No blasting or drilling activities in CRZ is permissible.
- I) The proponent should not prevent public from easy access to the beach.
- m) The proponent shall implement the Green Belt as envisaged in EIA report.

Proposed Construction of 400 MLD sea water reverse osmosis desalination plant at Perur village, Thiruporur taluk, Kancheepuram distict proposed by Chennai Metropolitan W ater Supply & Sewerage Board, Chennai - Clearance under CRZ Notification 2011.

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- g) A system shall be evolved for a close and continuous monitoring during the construction and post construction phases through reputed institutions such as National Center for Sustainable Coastal Management (NCSCM), Anna University, Chennai/NIOT, Chennai / IIT Chennai. Periodical report shall be furnished to the Tamil Nadu State Coastal Zone Management Authority on the site conditions every year so as to take mitigation measures on the event of any adverse impacts on the coast.
- h) The impact on the corals, marine organisms, Turtle nesting etc., due to the above constructions, in long run, should be evaluated and monitored through experts, in which, ecologists should be included.
- i) The activities such as intake pipeline and outfall line and intake arrangement in sea and the pipeline should not cause hindrance to fishing activities and to boat movement.
- j) Marking the intake and outfall pipelines adequately such that fishing vessels and fishermen are made aware of its presence.
- k) No blasting or drilling activities in CRZ is permissible.
- I) The proponent should not prevent public from easy access to the beach.
- m) The proponent shall implement the Green Belt as envisaged in EIA report.

AGENDA ITEM NO:08 Proposed construction of service apartments and convention centre at S.No. 2/3 & 3/2 Kanagam village & S.No. 2/1 of Thiruvanmiyur village, Gunidy - Mambalam Taluk, Chennai proposed by M/s TRIL Info Park Limited, Chennai.

The Authority resolved to approve the proposal subject to the following specific conditions .

- a) The proposed constructions should be subject to the local town and country planning regulations as modified from time to time, except the Floor Space Index or Floor Area Ratio which shall be as per 1991 level.
- b) Planning Permission shall be obtained from the Chennai Metropolitan Development Authority.
- c) Consent for Establishment from Tamil Nadu Pollution Control Board should be obtained.
- d) Premium FSI is not permissible.
- e) There should not be any ground water extraction in CRZ.
- f) Solid W aste Management Plan should be formulated and to be implemented without depending wholly on Corporation of Chennai for this purpose.
- g) Green belt development shall be implemented and site specific plants shall be identified for plantation.
- h) Adequate Rain W ater Harvesting structures shall be created for water percolation and to harvest the rainwater to the maximum extent possible.
- i) Sufficient budget allocations shall be provided for the proper maintenance of the project constructions and facilities especially for the maintenance of STPs, green belt and for solid waste management.

AGENDA ITEM NO.09: Any other issues with the permission of the Chair.

(i): Field experience training to selected staff and officers of Environment and Forests Department and Directorate of Environment

The Authority has approved the field experience training programme to western coastal areas near Karnataka and Kerala border for acquiring better field exposure on Ecological Sensitive Areas and Coastal Regulation Zones to some selected staff and officers of Environment wing of the Environment and Forests Department & Department of Environment and permitted to incur expenditure under the State Coastal Zone Management Fund.

General

The Director of Environment has briefed about the approval of project "Management and rehabilitation of coastal habitats and biodiversity for Climate Change Adaptation and Sustainable Livelihood in Gulf of Mannar in Tamil Nadu by the MoEF &CC during the meeting held on 28.12.2015. In the minutes of the meeting, it was informed that NABARD will be the Implementing Agency and Department of Environment will be the Executive Agency. And also it is suggested that the guidelines communicated by NABARD is to be taken into consideration for implementing. In addition, it was suggested that works carried out by SICOM with reference to biodiversity assessment component should be considered while executing the work so as to ensure that there is no duplication of work. Accordingly, the project will be implemented.

Sd./- XXXXX

Dr. H. Malleshappa, I.F.S.

Member Secretary, TNSCZMA &

Director, Dept. of Environment,

Chennai - 15.

Sd./- XXXXX

Thiru Hans Raj Verma, I.A.S.,

Chairman, TNSCZMA and

Principal Secretary to Government,

Environment & Forests Dept., Chennai -9