86th MEETING

TAMIL NADU STATE COASTAL ZONE MANAGEMENT AUTHORITY

Date: 30.09.2015 Venue:

Time: 02.00 P.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 - 86th MEETING

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

Government,

30.09.2015 - 02.00 P.M. Environment and Forests Department., 7th

floor, Secretariat, Chennai- 600 009.

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

The 85th meeting of the Tamil Nadu State Coastal Zone Management Authority was held on 24.08.2015 and the minutes were communicated in letter no. P1/1044/2015 dated 27.08.2015 (Copy enclosed) of Director of Environment. It may be confirmed.

MINUTES OF THE 85th MEETING OF THE TAMIL NADU STATE COASTAL ZONE MANAGEMENT AUTHORITY HELD ON 24.08.2015

AGENDA ITEM NO.01: Confirmation of the Minutes of the 84th meeting of the Tamil Nadu State Coastal Zone Management Authority held on 26.06.2015.

The minutes of the 84^{th} meeting of the Tamil Nadu State Coastal Zone Management Authority held on 26.06.2015 communicated in Letter No.P1/1044/2015 dated 07.07.2015 of the Director of Environment, were confirmed.

<u>AGENDA ITEM NO.02</u>: Report on the follow up action taken in respect of decisions taken during the 84th 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 84^{th} meeting of the Tamil Nadu State Coastal Zone Management authority held on 26.06.2015.

<u>AGENDA ITEM NO: 03</u>: Presentation by L&T Port, Kattuppalli, Kamaraj Port and Chennai Port Trust on compliance on CRZ clearance conditions and current status on ground.

As resolved in the 84th Authority meeting, all the three agencies viz., L&T Port, Kattuppalli, Kamarajar Port and Chennai Port Trust have made a power point presentation on compliance on CRZ clearance conditions and current status on ground in respect of their project for which clearances have been issued under CRZ Notifications 1991 and 2011.

During the deliberation, the following points were discussed, with regard to L&T Port, Kattuppalli and the reports mentioned below need to be submitted to the SCZMA committee.

- 1. Pollution monitoring report.
- 2. List of tree species planted in the green belt along with the details of planting is to be submitted.
- 3. Biological Monitoring report to be submitted.
- 4. Eco restoration and protection needs to be added in the ongoing CSR activities.

- 5. Technical report prepared by IIT-Madras for L&T is to be submitted.
- 6. Environment report on accretion on the northern side is to be submitted.
- 7. It was also stated that a copy of all compliance reports need to be submitted to TNSCZMA.

The following points were discussed, with regard to Kamaraj port and necessary reports mentioned below need to be submitted to the SCZMA committee.

- Action plan for Mangroves protection and conservation needs to be developed and submitted.
- 2. Development Plan for stabilization of sand in the northern side should be submitted. Further, no reclamation or use of natural accretion area is to be undertaken.
- 3. Suitable measures to be taken for dust management and a report on this need to be submitted.
- 4. Systematic monitoring of flora and fauna including the macro organisms needs to be undertaken and the report is to be submitted.
- 5. The Green belt area needs to be validated and documentation of the flora and fauna is to be done and submitted.

The following points were discussed with regard to Chennai port trust and necessary reports mentioned below needs to be submitted to the SCZMA committee.

 In Application No. 04 of 2013 in the matter of O.Fernandes versus Union of India pending before NGT at Chennai, the Hon'ble NGT 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., Hence construction of groynes should be in consideration of the above.

- Studies on the impact of Port activities on marine and coastal ecosystem, specifically the marine and coastal flora and fauna needs to be undertaken by engaging a reputed institution. The study reports are to be submitted to the TNSCZMA.
- 3. A copy of the monitoring report submitted to TNPCB should be submitted.

AGENDA ITEM NO:04: Proposed residential construction complex at 5.No. 4310/3,5, 4462/3, 4569/32, 33, 34, 35, 38 & 4570/8 of Blocks 96, 98 & 100 of Santhome Village, Mylapore-Triplicane Taluk, Chennai proposed by Thiru T.V. Sathia Narayana, Chennai.

The Authority resolved to clear the proposals 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.
- c) Environmental Clearance shall be obtained under EIA Notification 2006 from the State Environmental Impact Assessment Authority.
- d) Consent for Establishment, from Tamil Nadu Pollution Control Board should be obtained.
- e) There should not be any ground water extraction in CRZ.
- f) Solid Waste 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 as proposed in the proposal in consultation with Forest Department and should include list of trees, shrubs and herbs to be planted.
- h) Instead of Storm Water drain, adequate Rain Water Harvesting structures shall be created for water percolation and to harvest the rainwater to the maximum extent possible.
- STP should be designed with Ultra Filtration, to support the proposed dual plumbing.

AGENDA ITEM NO:05: Proposed Construction of "beach resort' at Kadalur village, Cheyyur Taluk, Kancheepuram district proposed by M/s. Dual Structurals and Industries Pvt. Ltd., Chennai

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 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 (ground floor plus one upper floor).
- 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 ground water extraction in the CRZ.
- f) There should not be any sea water intrusion due to the project activities and periodical water quality monitoring shall be conducted.
- g) Waste water should be treated in the STP and treated sewage shall be recycled after dis-infection for toilet flushing and green belt development.
- h) Suitable sludge disposal mechanism shall be evolved for the proper safe disposal of sludge in the project area.
- i) Proper arrangements should be made for the disposal of biodegradable solid wastes generated in the project areas, by providing Organic Waste Converter (OWC).

- j) The possibilities of utilization of solar energy to the maximum extent shall be explored.
- k) Consent for Establishment from Tamil Nadu Pollution Control Board should be obtained.
- The unit should obtain planning permission for their proposed construction from the Department of Town and Country Planning.
- m) There shall be no construction, including for recreational or part time activities on the beachside of the property.

AGENDA ITEM NO:06:

Proposed layout of land falling in T.S.No. 8, 11/2 part Block No. 14 of Adyar Village, Mambalam – Guindy Taluk, Chennai district proposed by M/s. Baashyaam Construction Private Limited. Chennai.

The Authority resolved to clear the proposals subject to the following specific conditions:

- a) Layout approval should be obtained duly from the CMDA / Corporation of Chennai.
- b) Prior Planning Permission should be obtained for the proposed constructions.
- c) The proposed building(s) to be constructed should be restricted to the single plot boundary (as on 19.2.1991) immediately abutting the existing authorized structures between which the imaginary line is drawn.
- d) The proposed construction/protrusion towards the riverward side should not go beyond the imaginary line drawn between the existing authorized structures on the adjoining plot.
- e) The imaginary line should be drawn parallel to the High Tide Line.
- f) The imaginary line to be drawn should not cut across any river, creek, backwater, sandy beach or mangroves.

AGENDA ITEM NO:07: Refund of scrutiny fee due to the withdrawal of application for the Proposed sub-division by the applicant by Thiru S. Sankar. Chennai.

The Authority resolved to accept the reimbursement of scrutiny fee of Rs.50,000/to the applicant Thiru S. Sankar and authorsed Member Secretary, Tamil Nadu State
Coastal Zone Management Authority to draw and disburse the amount to the applicant.

AGENDA ITEM NO:08: Review of progress of work on protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation & deployment of artificial reef carried out by the Director of SDMRI, Tuticorin.

The Director of SDMRI, Tuticorin accompanied by the Expert from Indian Institute of Technology, Madras Prof. Mr, Sundar made a power point presentation on the progress of work, carried out by the SDMRI on the project "Protection of Vaan Island in Gulf of Mannar from degradation through coral rehabilitation and deployment of artificial reefs' to the members of the Authority.

The Committee 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. Further, it was also suggested that the module should be showcased as an India success initiative in international deliberations such as COP 21 that is to be held at Paris in December 2015.

The Committee approved the sanction of budget for construction and deployment of remaining 9,895 numbers of Artificial Reef (AR) modules from the CRZ fund.

AGENDA ITEM NO.09 (i) Permanent Stability to Coastal inlet of Tamaraparani river at S.F. No. near 76 & 77, Punnakayal Village, Tiruchendur Taluk, Thoothukudi district under Coastal Disaster Reduction and Rehabilitation Programme proposed by Fisheries Department.

The Authority resolved to clear the proposals subject to the following specific conditions:

- a) It should be ensured that there should not be any adverse impact on coastal ecosystem due to the dredging activity and the dumping of dredged materials and proper mitigation measures should be evolved.
- b) Shoreline evolution due to the proposed activities should be observed periodically and remedial measures need to be planned.
- c) The activity should not have any adverse impact on the marine organisms.
- d) The proposed activity shall not cause hindrance to the nearby human settlements/ authorised structures and fishing activities.
- e) Proper Air Pollution control measures should be implemented especially on the vehicular emissions.
- f) Prior clearance should be obtained from the Tamil Nadu State Environment Impact Assessment Authority
- g) In Application No. 04 of 2013 in the matter of O.Fernandes versus Union of India pending before NGT at Chennai, the Hon'ble NGT 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., and hence shore protection work on the coast of Tamil Nadu should be carried out on the approval of the said plan from the competent authority.

The Chairman observed that periodical review on compliance would be an inherent component of the sanction process.

AGENDA ITEM NO.09 (ii) Power point presentation on the preparation of DPR on the ICZM-phase II by National Centre for Sustainable Coastal Management (NCSCM), Chennai.

The Ministry of Environment, Forests & Climate Change, New Delhi has requested the Government of Tamil Nadu a Detailed Project Report (DPR) with the assistance of NCSCM. Prof. R. Ramesh, Director, NCSCM has made a power point presentation on the preparation of ICZM-Phase II with reference to Tamil Nadu Coast with reference to CRZ Notification 2011. He outlined various issues under various factors such as conservation, disaster, pollution, livelihoods, tourism, shoreline etc.,

The Chairman, TNSCZMA highlighted the importance of protecting TN Coast and detailed the outcome and processes undertaken by the Member Secretary, TNSCZMA on ICZM

The Director, NCSCM has indicated that the DPR could not be prepared for the entire stretch of the coast as it is time consuming. Hence he suggested that the most vulnerable areas should be identified and strategies shall be evolved.

After detailed deliberation, it was suggested that the vulnerable areas may be segregated into two groups viz., Cuddalore, Nagapattinam coast as one group and Ramanathapuram and Thoothukkudi as another group and DPR shall be prepared.

The Chairman, TNSCZMA suggested that the Member Secretary, TNSCZMA shall convene stakeholders meeting with the participation of implementing agencies, NGOs and obtain the views and suggestions that may be considered and included in the DPR.

Finally it is suggested as follows:

a) Focus on developing a scientifically sound implementable plan which is prioritized on the vulnerability and strategic directions.

- b) Based on the strategic and action matrix presented, two geographical zones viz., Cuddalore, Nagapattinam coast as one group and Ramanathapuram and Thoothukkudi as another group were identified.
- c) In the template proposed, suggestions were made by the Members of TNSCZMA to include social safeguards and impact monitoring.
- d) DPR to be ready by the stipulated deadline of October 31, 2015.
- e) Department of Environment is the nodal agency. Director of Environment would convene a meeting to facilitate and identify the mechanism, processes including identification of domain experts for contributing to and reviewing the DPR.

Sd/-xxx Dr. H. Malleshappa, I.F.S. Member Secretary, TNSCZMA & Director, Dept. of Environment, Chennai - 15. Sd/- xxx
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 85th meeting of the Authority held on 24.08.2015 are given below:

SI.	subject	Action taken
01	Presentation by L&T Port,	As resolved the L&T Port, Kamarajar Port
	Kattuppalli, Kamarajar Port &	and Chennai Port have been requested to
	Chennai Port Trust on compliance	furnish the Compliance report, monitoring
	on CRZ clearance conditions and	report, action plan with reference to their
	current status on ground.	activities in Ir. No.P1/1905/2015,
		P1/1906/2015 & P1/1907/2015
		respectively dated 08.09.2015.
02	Proposed residential construction	As resolved Clearance under CRZ
	complex Santhome Village,	Notification 2011 has been issued for the
	Mylapore-Triplicane Taluk, Chennai	project in Proc. No. P1/1275/2015 dated
	proposed by Thiru T.V. Sathia	27.08.2015.
	Narayana, Chennai.	
03	Proposed Construction of "beach	As resolved, the proposal has been sent to
	resort' at Kadalur village, Cheyyur	Environment and Forests Department,
	Taluk, Kancheepuram district	GoTN in Ir. RoC. No. P1/766/2015 dated
	proposed by M/s. Dual Structurals	27.08.2015 for taking further action.
	and Industries Pvt. Ltd., Chennai	
04	Proposed layout of land falling	As resolved Clearance under CRZ
	Adyar Village, Mambalam - Guindy	Notification 2011 has been issued for the
	Taluk, Chennai district proposed by	project in Proc. No. P1/1058/2015 dated
	M/s. Baashyaam Construction	27.08.2015.
	Private Limited, Chennai.	

05 Refund of scrutiny fee due to the As resolved order has been issued for the withdrawal of application for the refund of scrutiny fee to the applicant in Proposed sub-division Proc. No. P1/2507/2015 dated 01.09.2015. by the applicant by Thiru S. Sankar, Chennai 06 Review of progress of work on As resolved SDMRI has furnished a protection of Vaan Island carried proposal with Detailed Project Report (DPR) to complete the entire rehabilitation out by Suganthi Devadason Marine Research Institute works (phase II) for the erection of balance 3,895 AR modules and to complete the whole project. 07 Permanent Stability to Coastal inlet As resolved Clearance under CRZ Notification 2011 has been issued for the of Tamaraparani river at S.F. No. near 76 & 77, Punnakayal Village, project in Proc. No. P1/1417/2014 dated Thoothukudi | 27.08.2015. Tiruchendur Taluk. district under Coastal Disaster Reduction and Rehabilitation Programme proposed by Fisheries Department. 08 Power point presentation on the The Director, NCSCM was requested preparation of DPR on the ICZMto indicate his convenient date to phase II by National Centre for

conduct

included in the DPR.

Sustainable Coastal Management

(NCSCM), Chennai

stakeholders

workshop to obtain the views and

suggestions that may be considered and

consultative

<u>AGENDA ITEM NO.03</u> 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.

The M.S. Swaminathan Research Foundation, Chennai under Coastal System Research Programme carrying out several activities on the coastal areas for the restoration, conservation and management of mangroves. In this regard Dr. M. Selvam, Director for the said programme has been requested specifically to make a power point presentation on the activities along the coast of Tamil Nadu to the Members of the Authority for information and to make use of their reports/ documents by TNSCZMA.

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

The water area of Sea has been included in CRZ and categorized as CRZ-IV upto territorial water limit 12 Nm in CRZ Notification 2011. As per para 8 IV (b) of the said CRZ Notification 2011, Pollution from oil and gas exploration and drilling, mining, boat house and shipping is prohibited activity. In this connection the following agencies handling oil spillage in CRZ areas are requested to make power point presentation and also participate in the discussion and deliberations on Oil Spill Management Plan for Chennai Region and Tuticorin Region.

1. Chennai Port, Chennai 2. Kamarajar Port, Ennore, 3. VOC Port Tuticorin 4. L &T port, Kattupalli 5. Indian Oil Company (IOC), Chennai 6. Bharat Petroleum Company Limited (BPCL), Chennai 7. Hindustan Petroleum, Chennai

The following departmental heads are requested to participate in the discussion and offer their views.

- 1. Coast Guard, Chennai Region 2. Tamil Nadu Maritime Board 3. Chief Wild Life Warden
- 4. Fisheries Department 5. Tamil Nadu Pollution Control Board.

AGENDA ITEM NO.05

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 Tamil Nadu Slum Clearance Board (TNSCB) has proposed to construct 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 for clearance under CRZ Notification 2011.

- 2) Under the proposal the TNSCB has proposed to construct 416 tenements in 13 blocks, each with G+3 floors with facilities of ration shop and convenient shops. The TNSCB has already constructed 5,440 tenements comprising of 141 blocks, for which Clearance under CRZ Notification 1991, has been obtained from the Ministry of Environment. Forests and Climate Change in letter dated 09th November 2006. In total, including the proposed constructions, there will be 5856 residential units comprising of 154 blocks and other units like ration shop, nursery school, library, community hall and convenient shop in an total extent area of 1,51,085.08 sq.m. The total plot area is 1,36,900 sq.m., to rehabilitate the slum families living at various location of Chennai city. The part of the proposed constructions is falling in CRZ-II and a part of the project site is falling away from CRZ. The proposed constructions are falling in non-CRZ area and the project cost is Rs. 27crores. The CMWSSB will supply fresh water and the treated sewage will be disposed off from the AIR land scheme and for development of green belt.
- 3) The proposal was placed before the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) in the 83rd meeting held on 19.05.2015 and the TNSCZMA has requested some additional details on the project proposals from the Tamil Nadu Slum Clearance Board (TNSCB). The details sought for by the TNSCZMA and the reply furnished by the TNSCB in their letter dated 31.07.2015 are furnished below:

Details sought for by the TNSCZMA	Reply furnished by TNSCB		
As the threat of sea erosion is high	TNSCB has obtained a letter from the		
along the coast adjacent to project	PWD., wherein, the PWD, Chennai has		
area a profile on the aggressive sea	stated that there is no such sea erosion		
erosion and the measures to mitigate	profile is available in their office (PWD).		
the adverse impact shall be furnished.	However with reference to mitigation of		
	sea erosion the PWD has stated that the		
	work of construction of Groyne Ennore to		
	Ernavoor Kuppam of Madhavaram Taluk		
	was cleared by TNSCZMA and will be		
	commenced shortly.		
Green belt development shall be evolved	Green belt will be developed all along the		
with site specific plants for plantation	boundaries of the project site with		
and furnished.	native species and the enclosed a layout.		

- 4) District Coastal Zone Management Authority for CMDA areas have recommended the proposal. 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 16th 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.

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

The Chennai Metro Water Supply and Sewage Board (CMWSSB) has proposed to construct 31MLD STP at T.S. No. 3/2, Block No. 14 of Sathangadu village, Thiruvottiyur. Tiruvallur district.

- 2) The CMWSSB has informed that the raw sewage will delivered through 600 mm $^{\prime}$ 800 mm dia pipe into the receiving chamber size of 1.94m \times 5.0m \times 5m LD and from where it will be taken into down stream screens. After sewage is treated to conform to standards, the treated sewage will be conveyed through pipe to Buckingham canal running at a distance of about 181 mt.
- 3) The part of the proposed site is falling in CRZ-II. The location of STP is falling outside CRZ and hence the clearance under CRZ Notification requires for the construction of pipelines for the discharge of treated sewage and also for the discharge of treated sewage into the Buckingham canal. The water area of Buckingham canal is categorized as CRZ-IV. The Project cost is Rs. 26.33 lakhs.
- 4) The District Coastal Zone Management Authority for CMDA areas have recommended the proposal subject to the condition that the CMWSSB shall explore the possibilities of using the treated sewage for further beneficial use by the nearby industries or to utilize the treated sewage for development of park in and around the site in consultation with the Corporation of Chennai.
- 5) The proposal was placed before the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) in the 83rd meeting held on 19.05.2015 and as resolved in the said meeting the CMWSSB has furnished the documents / reports to the TNSCZMA on the following issues in their letter dated 31.08.2015.

- a) As the secondary treatment of sewage water is not fit for reuse, CMWSSB may explore the possibilities of providing another alternative primary membrane treatment of sewage water with the adaptation of latest methods instead of chlorination and furnish the details for further action.
- b) A detailed report indicating the present water quality levels/ characters of the Buckingham canal, estimated water quality levels of proposed discharge and the estimated resultant water quality levels of the Buckingham canal after discharge, on various parameters, with reference to standard permissible limit shall be furnished.
- c) A plan for the continuance long term monitoring of quality/ characters of the treated water shall be furnished.
- d) CMWSSB shall explore the possibilities of using the treated sewage for further beneficial use by the nearby industries or to utilize the treated sewage for development of park in and around the site in consultation with the Corporation of Chennai and furnish the details on the proposed reuse of water.
- e) The CMWSSB shall design the STP in comparing with the performance of any one of the similar STP in the State and furnish the report
- 6) As per CRZ Notification 2011, vide para 3 (vi) Discharge of untreated waste and effluents from industries, cities or towns and other human settlements is prohibited activity and the concerned authorities shall implement schemes for phasing out existing discharge of this nature, if any. Further the above activity requires clearance from the Ministry of Environment, Forests and Climate Change, GOI vide para 4 (ii) (d) of CRZ Notification 2011.
 - 7) The Authority may consider.

AGENDA ITEM NO:07

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 Chennai Metro Water Supply and Sewage Board (CMWSSB) has proposed to construct 36MLD STP at T.S. No. 238/1 of Sholinganallur village, Tambaram Taluk, Kacheepuram district.

- 2) The CMWSSB has informed that the STP capacity shall be 36 MLD with SBR basins but initially sized for 18 MLD. Civil works will be erected for 36 MLD and pumps for 18 MLD. Space to be provided to accommodate additional pumps for 18 MLD flow. The applicant has informed that the peak flow will be 80.5 MLD. After sewage is treated to conform to standards, the treated sewage will be conveyed through pipe to Buckingham canal.
- 3) The part of the proposed site is falling in CRZ-II. The location of STP is falling outside CRZ and hence the clearance under CRZ Notification requires for the construction of pipelines for the discharge of treated sewage and also for the discharge of treated sewage into the Buckingham canal. The water area of Buckingham canal is categorized as CRZ-IV. The Project cost is Rs. 25.25 lakhs.
- 4) The District Coastal Zone Management Authority for CMDA areas have recommended the proposal subject to the condition that the CMWSSB shall explore the possibilities of using the treated sewage for further beneficial use by the nearby industries or to utilize the treated sewage for development of park in and around the site in consultation with the Corporation of Chennai.
- 5) The proposal was placed before the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) in the 83rd meeting held on 19.05.2015 and as resolved in the said meeting the CMWSSB has furnished the documents / reports to the TNSCZMA on the following issues in their letter dated 23.07.2015.

- a) As the secondary treatment of sewage water is not fit for reuse, CMWSSB may explore the possibilities of providing another alternative primary membrane treatment of sewage water with the adaptation of latest methods instead of chlorination and furnish the details for further action.
- b) A detailed report indicating the present water quality levels/ characters of the Buckingham canal, estimated water quality levels of proposed discharge and the estimated resultant water quality levels of the Buckingham canal after discharge, on various parameters, with reference to standard permissible limit shall be furnished.
- c) A plan for the continuance long term monitoring of quality/ characters of the treated water shall be furnished.
- d) CMWSSB shall explore the possibilities of using the treated sewage for further beneficial use by the nearby industries or to utilize the treated sewage for development of park in and around the site in consultation with the Corporation of Chennai and furnish the details on the proposed reuse of water.
- e) The CMWSSB shall design the STP in comparing with the performance of any one of the similar STP in the State and furnish the report
- 6) As per CRZ Notification 2011, vide para 3 (vi) Discharge of untreated waste and effluents from industries, cities or towns and other human settlements is prohibited activity and the concerned authorities shall implement schemes for phasing out existing discharge of this nature, if any. Further the above activity requires clearance from the Ministry of Environment, Forests and Climate Change, GOI vide para 4 (ii) (d) of CRZ Notification 2011.
 - 7) The Authority may consider.

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 Works Department.

The Executive Engineer, PWD (WRO), Korampallam Aru Basin Division, Thoothukudi district has submitted a proposal for the proposed construction of training wall at the mouth of the river Tamiraparani at Punnakayal village, Tiruchendur Taluk, Thoothukudi district for clearance under CRZ Notification 2011.

- 2) Under the proposal the PWD has proposed to construct two training walls at a length of 400mts and 299.50 mts on the south and north side of Punnakayal coast to reduce the coastal erosion. However in the EIA report it is reported that eventhough it is not expected to have severe erosion on both sides of the training wall, a buffer is recommended for the construction of two short groins, the average length of each of about 50m. The design length and the distance between the groins will be based on the behavior of shoreline during the construction of the training wall, IIT (M) will finalise the final design of the groin during the construction. The proposed site is falling under unsurveyed land and inter tidal zone in CRZ I area. The Project cost is Rs.8.47 crores.
- 3) The proposal was placed before the 79th meeting of the Tamil Nadu State Coastal Zone Management Authority held on 18.08.2014 and the Tamil Nadu State Coastal Zone Management Authority resolved as follows:

'As the proposal is not in consonance with the proposal of Permanent Stability to Coastal inlet of Tamaraparani proposed by the Fisheries Department and also the stakeholders of the project are fishermen, the Authority resolved to request the Public Works Department to submit a fresh proposal in consultation with the Fisheries Department with the following details.

- a) The details of options, alternatives considered by the PWD to prevent / reduce the erosion at the project site.
- b) The proposal should be finalized take into the confidence of all stake holders and fishermen. The proposed plan should be clear with long term objectives and to ensure no haphazard developments due the project.

- c) The details of projects on shoreline protection measures taken up by the PWD on the Coast of Tamil Nadu during the past 5 years and the current status / impacts on the said projects on the coastal environment should be furnished so as to have a wholist pictures on the said project.
- 4) In addition to the above, the PWD has also requested to furnish the following details:
- a) The details of proposed works in CRZ after the consultation with the Fisheries Department and World Bank, for which the Clearance is required.
- b) The proposed plan should be clear with long term objectives and to ensure no haphazard developments due the project.
- c) A report indicating that the locations of the propose groynes are not falling in the High Eroding site.
- d) PWD shall explore the possibilities of providing soft measures instead of going for erection of hard structures viz., construction of groynes along the coast. If the soft measures are not suited at the project site, then the reasons for the same should be furnished.
- 5) The PWD has furnished the above details viz., that the site is not falling in high eroding site, report from IIT Madras stating the reasons for providing hard structures, report on assessment of impacts and mitigation measures etc after consultation with the Fisheries Department.
- 6) As per CRZ Notification 2011, vide para 3 (i) (a) & 3 (iv) (b) construction for the foreshore facilities in CRZ and land reclamation, bunding or disturbing /the natural course of seawater as a measure for control of erosion based on EIA studies is permissible activity. As per CRZ Notification 2011, vide para 4 (i) (a) Clearance shall be given for any activity within the CRZ if it requires waterfront and foreshore facilities; Further as per the amendment issued by MOEF., GoI in Notification S.O. No. 3085 (E) dated 28th November 2014, the above proposal requires clearance from the Tamil Nadu State Coastal Zone Management Authority.

The Authority may consider.

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, Thoothukudi for grant under State Coastal Zone Development Fund.

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 Warden, 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 reference cited was placed before the 81st meeting of the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) held on 27.11.2014. The Authority has accepted the proposal and among other things the Authority resolved that before carrying out the activities one Wave Dynamic Study shall be carriedout through a reputed institution like IIT and also bathymetry study with relevant models and based on the above studies the design and the location of the above pilot project shall be finalized. Further the Authority resolved that the conservation project shall be implemented in a pilot scale and after analyzing the results, the size of the project area shall be extended.
- 3) Accordingly, the SDMRI has furnished Technical report and Interim and Final Reports on bathymetry and Wave dynamics studies in Ir dated 15.12.2014, 30.12.2014 & 12.01.2015 respectively during December 2014 and January 2015, obtained from IIT, Madras. The IIT has recommended on the implementation of the project with technical inputs and informed that the implementation of the project does not affect the stability of the Koswari Island.

- 4) As per the decision of the TNSCZMA the work has been entrusted to SDMRI at a cost of 1,86,67,000/- (Rupees One crore eighty six lakhs sixty seven thousand only) as pilot scale and the SDMRI is executing the works. Among other things, the pilot project includes the deployment of 705 numbers of artificial reef modules of total 10600 AR modules, at a selective locations based on the bathymetry and wave dynamics studies by IIT.
- 5) The Director, SDMRI made a power point presentation on the progress of work to the Members of the TNSCZMA in the 85th 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. Further, it was also suggested that the module should be showcased as an India success initiative in international deliberations such as COP 21 that is to be held at Paris in December 2015.
- 6) Further based on the progress the Authority approved the sanction of budget for construction and deployment of remaining 9,895 numbers of Artificial Reef (AR) modules from the CRZ fund. Accordingly SDMRI has furnished a proposal with Detailed Project Report to complete the entire rehabilitation works for the protection of artificial reefs.
- 7) As per the DPR the total AR modules to be erected is 9,895 and out of which 6000 AR modules will be erected with the financial assistance of MoEF & CC., under "National Adaptation Fund for Climate Change". Hence the Director, SDMRI has requested financial sanction of Rs. 6,96,85,000/- (Rupees Six Crores Ninety Six Lakhs Eighty Five Thousand only) for the erection of balance 3,895 AR modules and to complete the whole project.

- 8) Hence as resolved in the 85th Authority meeting held on 24th August 2015, the SDMRI may be permitted to deploy remaining 9,895 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) from the State Coastal Zone Development Fund. Management Authority for grant under State Coastal Zone Development Fund CRZ fund.
 - 9) The Authority may consider.

Sd/-xxxx Dr. H. Malleshappa., I.F.S. Member Secretary, TNSCZMA & Director, Dept. of Environment, Chennai -15 Sd/-xxxx Thiru Hans Raj Verma., I.A.S., Chairman, TNSCZMA and Principal Secretary to Government Environment & Forests Dept., Chennai - 9. Addl. AGENDA ITEM NO.01: Proposed Construction of 400 MLD sea water reverse osmosis desalination plant at Perur village, Thiruporur taluk, Kancheepuram distict proposed by Chennai Metropolitan Water Supply & Sewerage Board, Chennai - Clearance under CRZ Notification 2011.

M/s Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB) has proposed to establish a 400 MLD Sea Water 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.
- 6)) 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.
 - 7) The Authority may consider.

Addl. AGENDA ITEM NO.02: 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.

M/s Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB) has proposed to establish a 150 MLD Sea Water 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:

- g) Laying of seawater intake two pipeline
- h) Laying of outfall pipeline
- i) Construction of seawater intake head (offshore construction)
- i) Construction of outfall diffuser (offshore construction)
- k) Construction of seawater sump with pump house
- 1) 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 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.
 - 7) The Authority may consider.

Addl. AGENDA ITEM NO. 03: 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 District Coastal Zone Management Authority of Kancheepruam district has forwarded a proposal for the 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 for Clearance under CRZ Notification 2011. The applicant has proposed to construct the beach resort with two blocks in an extent of 4.1561 hectares (41561.25 sq.m.) with the built up area of 20843.11 sq.m., which includes FSI, Non FSI constructions and parking area. The area of the No Development Zone i.e., between 0-200mts from the HTL of sea is 21535.84 sq.m., and the area comes between 200mto 500m is reported to be 20025.41 sq.m. and the FSI is 0.3298. The entire project area is falling in CRZ-III. The applicant proposed to develop resort with a facility of 82 rooms in block 1 (Ground floor + first floor) 36 rooms in block 2 (upper ground + lower ground) with restaurant, banquet hall besides other features comprising spa, gym, bakery and lawns. The applicant has indicated that the maximum height of the building is to be restricted 9.0 m., The Total cost of the project is 30.00 crores.

2) The total water requirement for various uses is 128 KLD and will be met from the ground water and reported to be met by out sourcing through panchayat/tankers. The resort has proposed to implement sewage treatment plant to treat the domestic sewage quantity of 125 KLD. Out of the 107 KLD., the treated sewage of 70 KLD is to be utilized for gardening purpose and the quantity of 24 KLD will be reused for toilet flushing and 13 KLD for cooling tower.

- 3) The food waste and other organic waste of 158 kg/day generated from the resort will be converted as manure through organic waste converter system and the same will be sued for landscaping and gardening purposes The inorganic waste of 192 Kg/day will be disposed through recyclers. The STP sludge of 10 kg/day will be used for manure for gardening. The unit proposed to install DG set of 630 KVA with stack and with inbuilt acoustic enclosures.
- 4) The applicant produced a copy of HTL demarcation map obtained from IRS., Anna University and the entire project area is falling in CRZ.
- 5) The District Coastal Zone Management Authority, Kancheepuram district has recommended the proposal. The DCZMA has reported that a concrete cemented road is laid for about 100m within the site upto a cremation ground belonging to vadanemmeli panchayat and the road and part of cremation ground lies within the project site. Further TWAD maintained a open well with pump house to supply water to the said panchayat is also located within the project site and hence the DCZMA has informed that the proponent has to provide necessary provision to the public to access the cremation ground and the open well to the public.
- 6) As per para 8 III CRZ-III (B) (i) of CRZ Notification 2011, development of vacant plots between 200 and 500 metres of HTL in designated areas of CRZ-III with prior approval of Ministry of Environment, Forests & CC shall be permitted for construction of hotels/beach resorts.
 - 8) The Authority may consider.

Addl. AGENDA ITEM NO:04

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.

On the Application No. 4/2013 filed by Thiru O. Fernandes regarding the construction of shoreline protection structures by the PWD 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) In this connection the PWD in letter No.W1/5552/11, Dated:14.8.2015 has furnished a brief report on the coastal protection work's of Tamil Nadu, wherein, the PWD has informed that several protection measures in general consist of Groyne fields, rubble mound sea walls, combination of Groyne fields & rubble mound sea walls, training walls on river mouths, spurs, plantations.
- 3) The PWD further informed that the total estimate cost for the comprehensive Shoreline Management Plan for the Tamil Nadu Coast is approximately 886.82 Crores and the PWD has also furnished in letter No. No.W1/5552/11 Dated: 31.08.2015 an Action Plan indicating the locations along the coast of Tamil Nadu which requires shoreline protection measures / erosion control measures with specifications and cost estimates.
- 4) The PWD was requested by letter dated 21.08.2015 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. and also to furnish an action plan in respect of preparation of the said plan, as requested by the Hon'ble NGT.
- 5) However on 04.09.2015 the Hon'ble NGT directed the Tamil Nadu State Coastal Zone Management Authority to prepare a Comprehensive Shoreline Management Plan / Scheme for the entire coast of Tamil Nadu engaging a reputed institution and the NGT has also issued stay preventing PWD or any other agencynot proceed with any work on shore

protection until further orders till the approval of the Comprehensive Shoreline Protection Management Plan / Scheme by MoEF&CC.

- 6) Hence a meeting was conducted on 18.09.2015 to finalize an action plan for the preparation of shore protection management plan for the coast of Tamil Nadu with the following experts.
 - 1. Dr. R.S. Kankara, Scientist F, ICMAM Project Directorate, Ministry of Earth Sciences, NIOT Campus, Pallikaranai, Chennai 600 100.
 - 2. Dr. V. Sundar, Director of Ocean Engineering, IIT, Madras 600 036.
 - 3. Dr. S.A. Sannasiraj., Professor, Department of Ocean Engineering, IIT, Madras 600 036.
 - 4. Dr. N.K. Ambujam, Prof& Director (i/c). Institute of Ocean Management, Anna. University, Chennai 600 025.
- 3) The other invitees viz., the National Institute Ocean Management (NIOT), Chennai has informed that due to urgent other important meeting, they couldn't able to attend the meeting. No representative from NCSCM, Anna University, Chennai has attended the meeting.
- 4) After detailed discussions and deliberations, the research institutions agreed to prepare a Comprehensive Shoreline Management Plan / Scheme for the entire coast of Tamil Nadu and the Institutions agreed to send a proposal indicating the time requires for the preparation of plan along with methodologies, budget etc., in a week i.e., by 25.092015 so as to finalise the issue.
 - 5) Accordingly the proposals have been received as follows:
- i) Department of Ocean Engineering, IIT, Chennai 4 months to complete the project at a Cost of Rs. 64.98 lakhs. (bathemetry, EIA studies are not included in the scope of the present project)
- ii) Institute of Ocean Management (IOM), Chennai 45 days each for 4 components viz., Identification of vulnerable coastal areas, modeling, Management options based on behavioural studies and preparation of coastal management plan to complete the project at a cost of Rs.40 lakhs. Further Rs.10.00 lakhs each per site for the preparation of EIA, EMP, Risk assessment, natural hazard vulnerability maps, bathymetry etc.,

- iii) National Institute of Ocean Technology, Chennai 6 months to complete the work at a cost of Rs.1,52,07,600/- (bathmetry, waves studies, sediment transport, current studies not included in the scope)
- 6) The Authority may decide the agency to whom the preparation of Comprehensive Shoreline Protection Management Plan / Scheme for the entire coast of Tamil Nadu may be entrusted. The financial assistance may be released from the State Coastal Zone Development fund.
- Addl. AGENDA ITEM NO.05: 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.

To address the issue of global climate change impacts at local level and to take effective actions, the State of Tamil Nadu has prepared its State Action Plan on Climate Change. The Tamil Nadu State Action Plan on Climate Change (TNSAPCC) was drafted and submitted to the Ministry of Environment, Forests and Climate Change, Government of India on 4th July 2014 and the same was endorsed on 31st March 2015.

- 2) In this connection DFID (Department for International Development) was identified as the Consultant in preparation of projects in Tamil Nadu, envisaged in TNSAPCC to obtain fund from National Adaptation Fund for Climate Change (NAFCC), Green Climate Fund (GCF), Adaptation Fund Board (AFB) and Demonstration Projects under Climate Change Action Programme (CCAP).
- 3)The Principal Secretary, Environment and Forest Department, Government of Tamil Nadu, conducted a meeting with officials of Department of Environment, British Deputy High Commission (BDHC) and concerned sectoral Nodal officers of TNSAPCC on 4th May, 2015. Coastal Area Management, Sustainable Habitat and Energy Efficiency/Renewable Energy and Solar Mission were identified as prioritized sectors for the implementation of projects funded under TNSAPCC.

- 4) Accordingly, a concept Note entitled "Management and rehabilitation of coastal habitats and biodiversity for Climate Change Adaptation and Sustainable Livelihood in Gulf of Mannar, Tamil Nadu, India", with a total project cost of Rs. 24,74,06,000/- under the Coastal Area Management sector was submitted to the Ministry of Environment, Forests and Climate Change, Government of India, for financial assistance under the National Adaptation Fund for Climate Change.
- 5) The proposal has been technically accepted MOEF & CC, with few modifications/suggestions and the final proposal will be submitted to the Ministry of Environment, Forests and Climate Change, Government of India, after incorporating the suggestions/views shortly.
- 6) The Technical Scrutiny Committee of the National Adaptation Fund on Climate Change has also informed that the Detailed Project Report (DPR) for the above proposal should be prepared in consultation with National Bank for Agriculture and Rural Development (NABARD) and the NABARD has offered to prepare the DPR through NABARD Consultancy Services (NABCONS), which is the wholly-owned subsidiary of NABARD.
- 7) The NABCONS have quoted the consultancy fee for preparation of DPR as 1% of the project outlay (subject to a minimum of Rs. 5 lakhs plus Service Tax and maximum of Rs. 10 lakhs plus Service Tax per DPR) along with their terms and conditions.
- 8) The proposal relates to Coastal Area Management and sustainable livelihoods of Gulf of Mannar and hence financial assistance may be released from the State Coastal Zone Management Development fund. The quantum of financial assistance may be fixed.
 - 9) The Authority may also consider.

Addl. AGENDA ITEM NO 06: 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

regarding.

Government of Tamil Nadu in G.O.Ms. No. 577 Revenue (LD 4(1) Department dated 05.10.2007 has issued orders for the transfer of the project lands to fisheries department for the construction of fishing harbour at Rajakkamangalam, as the said lands are vacant seashore lands.

- 2) Based on the above said orders, the project lands have been handed over to Fisheries Department by the Revenue Department in Ir. No. A2/34571/07 dated 22.05.2008 for the construction of fishing harbour.
- 3) The Commissioner of Fisheries, Government of Tamil Nadu in Ir. No. DB/D2/303/2007 dated 17.12.2007 has awarded the development of fishery harbour at Rajakkamangalamthurai in Kanniyakumari district under BOOT System to the Rajakkamanagalamthurai Development Trust at concessionarire's own cost to develop design, engineer, finance, procure, construct, operate and maintain for the period of 30 years from the commencement date.
- 4) The Principal Conservator of Forests, Government of Tamil Nadu has ordered for the recovery of Rs.2,60,200/- towards the cost for the 2008 shelter belt plantation, in the project site and he also permitted the applicant for clearing the said casuarinas plantation in the presence of forest officials. Accordingly the applicant has remitted the said amount on 10.02.2010.
- 5) In M.P. (MD) No.2/2009 of W.P.2206/2009 filed by one Thiru T. Dharmakrishnan in the Hon'ble High Court of Chennai against the project, the Hon'ble High Court has issued orders on 19.03.2010 as follows:

- " if there is any such restriction for making any construction under Coastal Regulatory zone, it is needless to state that without getting such Clearance from the competent authority, no construction can take place."
- 6) Accordingly ., M/s. Rajakkamangalam Thurai Fishing Harbour Private Limited (RTFHPL), Rajakkamangalamthurai, Kanniyakumari has submitted a application for the construction of Rajakkamangalam Fishing harbour in the application dated 06.05.2010.
- 7) The Ministry of Environment and Forests, GoI have approved Coastal Zone Management Plan of Tamil Nadu in Ir. No. J-17011/16/93 -IA-III dated 27.09.1996. The project site for the construction of above said fishing harbor is falling in Approved Coastal Zone Management Plan Map No. 31 of Kanyakumari district of Tamil Nadu. As per said Approved Coastal Zone Management Plan Map No. 31, the project site is falling in CRZ III and CRZ I (ii) i.e, inter tidal zone and as per the said map also the project site has no sand dunes and sand dunes are available adjacent to the said project site.
- 8) The applicant has engaged the Department of Ocean Engineering, Indian Institute of Technology (IIT), Madras, who have prepared and furnished the Detailed Project Report covering designs, constructions etc., where in under "Topography" the IIT has indicated that the project site has a formation of varied topography sloping towards the beach having an elevation greater than 3m and has a green cover formed with thorny plants, casuarinas and other vegetations and the beach stretch and the foreshore is sandy. The IIT has not indicated the presence of sand dunes in the project site.
- 9) The feasibility report was prepared by "Ensyscon" one among the accredited agencies and as per their report the project site is a beach purampoke land with thorny bushes and casuarinas plantation and also indicated that there is no environmental issues about the site and furnished photographs of the project site.
- 10) The District Coastal Zone Management Authority (DCZMA) of Kanniyakumari district has resolved to forward the proposal to State Coastal Zone Management Authority in their meeting held on 18.05.2010 so as to enable to obtain Environmental Clearance for the

project, from Government of India and the DCZMA has also indicated that the project site is falling in CRZ-III.

- 11) As per CRZ Notification 1991 & 2011., the applicant should furnish HTL demarcation map from an authorized agency approved by MoEF, GoI and accordingly the applicant has furnished a HTL demarcation map obtained from the Institute of Remote Sensing, Anna University. The IRS., Anna university has not indicated any sand dune in the project site.
- 12) The above details have been placed before the 59^{th} meeting of the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA), held on 28.05.2010 and the Authority have resolved to recommend the proposal to Ministry of Environment and Forests, Government of India. Accordingly the proposals have been sent to Ministry of Environment and Forests, GoI in the reference 5^{th} cited, from the Government of Tamil for issuing Environmental Clearance under CRZ Notification 1991. The MoEF& CC has issued CRZ Clearance in No. 11-67/2010 dated 18.07.2011 for the above project.
- 13) An application No.5 of 2013 is filed in the Hon'ble NGT (Southern zone) at Chennai by Panaiyoor Regional Citizens Welfare Trust against the setting up the said Fishing Harbour and the matter is under sub-judice.
- 14) Hence to furnish the factual report to the Hon'ble NGT, a sub-committee has inspected the project site on 22.11.2013 and 23.11.2013 and furnished a report. As per the report there is no violation of conditions of CRZ clearance already issued to the project and also there is no sand dunes in the project site and also indicated that the Rajakkamangalam Coast is not a turtle nesting area. Further the Institute of Remote Sensing (IRS), Anna University who is the authorized agency to demarcate HTL/LTL based on the geomarphological features have also certified in letter dated 19.11.2013 that there is no sand dunes in the project site. The District Forest Officer, Department of Forests, Kanyakumari Division, Nagercoil has also in his letter dated 26.02.2013 has also certified that there is no sand dunes available in the project area.
- 15) In the meantime, MoEF & CC has in its order No. F. 2-60/2014-IA-III dated 11^{th} September 2015, cancels the CRZ Clearance issued in No. 11-67/2010 dated 18.07.2011. The MoEF & CC has directed to initiate the process of revision of CRZ Map of this area after

having consultations with NCSCM and also with IRS, Chennai and submit their recommendations in the matter within three months from the date of receipt of the order subject to the adjudication of the cases pending in the Hon'ble tribunal and High Court of Chennai.

16) The above facts are furnished for the perusal of the Authority and the Authority may consider further course of action.

<u>Addl. AGENDA ITEM NO.07</u> Power point presentation on the activities of Indian Rare Earths Limited (IREL), Manavalakurichi, Kanyakumari district.

As the Indian Rare Earths Limited (IREL) is carrying out their activities on the coastal areas of Kanyakumari, the IREL has been requested specifically to make a power point presentation on their activities in CRZ., along the coast of Tamil Nadu to the Members of the Authority.

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

Sd./- XXXXXXXX

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

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

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

The minutes of the 85th 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.

<u>AGENDA ITEM NO.02</u>: Report on the follow up action taken in respect of decisions taken during the 85th 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., (IOCL), 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.

AGENDA ITEM NO.05 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

- j) 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.
- k) Planning Permission shall be obtained from the Chennai Metropolitan Development Authority.
- Consent for Establishment from Tamil Nadu Pollution Control Board should be obtained.
- m) Explore the possibilities of designing eco-friendly elevation.
- n) Premium FSI is not permissible.
- o) There should not be any ground water extraction in CRZ.
- p) Sewage should not be let off into the sea.
- q) Solid Waste Management Plan should be formulated and to be implemented without depending wholly on Corporation of Chennai for this purpose.

- r) 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.
- s) Adequate Rain Water Harvesting structures shall be created for water percolation and to harvest the rainwater to the maximum extent possible.
- t) 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.
- u) 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.

<u>AGENDA ITEM NO:06</u> 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, CMWSSB 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.

AGENDA ITEM NO:07 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, CMWSSB 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.

<u>AGENDA ITEM NO.08</u> Proposed construction of training wall at the mouth of river

Tamiraparani at Punnakayal Village, Tiruchendur Taluk,

Thoothukudi district proposed by Public Works Department.

The Authority resolved to request the PWD 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 PWD 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 81st meeting. Further he detailed the proposed phase II activities which need to be impelemented 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 Island 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 Water 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 CMWSSB 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 CMWSSB 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 learnings.

AGENDA ITEM NO. 12:

Proposed construction of "beach resort' at 5.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:

- n) 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.
- o) 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.
- p) Basement, if any, shall be erected after getting NOC duly from the Central Ground Water Authorities.
- q) 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.
- r) There should not be any construction for residential purpose.
- s) There should not be any ground water extraction in the CRZ.
- t) There should not be any sea water intrusion due to the project activities and periodical water quality monitoring shall be conducted.

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

AGENDA ITEM NO:13

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.

AGENDA ITEM NO.14: 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 11th 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 (IREL) 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 IREL 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.

AGENDA ITEM NO.17:

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