

Proceedings of the 22nd meeting of the Odisha Coastal Zone Management Authority (OCZMA) held on 28.04.2014 at 11:00 AM

The 22nd meeting of the Odisha Coastal Zone Management Authority (OCZMA) was held under the Chairmanship of the Principal Secretary to Govt., Forest & Environment Dept. Govt. of Odisha in the conference hall of OCZMA at Plot. No-108, Suryanagar, Bhubaneswar. The list of members present is given in Annexure-I

A. Compliance of the decision taken in the 21st meeting of Odisha Coastal Zone Management Authority (OCZMA) held on 17.01.2014.

Compliance of the decision taken in the 21st meeting of Odisha Coastal Zone Management Authority held on 17.01.2014 was placed before the Authority and the Authority took note of the compliance.

Sl. No.	Project / Project Proponent	Decision taken	Compliance
A1	Keshapur Multipurpose Cyclone Shelter and connecting road Projects at Vill – Keshapur, Block- Khallikote, Dist - Ganjam by OSDMA	It was decided to issue clearance to the project	Necessary clearance was issued vide Letter No.- 34 Dt. 12.02.2014
A 2	Nuagan Multipurpose Cyclone Shelter and connecting road Project at Vill-Nuagan, Block- Krus-hnaprasad, Dist - Puri by OSDMA		
A 3	Siara Multipurpose Cyclone Shelter and connecting road Projects at Vill- Siara, Block- Krus-hnaprasad, Dist - Puri by OSDMA		
A 4	Jagdala Multipurpose Cyclone Shelter and connecting road Projects at Vill- Jagdala, Block - Brahmagiri, Dist - Puri by OSDMA		
A 5	Asana Multipurpose Cyclone Shelter and connecting road Projects at Vill –Asana, Block - Astaranga, Dist -Puri by OSDMA		
A 6	Khandasahi Multipurpose Cyclone Shelter and connecting road Projects at Vill-Khanda-sahi, Block - Astaranga, Dist - Puri by		

Raj

	OSDMA		
A 7	Dihakarada Multipurpose Cyclone Shelter and connecting road Projects at Vill - Dihakarada Block - Astaranga Dist - Puri by OSDMA		
A 8	Baradihi Multipurpose Cyclone Shelter and connecting road Projects at Vill-Baradihi, Block-Chilika, Dist- Khorda by OSDMA		
A 9	Sorana Multipurpose Cyclone Shelter and connecting road Projects at Vill- Sorana, Block - Chilika, Dist- Khorda by OSDMA		
A 10	Manasinghpur Multipurpose Cyclone Shelter and connecting road Projects at Vill- Manasinghpur Block - Chilika Dist-Khorda by OSDMA		
A 11	Hariharpur Multipurpose Cyclone Shelter and connecting road Projects at Vill-Harihar-pur, Block-Chilika, Dist- Khorda by OSDMA		
A 12	Mangalajori Multipurpose Cyclone Shelter and connecting road Projects at Vill- Manga-lajori Block- Tangi, Dist- Khorda by OSDMA		
A 13	Sundarpur Multipurpose Cyclone Shelter and connecting road Projects at Vill - Sunderpur Block- Tangi, Dist- Khorda by OSDMA		
A 14	Karatia sahi Multipurpose Cyclone Shelter and connecting road Projects at Vill - Karatiasahi Block- Tangi, Dist-Khorda by OSDMA		
A 15	Khamarsahi Multipurpose Cyclone Shelter and connecting road Projects at Vill - Khamarsahi Block - Rajnagar Dist - Kendrapara by OSDMA		
A 16	Bidyutprava Multipurpose Cyclone Shelter and connecting road Projects at Vill - Bidyutprava Block - Chandbali Dist-Bhadrak by OSDMA		

2/

A 17	Kanakprasad Multipurpose Cyclone Shelter and connecting road Projects at Vill-Kanakprasad, Block - Chandbali, Dist-Bhadrak by OSDMA		
A 18	Gauraprasad Multipurpose Cyclone Shelter and connecting road Projects at Vill - Gourprasad, Block - Chandbali, Dist - Bhadrak by OSDMA		
A 19	Sankhua Multipurpose Cyclone Shelter and connecting road Projects at Vill- Sankhua, Block - Baliapal, Dist – Balasore by OSDMA		
A 20	Establishment of Passenger Jetty at ARADI (Baitarani River) in Bhadrak District. Vill - Aradi P.S - Chandbali Dist - Bhadrak under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha	Committee suggested the projects cannot be considered in the present form due to the following reasons: I. Waiting hall is not a permissible activity in CRZ-I area. II. Community toilet should be integrated with the provision of bio digester III. The project proponent was advised to resubmit the proposal, if they so like, incorporating only those activities which are permissible under CRZ Notification, 2011.	The decision of the Committee was communicated to the project proponent vide Letter No. – 16 Dt. 05.02.2014
A 21	Establishment Of Passenger Jetty at DHAMARA (Dhamara River) in Bhadrak District Vill - Dhamara Dist - Bhadrak under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha		
A 22	Establishment of Passenger Jetty and waiting Hall at TALCHUA (Dhamara River) in Kendrapara District. Vill - Talchua Dist - Kendrapada under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha		
A 23	Establishment of Passenger Jetty and Waiting Hall at KALIAKANA (Devi River) In Puri District. Vill - Kaliakana Dist - Puri under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha		

Bo

A 24	Establishment of Passenger Jetty and Waiting Hall at GANDAKULA (Devi River) In Jagatsinghpur District. Vill - Gandakula Dist - Jagatsinghpur under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha		
A25	Improvement of existing passenger Jetty at Balugaon (Chilika Lake in and around the project site) in Khurda District at Vill - Balugaon, Dist - Khorda under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha		
A 26	Establishment of Passenger Jetty and waiting Hall at GUPTI (Patsala River) in Kendrapara District. Vill - Gupti Dist-Kendrapara under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha	Committee suggested the project proponent is to resubmit the proposal, if they so like: I. Waiting hall is not a permissible activity in CRZ-I area. II. Project proponent should incorporate only those components which are permissible under CRZ Notification, 2011. III. The proposed location of the Jetty should be changed from Gupti or else they should produce NOC from DFO, Mangrove Forest Division (Wildlife), Rajnagar for construction of Jetty at Gupti.	The decision of the Committee was communicated to the project proponent vide Letter No. – 15 Dt. 05.02.2014



A 27	Establishment of Remodelling of Satapada Jetty in Puri District under Berhampur Directorate of Port and IWT (Commerce & Transport (Com) Department, Govt of Odisha	It was decided to issue clearance to the project	Necessary clearance was issued vide Letter No.- 40 Dt. 12.02.2014
A 28	Development of Participatory Eco-Tourism under livelihood security at Chilika, Gangadharpur in the district of Puri by OTDC under ICZM Projects	Committee suggested that the project proposal in present form is not permissible. The project proponent needs to modify the project and seek clearance only for the permissible activities in the CRZ area under CRZ Notification, 2011 and non-permissible activities outside the CRZ area.	The decision of the Committee was communicated to the project proponent vide Letter No. – 17 Dt. 05.02.2014
A 29	Development of Participatory Eco-Tourism under livelihood security at Chilika, Mirzapur in the district of Puri by OTDC under ICZM Projects		
A 30	Development of Participatory Eco-Tourism under livelihood security at Chilika, Gabakunda in the district of Puri by OTDC under ICZM Projects		
A 31	CRZ Clearance for construction of R.C.C. piled jetty at village Arakhakuda (Bhagabat Sahi) proposed by Chilika Development Authority.	It was decided to issue clearance to the project	Necessary clearance was issued vide Letter No.- 36 Dt. 12.02.2014
A 32	CRZ Clearance for construction of R.C.C. piled jetty at at village Sanapatana by Chilika Development Authority.		Necessary clearance was issued vide Letter No.- 38 Dt. 12.02.2014
A 33	Establishment of captive minor port and intake & discharge pipeline at the confluence of Jatadharmohan creek near Paradeep for POSCO-India project	The Committee reviewed the documents and suggested to submit the following additional information/ data for further examination during next meeting; I. Beach erosion modelling study. II. Macro/ micro benthos study as baseline data for impact analysis	The decision of the Committee was communicated to the project proponent vide Letter No. – 19 Dt. 05.02.2014

Rup

		<p>during construction and operation phase</p> <p>I. Information regarding the impact on Olive Ridley turtle during turtle breeding and mass nesting along Gahirmatha coast.</p> <p>V. It was informed that IMMT, Bhubaneswar carried out Marine Ecology/ Water Quality Study. The proponent is to submit the competence of the core group of Scientists involved in such kind of study.</p> <p>V. Impact of proposed Break-water on the sediment transport.</p> <p>VI. Justification regarding significant variation in Water Quality Monitoring Data between 2005-06 and April, 2013 report.</p>	
A 34	<p>Construction of Storm Water Drainage System of Puri Town under JNNURM Scheme of Govt. of India by Drainage Division, Bhubaneswar.</p>	<p>The committee discussed the proposal in detail and approved the proposal in principle as per CRZ Notification, 2011, but the approval letter will be issued subject to submission of following undertaking by the project proponent;</p> <p>I. Sewage shall not mix with/percolate into the Storm Water drainage channel at any point of time.</p>	<p>The decision of the Committee was communicated to the project proponent vide Letter No. – 18 Dt. 05.02.2014</p>

		ii. Regular water quality monitoring will be carried out to ascertain that sewage is not released to the storm water drain.	
--	--	---	--

B. Resubmitted proposals/ Undertaking submitted/ additional data & document submitted as per 21st OCZMA meeting on 17.01.2014

1. **Construction of Jetty and Public Rain Shelter at different districts of Coastal Odisha by The Executive Engineer (Civil) Ports & IWT, South Division under Berhampur Directorate of Port and IWT (Commerce & Transport (Com)) Department, Govt of Odisha.**

In pursuance of the suggestions made by OCZMA in the 21st meeting, the project proponents have revised the proposals as per the observations made and submitted the revised application to OCZMA and made a presentation before the Authority during 22nd meeting as follows:

Sl. No	Project	Site Address	CRZ Status & Map No.	Total Area in Ac.	Constructi on Area	Cost of the projects
1	Construction of Jetty at ARADI (Baitarani River) in Bhadrak District.	Vill - Aradi P.S - Chandbali Dist - Bhadrak	CRZ-I(B)(Inter Tidal Area) & IV Map No. CZMP.73L/9/SE).	0.260	Jetty-282 sqm	Rs.144.33 Lakh
2	Construction of Jetty & Public Rain Shelter at DHAMARA (Dhamara River) in Bhadrak District	Vill - Dhamara Dist - Bhadrak	CRZ-I (B) (Inter Tidal Area) & IV Map No. CZMP.73L/13/SE).	0.500	Public rain shelter -60 sqm Jetty – 247 Sqm	Rs.140.66 Lakh
3	Construction of Jetty & Public Rain Shelter at TALCHUA (Dhamara River) in Kendrapada District.	Vill - Talchua Dist - Kendrapada	CRZ-I (B) (Inter Tidal Area) & IV Map No. CZMP.73L/13/SE).	0.500	Public rain shelter -60 sqm Jetty – 402 Sqm	Rs.200.86 Lakh
4	Construction of Jetty & Public Rain Shelter at KALIAKANA (Devi River) In Puri District.	Vill - Kaliakana Dist - Puri	CRZ-I (B) (Inter Tidal Area)& IV Map No. CZMP.73L/8/SW).	0.014	Public rain shelter - 60Sqm Jetty – 282 sqm	Rs.107.79 Lakh

Rup

5	Construction of Jetty & Public Rain Shelter at GANDAKULA (Devi River) In Jagatsinghpur District.	Vill - Gandakula Dist - Jagatsinghpur	CRZ-I (B) (Inter Tidal Area)& IV Map No. CZMP.73L/8/SW).	1.270	Public rain shelter - 60Sqm Jetty – 252 sqm	Rs.101.0 2 Lakh
6	Improvement of existing passenger Jetty at Balugaon (Chilika Lake in and around the project site) in Khurda District.	Vill - Balugaon Dist - Khorda	CRZ-I (B) (Inter Tidal Area) & IV Map No. CZMP.73E/2/NE).	6.940	Jetty – 699 sqm	Rs.367.0 1 Lakh
7	Establishment of Passenger Jetty and waiting Hall at GUPTI (Patsala River) in Kendrapara District.	Vill - Gupti Dist - Kendrapara	CRZ-I (B) (Inter Tidal Area) & IV Map No. CZMP.73L/14/NW).	0.920	Public rain shelter -60 sqm Jetty – 222 sqm	Rs. 125.52 Lakh

Presently, the components incorporated by the project proponent are permissible under Para 8 CRZ (I) CRZ-I (ii)(b) of CRZ Notification, 2011, "Construction of dispensaries, schools, **public rain shelters, community toilets**, bridges, roads, **jetties**, water supply, drainage, sewerage which are require for traditional inhabitants living within the biosphere reserves after obtaining approval from concerned CZMA". The project does not attract Environmental Clearance under EIA Notification, 2006.

The matter was discussed in detail. The Authority decided to grant clearance for construction of Public rain shelter, community toilet and jetty at different sites as per the provision of CRZ Notification, 2011 for Sl. No. 1 to 7 with following condition;

- I. There should be acoustic covering of the sound emitting system of the boat to reduce noise
- II. Public toilet should be bio-digester integrated.
- III. Project proponent shall develop greenbelt using local species by the side of the approach roads and un-built areas of the project site at their own cost.
- IV. There should be hand railing on both sides of the jetty for the safety of the passengers.

Further, the CRZ Clearance for Sl. No. 7 is subject to NOC from DFO, Mangrove Forest Division, Rajnagar and the works for Sl.No. 7 will commence only after obtaining such NOC.

2. a. Development of Community (fisher folk) Amenities at Gangadharpur, Chilika in the district of Puri by OTDC under ICZM Projects

Considering the observations of the OCZMA, the project proponent has resubmitted the project proposal with a revised title "Development of Community (fisher folk) Amenities at Gangadharpur,

Ref

Chilika, in the district of Puri by OTDC under ICZM Projects” and the consultant of OTDC presented this before the Committee during 22nd meeting as follows:

The project is located in CRZ-III area, periphery of Chilika Lake (Sheet No. 23, Map No. CZMP.74E/10/NW). The proposed development activity includes public rain shelters & community toilet.

The public rain shelter will be used by the local fisher communities during rainy & summer season having community toilets with bio-digester facility. The project will avail the water supply from the existing source and local grid power supply with solar power backup will be connected for energy requirement. Total estimated cost will be Rs. 183 lakh. There shall be proper management and composting will be done for the biodegradable solid wastes to be generated from the project area.

The activity is permissible under the Para 8 (i) (III) CRZ-III (A) (iii) (j) of CRZ Notification, 2011, “Construction of dispensaries, schools, **public rain shelters, community toilets**, bridges, roads, provision of facilities for water supply, drainage, sewerage, crematoria, cemeteries and electric substation which are required for the local inhabitants may be permitted on case to case basis by CZMA”. The project does not attract Environmental Clearance under EIA Notification, 2006.

The Authority discussed the project in detail and approved the proposal for development of community (fisher folk) for amenities at Gangadharpur, Chilika in the district of Puri by OTDC under ICZM projects as per the provisions of CRZ Notification, 2011 with following conditions:

- I. Public toilet should be bio-digester integrated.
- II. Felling of tree is prohibited.
- III. Project proponent shall develop greenbelt using local species by the side of the approach roads and un-built areas of the project site at their own cost.
- IV. Adequate provision will be put in place and maintained by the project proponent for collection of solid wastes and their disposal.

b. Development of Community (fisherfolk) Amenities at Mirzapur, Chilika, in the district of Puri by OTDC under ICZM Projects

Considering the observations of the OCZMA, the project proponent has resubmitted the project proposal with a revised title “Development of Community (fisherfolk) Amenities at Mirzapur, Chilika, in the district of Puri by OTDC under ICZM Projects” and the consultant of OTDC presented this before the Committee during 22nd meeting as follows:

The project is located in CRZ-I area, periphery of Chilika Lake (Sheet No. 23, Map No. CZMP.74E/10/NW). The proposed activity includes Public rain shelters, Community toilet & a floating jetty.



The public rain shelter will be used to protect the local fisher communities during rainy & summer season having facility with community toilets with bio-digester facility. The project will avail the water supply from the existing source and local grid power supply with solar power backup will be connected for energy requirement. Total estimated cost is Rs. 191 lakhs. There shall be proper management and composting will be done for the biodegradable solid wastes to be generated from the project area.

Presently the components proposed in the revised project are permissible under the Para 8 (i) CRZ-I (ii) (b) of CRZ Notification, 2011, "Construction of dispensaries, schools, **public rain shelters, community toilets**, bridges, roads, **jetties**, water supply, drainage, sewerage which are require for traditional inhabitants living within the biosphere reserves after obtaining approval from concerned CZMA".The project does not attract Environmental Clearance under EIA Notification, 2006.

The Authority discussed the project in detail and approved the proposal for "Development of Community (fisher folk) Amenities at Mirzapur, Chilika, in the district of Puri by OTDC under ICZM Projects" as per the provisions of CRZ Notification, 2011 with following conditions:

- I. Public toilet should be bio-digester integrated.
- II. Felling of tree is prohibited
- III. Development of greenbelt using local species by the side of approach roads and un-built areas of the project site at the project cost.
- IV. Adequate provision for setting up and maintaining the collection of solid waste and their disposal by the project proponent.

C. Development of Community (fisher folk) Amenities at Gabakunda, Chilika, in the district of Puri by OTDC under ICZM Projects

Considering the observations of the OCZMA, the project proponent has submitted the project proposal with a revised title "Development of Community (fisherfolk) Amenities at Gabakunda, Chilika, in the district of Puri by OTDC under ICZM Projects" and the consultant of OCZMA presented this before the Committee during 22nd meeting as follows:

The project is located in CRZ-I area, periphery of Chilika Lake (Sheet No. 23, Map No. CZMP.74E/10/NW). The proposed activity includes Public rain shelters, Community toilet & a floating jetty.

The rain shelter will be used to protect the local fisher communities during rainy & summer season having facility of community toilets with bio-digester facility. The project will avail the water supply from the existing source and local grid power supply with solar power backup will be connected for



energy requirement. Total estimated cost is Rs. 265 lakh. There shall be proper management and composting will be done for the biodegradable solid wastes to be generated from the project area.

The activities proposed in the revised proposal are permissible under the Para 8 (i) CRZ-I (ii) (b) of CRZ Notification, 2011, "Construction of dispensaries, schools, **public rain shelters, community toilets**, bridges, roads, **jetties**, water supply, drainage, sewerage which are require for traditional inhabitants living within the biosphere reserves after obtaining approval from concerned CZMA". The project does not attract Environmental Clearance under EIA Notification, 2006.

The Authority discussed the project in detail and approved the proposal for "Development of Community (fisher folk) Amenities at Gabakunda, Chilika, in the district of Puri by OTDC under ICZM Projects" as per the provisions of CRZ Notification, 2011 with following terms and conditions:

- I. Public toilet should be bio-digester integrated.
- II. Felling of tree is prohibited.
- III. Development of greenbelt using local species by the site of approach roads and un-built areas of the project site at the project cost.
- IV. Adequate provision for setting up and maintaining the collection of solid waste and their disposal by the project proponent.

3. Establishment of captive minor port and intake & discharge pipeline at the confluence of Jatadharmohan creek near Paradeep for POSCO India project

A project proposal for establishment of Captive minor port of material handling capacity of 30.6 MTPA with an area of 150 Ac. within 4004 Ac. of area for integrated steel plant of 12 million tons per year and discharge pipeline at Jatadharmohan was placed before the OCZMA for consideration in its 21st meeting held on 17.01.2014. The proposed project obtained EC from MoEF in 2007.

As per the suggestion of OCZMA, POSCO-India submitted a proposal for CRZ Clearance after a- laps of 5 years clearance period. As per the project outline, the harbour facility will include material handling capacity of the port in 3 phases, Phase-I-10.5 MTPY, Phase-II-20.5 MTPY, and Phase-III-30.6 MTPY which includes both import & export. Regional centre of NIO at Visakhapatnum has prepared the required CRZ Map (73L/12/NW) in 1:25000 scale & 1:4000 scale demarcating HTL & LTL & delineating CRZ boundaries on the Maps.

The proposed project activity i.e port & intake discharge pipeline facilities fall in CRZ-I(B), CRZ-III & CRZ-IV areas & proponent indicated permissibility of Port & its facilities is under para-4 (i)(f) of CRZ Notification,2011& indicated pipelines separately in different CRZ Zone areas under CRZ Notification,2011 in their proposal.



This project proposal also attracts the provision of EIA Notification, 2006 under schedule 7(e). Since the cargo handling capacity of the port is 30.6 MTPA, it is considered as Category "A" project & requires prior environmental clearance from MoEF, Govt. of India.

The total project cost of 12 MTPA integrated steel complex along with captive minor port is 11,600 million USD out of which 550 million USD is estimated for the captive minor port.

The committee after deliberation on various issues opined that the following additional information/data are to be provided by the project proponent for further examination during next meeting.

- I. Beach erosion modelling study.
- II. Macro/ micro benthos study as baseline data for impact analysis during construction and operation phase
- III. Information regarding the impact on Olive Ridley turtle during turtle breeding and mass nesting along Gahirmatha coast.
- IV. It was informed that IMMT, Bhubaneswar carried out Marine Ecology/ Water Quality Study. The proponent is to submit the competence of the core group of Scientists involve in such kind of study.
- V. Impact of proposed Break-water on the sediment transport.
- VI. Justification regarding significant variation in Water Quality Monitoring Data between 2005-06 and April, 2013 report.

Considering the suggestions of the Committee, the project proponent submitted data/additional documents/clarifications on the above cited issues as follows and the project consultant made a presentation on above issues before the Committee.

Regarding the Beach Modelling Study: DHI Water & Environment Pvt. Ltd, an independent international consulting and research organization was engaged by the project proponent to estimate possible coastal advance/retreat due to the construction of the proposed break water structures at the mouth of Jatadhari creek using Littoral drift module LITDRIFT, of DHI's LITPACK littoral process modelling system. Littoral Drift Study indicated an annual net drift of 950,000 m³ to the north along the coastline. The transport will take place inside the 7m water depth. Breakwaters will block the entire littoral drift to the north coastline with the result, the south coast line will witness accretion and the north coastline will experience annual maximum retreat of about 13m with 5.5 km range. The detailed modelling study report is enclosed.

Regarding the macro/micro benthos study as baseline data for impact analysis during construction and operation phase: The impact of construction of port on the sub-tidal as



well as intertidal sediment quality would largely be confined to the changes in sediment texture and the deposited benthos structure. The dredging would cause removal of benthos/habitat at places in the Creek and near shore region. This will have direct and indirect impact due to changes in circulation pattern and increase in suspended solids during dredging; there would be significant negative impact on the benthic organism. Being a onetime operation, it would be temporary and any long term impact is not envisaged. It was also observed during the study that the benthic fauna inside the Creek was not drastically affected due to the dredging carried out by IOCL in Jatadharmohan Creek. It is therefore, expected that the population of benthic organism will recover within a short period of time.

The proponent has proposed following management measures for regeneration of benthic organism; a) No untreated waste water would be released into the marine water. b) Control of oil and grease from ship movement. c) No discharge of ballast water. d) Prohibition of illegal tank washing. e) No sewage water from vessel is allowed to discharge into sea, etc.

The proponent anticipated negative impacts of raw material deposition at the sea floor on the benthic component of marine ecological set up and coal dust in water column on fish and molluscs as these ecosystem do not have appropriate assimilative and biodegrading capabilities for this fossil fuel. As to reduce or even for no impact, the project proponent proposed for direct transport of raw material/ coal to steel plant directly from the cargo through covered conveyor.

Regarding Information on the impact on Olive Ridley turtle breeding and mass nesting along Gahirmatha coast: Olive Ridley Sea Turtles are found in the offshore waters within 50-200 km of the Orissa coast. During early November, Olive Ridley follow a coast-wise northerly course, crossing waters off Tamil Nadu and Andhra Pradesh till reach Orissa coast and during this migration they have been observed moving in the offshore waters at 3-10 km away from the shore/coast. The mounted pairs have been witnessed off the nesting beaches at water depth of more than 50 m. The reproductive patches of 50-75 km² have been reported in about 5-6 km offshore. The nearest rookery of Olive Ridley at Gahirmatha is about 30 km north of the project site and Devi river mouth is about 15 km south of the project site. Proposed minor port of POSCO-India is predominantly a shore based activity with break waters extending to a maximum of 1.6 km into the sea. This will have no effect on the migration of the turtle in this area. More over the present site has not witnessed any mass nesting by the Olive Ridley. High intensity lights in the beach side will be replaced with suitable types of lamps near the beaches to minimize the impact on turtles.



Regarding the competency Of IMMT, Bhubaneswar to carry out Marine Ecology/Water Quality Study and the competence of the core group of Scientists involved in such kind of study: The project Proponent has submitted following information with relevant documents regarding the competency of IMMT, Bhubaneswar and its core group of scientists on Ecology/ Water Quality Study:

Recognition of IMMT, Bhubaneswar

1. Central Pollution Control Board has given recognition of Environmental Management and Inorganic Chemical Laboratory, CSIR, Bhubaneswar as "Environmental Laboratory" under section 12 (i) B of environment (Protection) act 1986 (dt. Feb,11, 2005)
2. F& E Department, Govt. of Odisha with consultation with the State Pollution Control Board has specified Environmental Management & Inorganic Chemicals Dept. of IMMT Bhubaneswar as "State Water Laboratory" & "State Air Laboratory" to carry out the functions entrusted to it under the Water (Prevention & Control of Pollution) Act,1974 & the Air (Prevention & Control of Pollution) Act,1981 (dt. 29th april,200

Marine Ecology / Water Quality Study Experiences of IMMT

1. Coastal Ocean Monitoring & Prediction System (COMAPS) Programme Research Project-"Water Quality Monitoring", sponsored by Ministry of Earth Science Govt. of India (More than 15 years & continuing)
2. Pollution monitoring at Paradeep- sponsored by PPT(More than10 years & continuing)
3. EIA of dredging & other activities for Dhamara Port (More than 06 years & continuing)
4. Study of carbon dynamic in Estuaries & near shore waters of Dhamara & Mahanadi -Sponsored by National Remote Sensing Centre & Space Application Centre (ISRO) Hyderabad (continuing)
5. Validation of OCM- II Geophysical products over Bay of Bengal Region- Sponsored by Space Application Centre (ISRO) Ahmadabad (continuing)

Competency of the core group of scientist of IMMT on Marine Ecology / Water Quality Study:

Following core group of scientists have experiences in Marine Ecology / Water Quality Study as mentioned against them

1. Dr. C. R Panda scientist-F Dept. of Environment & Sustainability IMMT-Awarded research project on water quality monitoring and COMAPS Programme by Ministry of Earth Sciences, Govt. of India.
2. Dr. C. R Panda & K. C Nathasharma – recognised by F & E Dept, Govt. of Odisha (April, 2008) as Govt. analyst for purpose of analysis of samples of water or sewage or trade effluent & air or emission etc.



Competency of the other group of scientist of IMMT on Marine Ecology / Water Quality Study:

The following groups of scientists associated with the above mentioned projects have sufficient expertise to critically assess the levels of pollution in water, air, sediment, noise and biological environments.

1. Dr. P Chattopadhyay (Environmental Chemistry)
Sr. Principal Scientist; Research Experience - 34 years
2. Dr. R. N Kar (Environmental Biology)
Chief Scientist; Research Experience - 35 years
3. DR. Manish Kumar (Environmental Science)
Scientist; Research Experience - 7 years
4. DR. D. R Satapathy (environmental geology & remote sensing)
Technical officer ; Research Experience - 15 years

Regarding the Impact of proposed Break-water on the sediment transport: The proposed breakwaters, which extend approximately to 10 m depth contour would block the littoral drift initially. It can therefore, be expected that the coastline would accrete on the south side of the breakwaters. Due to the blocking of the littoral drift the coastline is expected to retreat north of the breakwaters. The coastline response has been calculated with the coastline evolution module LITLINE, of DHI's LITPACK littoral process modelling system. The calculations indicate that the coastline north of the breakwater will have an annual maximum retreat of approximately 20 m. As expected, accumulation is found on the south side of the port and caused by blockage of the littoral drift causing the coastline close to the southern breakwater to move approximately 140 m offshore during the first year after the construction. The maximum retreat is expected 2 km down drift of the port and changes in the coastline are to a maximum distance of 5 km from the north breakwater of the port in 7 years period. At this stage natural bypass of the sediment around the southern breakwater would take place. Similar happenings experienced with the Paradeep port.

The proposed mitigation measures for shoreline protection includes: (1) Out of 18 million cu m of dredged sand material, 4 million cu m would be used for shoreline protection. The dredged sand material obtained during maintenance dredging would be used for nourishment of the northern shoreline. It is estimated that about 3 million cu m of dredged sand would be used for nourishment of northern shoreline for an approximate length of 5.5 km. (2) Sand by-pass system would be established at the south side of the southern break water by installing 18 inch pipeline complete with pump.



The project Proponent has indicated Additional Morphological aspects of Port Development, such as the approach channel, which will be about 21 m deep and initially 250 m wide and would be expanded to 500 m wide. This wide channel would trap most of the sediments entering the channel and only very little amount of sediment will be mobilized inside the channel. Sediments (mostly finer sediment fractions) will deposit within the channel as a result of the tidal and ocean currents and more coarse littoral sand due to the wave-driven currents.

The sedimentation of littoral sand would pick up at later stage i.e. when the bypass of littoral sand around the tip of the southern breakwater has been established. The upstream channel slope (typically the slope close to the southern breakwater) would thus migrate northward. On the down drift slope, which is typically in front of the northern breakwater, the flow will be accelerated as the water depth decreases. This will cause an erosion of the channel slope displacing it towards the north.

The proponent has proposed to dredge the sand bar for a length of 1,200 m to make the navigational channel. The average width of the sand bar is around 400 m. The impacts arising from this activity will be permanent. But the proposed dredging location was the mouth of the Jatadharamohan. The proposed breakwaters and revetments will provide stability to the sand bar/spit. To ascertain this aspect, the proponent would recheck the stability of the sand bar/spit during detailed engineering

Regarding the justification of significant variation in Water Quality Monitoring Data between 2005-2006 and April 2013 Report

The biological community (phytoplankton, zooplankton and benthos etc.) of the sea particularly in tropics undergo a seasonal/ annual change in abundance and biomass. This happens because the tropical species breed and multiply in number depending on favourable condition. It may be noted that the prevailing condition of the sea in a particular area and season favours only a certain group of organisms. This is the main reason for differences in the numerical count for the two observations carried out in different season.

The proposed project is permissible under Para 4 (i) (a) (f) of the CRZ Notification, 2011. This project also attracts the provisions of EIA Notification, 2006 under schedule 7 (e). Since the cargo handling capacity of the port is 30.6 MTPA, it is considered as Category "A" project & requires prior environmental clearance from MoEF, Govt. of India.

The members raised several issues including the impact of the project on Olive Ridley Turtle, fall of pipe outlets, Cyclonic impacts on erosion etc and sought clarification on those issues. Hence, the Authority decided to form a Sub-Committee of the Authority comprising of following members:



- I. Principal Chief Conservator of Forest (WL) & Chief Wild Life Warden, Odisha
- II. Project Director, ICZMP, Odisha
- III. HOD, Marine Science Dept. Berhampur University
- IV. Member Secretary, State Pollution Control Board

The Sub-Committee will visit the site and furnish a report on the following issues within 3 weeks;

- I. Macro / micro benthos study as baseline data for impact analysis during construction and operation phase.
- II. Impact of discharge pipeline to the Jatadharmohan creek
- III. Beach erosion & model study

The Authority will examine the report during next meeting and take a decision.

4. Construction of Storm Water Drainage System of Puri Town under JNNURM Scheme of Govt. of India

The proposal was considered by the OCZMA during 21st meeting on Dt. 17.01.2014 as per the agenda notes below:

The proposed construction of Storm Water Drainage System of Puri town under JNNURM Scheme is aimed at reducing the impact of urban flooding due to cyclone, flood and heavy rain in the thickly populated pilgrimage Puri town. This project is funded by Govt. of India & Govt. of Odisha.

The drain will be 3.82 km in CRZ-I(B) area, 18.46 km in CRZ-II area and 0.93 km in CRZ-III area having total of 22.76 km under CRZ area. The drain will remain below the sub soil and expected not to bring any permanent change in land use /land cover or topography including increasing in intensity of land use. Release of storm water will be in to the existing water body of Mangala River & Banki Muhan confluence at the Bay of Bangle located at the periphery of Puri Town. The proposed cost of the project is 41.48 Cores & permissible under Para 3(iv) (d), Para-8 (I) (ii) (b), Para 8 (A) (iii) (j) under CRZ Notification 2011. The proposed project does not attract Environmental Clearance under EIA Notification, 2006.

In the previous meeting held on 17.1.14, the Committee discussed the proposal in details and approved the proposal in principle as per CRZ Notification, 2011; but decided that the approval letter would be issued subject to submission of following undertaking by the project proponent:

- It will be ensured that sewage should not be released to the Storm Water drainage.
- Regular water quality monitoring will be carried out to ascertain that sewage is not released to the storm water drain.

Considering the suggestion of the Committee, the project proponent submitted the necessary undertaking for issue of CRZ Clearance.

In pursuance of the decision taken by the authority held on 17.4.14, the project proponent has submitted the necessary undertaking with a request to consider grant of CRZ clearance in favour of



the project. As the project proponent has submitted the required undertaking, the Authority decided to issue the CRZ clearance for the proposed project as per the provision of CRZ Notification, 2011.

C. FRESH PROPOSALS

1. Development of Community (fisherfolk) Amenities at Chilika, Kalijai, District - Puri under ICZM Project, OTDC Ltd., Odisha

Odisha Tourism Development Corporation (OTDC) has submitted a proposal entitled "Development of Community (fisherfolk) Amenities at Chilika, Kalijai, in the district of Puri" under ICZM Projects. This project is funded by World Bank & Ministry of MoEF, GoI & Forest & Environment Dept. Govt. of Odisha.

The consultant of OTDC presented the proposal and informed that the project is located in CRZ-I area (Kalijai Island, inside Chilika Lake) (Sheet No. 16, CRZ Map No. CZMP.74E/2/NE). The total area acquired for this project is 29.30 Ac and the King of Parikuda has given his consent to offer the land to the Tourism Dept., Govt. of Odisha for this project. The construction activities include public rain shelter, community toilet and a floating jetty.

The rain shelter will be used to protect the local community with the facility of bio-digester integrated community toilet. The project will avail the water supply from the existing source. Total estimated cost is Rs. 150 lakhs. There shall be proper management and composting will be done for the biodegradable solid wastes to be generated from the project area.

The activity is permissible under the Para 8 (i) CRZ-I (ii) (b) under CRZ Notification, 2011, "Construction of dispensaries, schools, **public rain shelters, community toilets**, bridges, roads, **jetties**, water supply, drainage, sewerage which are require for traditional inhabitants living within the biosphere reserves after obtaining approval from concerned CZMA". The project does not attract Environment Clearance under EIA Notification, 2006.

The Authority deliberated on the project proposal and deferred the matter with the opinion that detailed drawing & design is lacking in the proposed project. Hence, the proponent needs to provide the same for consideration during next meeting.

2. Construction of improvised crematorium at Swargadwar, Puri by SPC Board, Odisha

The Member Secretary, State Pollution Control Board, Odisha has submitted a proposal for construction of one improvised facility with adequate pollution control devices for cremating dead bodies at Swargadwar at Puri. This has been submitted by the State before the Hon'ble National Green Tribunal, New Delhi through an affidavit sworn in by the Principal Secretary, Forest & Environment Department as per a decision taken by a Committee constituted by the Hon'ble NGT under the Chairmanship of Chief Secretary, Odisha.



The nodal officer from State Pollution Control Board presented the proposal and informed that Puri municipality has provided a piece of land measuring 144 sq. m in the existing burning ghat at Swargadwar for construction of the proposed facility.

This plan has been prepared in consideration of religious traditions and sentiments and discussion with spiritual groups. The proposal is aimed at channelizing the smoke and gas through a canopy and to disperse it through a high stack/chimney for better dilution and keep the ambient air at ground level free from its effects. Now the plan is to construct an improvised platform with chimney/stack and adequate pollution control devices to cremate corpses, on a pilot scale. This is modular in nature with a facility to cremate one body at a time. To begin with, it shall be constructed at one corner of the available land of Swargadwar. The pilot project will be completed within six months.

The present air quality at Swargadwar is exceeding the national ambient air quality standards due to cremation under existing practices and uncontrolled methods. The broad objectives of the project is to maintain ambient air quality at Swargadwar, Puri with existing practice of cremation with an attempt to supplement the effort of enabling Puri town to conform to the normal environmental standards.

After establishment of the project, it will be handed over to Puri Municipality for operation.

The proposed project activity is located in CRZ-II area (Swargadwar) (sheet no.26, Map no. CZMP.74E/13/SW). The project will require an area of 144 Sq m (16mx9m) Govt. land out of Ac. 0.464 dec. area of Swargadwar, Puri, which is a Govt. Land. The land available for the construction work is presently used as open cremation area. The proposed project with improve facilities and pollution control mechanism will be a masonry structure which will cover 144 Sq m built up area. It will include corrosion-resistant steel and other mild-steel, galvalium coated sheet for reinforcement. The roof of cremation will be a height of 3.9 m above the ground and the chimney for release of smoke to the atmosphere for dispersion at a height of 20m above ground. Emission from the cremation process will be collected by suction hood, passed through a cyclone arrangement and release through a proposed stack of height of 20 m above the ground level. The proposed activity will not generate any waste water except ash and burn sand. The waste so generated will be collected by Puri Municipality and disposed off at designated disposal site. Compliance environmental monitoring of the proposed project will be carried out by the SPCB. The total cost of the project is Rs. 61.77 lakhs.

As the proposed activity is a structure to be located towards the landward side of the existing road and will not change the land use pattern, it is permissible under Para-8 (i) (II) CRZ-II (i) of CRZ Notification, 2011 which is read as "building shall be permitted only on the landward side of the existing road or the landward side of existing authorised structure". The project does not attract environmental clearance under EIA Notification, 2006




The committee deliberated on the project proposal in detail and considered to grant ~~environmental~~ ^{clearance} clearance on CRZ angle in favour of the project proponent under CRZ Notification, 2011.

D. Others:

- (a) The Committee took decision on following matters;
- (i) CRZ Violations / Action taken / Prosecution undertaken will be placed in all the subsequent Authority meetings.
 - (ii) Accounts of the OCZMA should be updated and steps should be taken for the auditing.
 - (iii) The committee suggested ICZMP, Odisha to continue district level CRZ sensitization meeting and at other forum.
- (b) Following matters were also discussed;
- (i) The status of preparation of map by ORSAC, Bhubaneswar & SAC, Ahmadabad & public consultation necessary for CZM Plan as well as request for one year extension of the existing CZM Plan to the MoEF was intimated to the Committee.
 - (ii) Project Director, ICZMP intimated to the Committee that ToR for workout ICZM Plan is being communicated to World Bank for approval. He informed to the Committee that during preparation of ICZM Plan, CRZ Maps (1:4000 scales) will be prepared for Hotspot areas along Odisha Coast. This will be helpful for the project proponents to collect such maps without delay as well as will involve lesser cost.
 - (iii) Project Director, ICZMP also informed to the Committee that process is being initiated for assigning a cost to the data generated from RCPS (under ICZMP, Odisha) for data sharing. It will be of much helpful for the project proponents and others for data sharing with less cost.

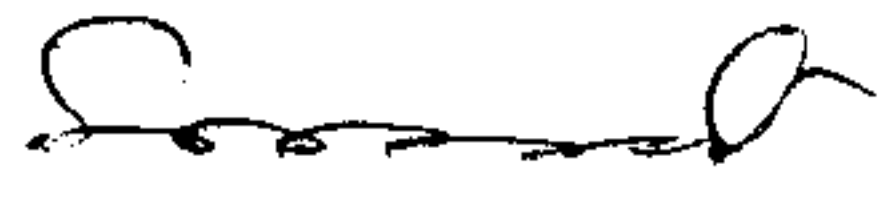
The meeting ended with the vote of thanks to the chair.


Principal Secretary, F & E Dept.
and Chairman, OCZMA

Memo No. 62 /OCZMA

Dt. 07/05/2014

Copy forwarded to Shri Mangaraj Panda, Secretary, United Artists' Association, At – Raula Street, Po/Dist- Ganjam- 761026 / Project Director, Integrated Coastal and Marine Area Management Department of Ocean Development, Chennai / Dr. Rabindra Nath Hota, Professor of Geology, Utkal University, Bhubaneswar / Head of Department of Marine Science, Berhampur University, Odisha / Additional Chief Secretary to Govt., Housing and Urban Development, Department, Govt. of Odisha / Commissioner-cum-Secretary to Govt., Fisheries and Animal Resources Development Department, Government of Odisha / Principal Chief Conservation of Forest (WL) and Chief Wildlife Warden, Odisha / Chairman, State Pollution Control Board, Odisha or Member Secretary, State Pollution Control Board, Odisha / Chief Executive, Chilika Development Authority, Bhubaneswar / Chief Executive, Odisha Space Application Centre, Bhubaneswar / Chief Conservator of Forests, Regional Office of Ministry of Environment and Forests, Bhubaneswar.


7.05.14
Director Environment, F & E Dept.
and Member Secretary, OCZMA

22nd meeting of the Odisha Coastal Zone Management Authority

Venue: - OCZMA Conference Hall



Date: - 28th Apr, 2014
Time: 11:00 AM

Sl. No.	Participants	
1.	Principal Secretary to Government Forest & Environment Department Government of Odisha	Chairman
2.	Special Secretary to Govt. Housing & Urban Development Dept. Government of Odisha	Member
3.	Principal Chief Conservator of Forest (WL) and Chief Wildlife Warden, Odisha	Member
4.	Director Environment-cum- Special Secretary to Govt., F&E Department and Member Secretary, OCZMA	Member Secretary
5.	Member Secretary State Pollution Control Board, Odisha	Member
6.	Chief Executive Chilika Development Authority	Member
7.	Chief Executive Odisha Space Application Centre	Member
8.	Scientist F , ICMAM, Chennai	Member
9.	Secretary, United Artists' Association, Ganjam	Member