

**MINUTES OF THE 261<sup>st</sup> MEETING OF THE EXPERT APPRAISAL COMMITTEE  
FOR PROJECTS RELATED TO COASTAL REGULATION ZONE HELD ON  
7<sup>th</sup> APRIL, 2021**

The 261<sup>st</sup> meeting of the Expert Appraisal Committee (EAC) for projects related to Coastal Regulation Zone (CRZ) was held on 07/04/2021 through Video Conferencing due to prevalent pandemic situation. The members present are:

1.	Dr. Deepak Arun Apte	-	Chairman
2.	Dr. Manoranjan Hota	-	Member
3.	Shri S. Jeyakrishnan	-	Member
4.	Shri Manmohan Singh Negi	-	Member
5.	Shri Sham Wagh	-	Member
6.	Prof. Ashok Kumar Pachauri	-	Member
7.	Dr. M.V. Ramana Murthy	-	Member
8.	Dr. V. K. Jain	-	Member
9.	Dr. H. Kharkwal	-	Member Secretary

Prof. Mukesh Khare, Dr. R.P.S. Verma and Ms. Bindhu Manghat were absent.

In attendance: Dr. Saranya P, Joint Director and Dr. Bhawana Kapkoti Negi, Technical Officer, MoEF&CC. The deliberations held and the decisions taken are as under:

## **2.0 CONFIRMATION OF THE MINUTES OF THE LAST MEETING**

2.1 The Committee having noted that the Minutes of the 259<sup>th</sup> meeting are in order confirmed the same with suggestions that in case any typographical / grammatical errors are noticed in due course, the same may be corrected suitably.

2.2 The Committee also agreed correction in the minutes of the 259<sup>th</sup> meeting held on 19/03/2021 on the following proposal:

**3.1 Laying of iron ore slurry pipeline system from Koira/Barbil/Joda in Keonjhar district to Paradip in Jagatsinghpur district to transport 30 MTPA Iron ore concentrate by M/s JSW Utkal Steel Limited-CRZ Clearance**  
[IA/OR/CRZ/199461/2021] [ F.No 11/6/2021-IA.III]

Delete the conditions at item 5.(i) That the proposal is still viable species to the observation made in sr. no. 3 as stated above, which was advertently included in minutes.

## **3.0 CONSIDERATION OF PROPOSALS**

### **FRESH PROPOSALS:**

**3.1 Proposal for Cross country pipeline for transportation of anhydrous Liquid Ammonia from liquid jetty of Gopalpur Port to M/s Smartchem Technologies Ltd (STL) Site inside the Industrial Park of Tata Steel Special Economic Zone Limited (TSSEZ) by M/s Smartchem Technologies Ltd - CRZ Clearance**  
[IA/OR/CRZ/204641/2021] [ F.No 11-8/2021-IA.III]

***“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data / information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”***

The proposal of M/s Smartchem Technologies Ltd (STL) is for Cross country pipeline for transportation of anhydrous Liquid Ammonia from liquid jetty of Gopalpur Port to M/s Smartchem Technologies Ltd (STL) Site inside the Industrial Park of Tata Steel Special Economic Zone Limited (TSSEZ) covering the villages Arjeepalli, Basanputi, Badaputi and Chamakhandi, Tehsil Chatrapur in district Ganjam Odisha. The project proponent made a presentation and provided the following information:

- i. The proposed route for pipeline originates from Berth 1 of Port to 15 m wide Gopalpur Port Limited (GPL) Right Of Way (ROW) till Industrial Infrastructure Development Corporation of Orissa Ltd. (GPL) Port limit which is 1168 m stretch and further moving through 60m wide IDCO Pipeline Corridor till TSSEZL Boundary. IDCO Pipeline Corridor, proposed to be developed adjacent to mainly two villages namely Basanaputi & Badaputi. Both these villages have several stretches of Government Land & Private owned land. This corridor crosses NH-516 at approximately 200m from TSSEZ boundary. The length of IDCO Pipeline corridor is approx. 2457 m which start from GPL Boundary and end at TSSEZL Boundary. Thereafter, 1217 m pipeline will be laid adjacent to the 60m wide Road till STL Plant Entry Point in 15m wide Right Of Way (ROW). The proposed route crosses three different land schedules involving Govt. and private portions of land. The proposed route also crosses one Railway line within GPL Limit as well as NH-516 located at approx. 200m from TSSEZL boundary. Out of the total land required or ROW required for the proposed pipeline, only ROW under the battery limit of GPL upto 500 m from HTL falls under CRZ area as demarcated by Coastal Regulation Zone (CRZ). The Corridor of IDCO and TSSEZL is outside the CRZ area.
- ii. The proposed pipeline carrying Anhydrous Liquid Ammonia will start from the berth 1 of Gopalpur Port Limited (GPL) to entry point of Smartchem Technologies Ltd. (STL) plant inside Tata Steel Special Economic Zone Limited (TSSEZL) industrial park.
- iii. Total length of the pipeline is 4.84 km and 997.0 m Length of pipeline falls under CRZ Category CRZ IB, CRZ-III (NDZ), CRZ-III, which is within battery limit of GPL. The CRZ details of proposed pipeline as:

Sl. No.	Pipeline Inside	CRZ classification	Length (m)
1.	TSSEZL Battery Limit	Non-CRZ	1168
2.	IDCO Common Corridor	Non-CRZ	2457
3.	GPL Battery Limit	CRZ IB	168
		CRZ- III (NDZ)	335
		CRZ-III	494
		Non-CRZ	220
<b>Total</b>			<b>4842 m~ 4.84 Km</b>

- iv. Proposed route has been superimposed on approved CZMP as per CRZ notification 2011 on the scale of 1:4000 by IRS Chennai. The pipeline passing through CRZ area has been classified as CRZ IB, CRZ III (NDZ & Non NDZ).

- v. The proposed pipeline is for the STL Technical Ammonium Nitrate Manufacturing Plant proposed inside the domestic tariff area of Tata Steel Special Economic Zone Limited (TSSEZL) Industrial Park (non CRZ area), Odisha.
- vi. The pipeline carrying ammonia is a major raw material for the manufacturing of both intermediate and finished product at proposed plant. The pipeline shall ensure the uninterrupted sourcing of raw material (ammonia) for continuous production and supply of the finished product to the market.
- vii. The proposed route has been prepared after taking concurrence from various authorities for the Right Of Way i.e TSSEZL, GPL, IDCO and STL have MOU with TSSEZL and GPL for providing ROW in their battery limit.
- viii. The details of Right Of Way (ROW) :
  - The ROW required between GPL western outlet and TSSEZL Industrial Park inlet, will be entirely under the scope of Industrial Promotion & Investment Corporation of Odisha Limited (IPICOL)/ IDCO and Govt. of Odisha (GoO).
  - STL is bound to lay its pipeline within the allocated ROW inside the developed 60m corridors, developed & facilitated by IDCO, GoO
  - Right Of Way (ROW) :i. TSSEZL Limit – 15 m  
ii. IDCO Limit- 60 m and  
iii. GPL Limit – 15 m

S. No.	Landowner	Type of Land	Length of Pipeline (Approx.)	ROW	Total Area (Sqm)	Remark
1.	Gopalpur Port Limited	Port Land	1217m	15 m	18,255	Starts from Berth 1 of Port CRZ area
2.	IDCO	Govt & Pvt. Land	2457 m	60 m	1,47,420	In principle ROW allocated to STL is of 5m width only Non CRZ area
3.	TSSEZL	Industrial area land	1168 m	15 m	17,520	Ends at STL plant entry point. Non CRZ area
	<b>Total</b>	-	<b>4842.85 m ~ 4.84 km</b>	-	<b>1,83,195</b>	

- ix. Total land area required for the project is 1,83,195 Sqm.
- x. The employment potential of the project in Construction Phase is approximate 50 No's and Operation Phase is about 5-6 No's.
- xi. Power and Fuel requirement is 4 kVA at unloading arms and no specific power backup for pipelines.
- xii. Maximum 1 KLD of fresh water shall be required for the employees working at port which shall be facilitated by GPL only and existing port water supply and toilets shall be used by STL workers working at Port. No additional toilets or water supply facility shall be developed
- xiii. The total cost of the project is ₹70 Crores.
- xiv. Odisha Coastal Zone Management Authority has recommended the project *vide* its letter No. OCZMA/63/2020/45/OCZMA, dated 01/02/2021.

2. On perusal of the recommendation of CRZ clearance by the OCZMA, the Committee observed that the project was recommended by the OCZMA and accordance with CRZ Notification, 2011. During examination EAC noted that Right Of Way (ROW) and the status of NOC for pipeline from PESO is still not obtained /submitted by PP. Accordingly, the proposal was deferred.

**3.2 Proposal for Setting up of Pontoon-Berge operation for transportation of Gypsum of Capacity 90,000 MT per month from IFFCO Gypsum stack to Paradip Port via Mahanadi River routes of Length approx. 15 km by M/s IFFCO Ltd.-CRZ Clearance [IA/OR/CRZ/204686/2021] [ F.No 11-12/2021-IA.III]**

*“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

The proposal of M/s IFFCO Ltd. is for Setting up of Pontoon-Berge operation for transportation of Gypsum of Capacity 90,000 MT per month from IFFCO Gypsum stack to Paradip Port via Mahanadi River routes of Length approx. 15 km. The project proponent made a presentation and provided the following information:

- i. The proposed to deploy a pontoon (50 m X 15 m) to be used as a temporary floating platform to load Gypsum onto the Barges & transport material through river Mahanadi to Paradip port for loading to the rail wagons / ships.
- ii. No permanent construction on the river bank of Mahanadi is envisaged.
- iii. It proposes to use the existing water front for the temporary anchoring of Pontoon-Berge system. To temporarily tie pontoon & barge, four nos. of pre-constructed bollards are to be planted on the IFFCO ground.
- iv. The proposed Pontoon-Berge site is located near to IFFCO and located on the River bank of Mahanadi at 7.5 km from the mouth of river in the Bay of Bengal. The project global location having global system of WGS84: E: 2247384.53m, N: 464195.51m, UTM Zone-45 N.
- v. The project is not envisaged for Environment Clearance, due to the fact that it is not within the List of Projects or Activities Requiring Prior Environmental Clearance as per EIA Notification 2006 and subsequent modifications in 2016 respectively.
- vi. This project has already obtained NOC from OSPCB and Permission from IWAI to use the National Waterways no.- 5 (from Dhamra to Paradeep).
- vii. The estimated project Cost for the Pontoon-Berge Operation is ₹1.03 Crores.
- viii. Around 30 people will get employment with this project.
- ix. The CRZ map in 1:4000 scales is a prepared by NCSCM Chennai.
- x. Odisha Coastal Zone Management Authority has recommended the project *vide* its letter No. OCZMA/62/2020/87/OCZMA, dated 17/03/2021.

2. The Committee noted that the instant proposal is for setting up a Poontoon Barage operation and construction of Bollards required for floating jetty for handling an average capacity of 90,000 MT / months Gypsum from the IFFCO stockyard to Paradip Port for export.

The CRZ map in 1:4000 scales is a prepared by NCSCM Chennai and also project site is located in CRZ-I (B) intertidal area, II & IV (B) Mahanadi River area as per CRZ Notification 2011.

3. However, the EAC observed that the Consultant M/s Ardra Consulting Service (ACS) Private Ltd. has not presented any details about EIA / EMP report, impact by this project, mitigation measures and EMP etc.

4. It was also observed that many parts of the EIA were copy paste from other unknown project. Some of the observations are listed below:

**i. Section 4.2 while listing impact during construction phase:**

**4.2.1:** Impact on topography and land use: speaks about LPG marketing terminal while the proposed project is for Setting up of Pontoon-Berge operation for transportation of Gypsum.

**4.2.8:** Traffic volume: The EIA write about existing roads, traffic management plans etc. However, the present proposal is a Pontoon-Berge operation through waterways.

**4.2.9:** Impact due to solid / hazardous waste: The EIA write about construction of Mounded Bullets for bulk Butane & Propane storage while the proposed project is for Setting up of Pontoon-Berge operation for transportation of Gypsum.

**ii. Section 4.3 Impact during operation phase:**

**4.3.2:** Impact on Air Quality & Fugitive emissions: EIA briefed about construction of LPG plant and storage & handling of LPG in the Mounded Bullets. However, the present proposal is a Pontoon-Berge operation through waterways.

**4.3.3:** Impact on the water environment: EIA writes about STP, hazardous waste management, ZLD etc. which none is applicable in the proposed project.

**4.3.6:** Impact on biological environment: EIA briefly speak that there will be no impact due to construction of Mounded Bullets / facility which has no relevance to the proposed project. For Aquatic Ecology, EIA states that there is no impact on aquatic biota. Infact the proposed project will have impacts on aquatic biota since it is waterway transport of Gypsum.

5. The above observations were brought to the notice of EIA consultant and were accepted by the consultant during presentation.

6. The Committee while rejecting the proposal directed following action:

i. The observation made by the Committee on extremely poor quality and cut and paste content of EIA by M/s Ardra Consulting Service (ACS) be referred to NABET for necessary action.

ii. Completely fresh and comprehensive EIA covering impacts of the project from a reputed institution be done including impact on waterways and its flora and fauna.

iii. The Committee was also concerned about lack of quality check by the project proponent M/s IFFCO Ltd. and advised the mater be referred to the highest authority of M/s IFFCO Ltd. so that such lapses are avoided in the future and management check on quality control are ensured.

**3.3 Proposal for Development of Tourism Project at Rushikonda, Visakhapatnam Andhra Pradesh by Andhra Pradesh Tourism Development Corporation Ltd(APTDC)-CRZ Clearance reg.[IA/AP/CRZ/205693/2021] [ F.No 11-13/2021-IA.III]**

*“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”*

The proposal is for Development of Tourism at Rushikonda, Visakhapatnam Andhra Pradesh by Andhra Pradesh Tourism Development Corporation Ltd. (APTDC).The project proponent made a presentation and provided the following information:

- i. APTDC has built an impressive infrastructure: hotels, resorts, transport fleet and amenities to promote an array of tourist activity. It is establishing new facilities while upgrading the existing ones, introducing new products and enhancing the quality of services to meet the growing expectations of tourists and the challenges of the future.
- ii. The proposed project comprises of private luxury villas, beach facing suits, master suits, guest suits, dining spaces, cafeterias, gymnasium, swimming pools, banquet halls, security spaces, front desk and back offices, services areas and kitchens. The remaining area will be used for parking and landscaping and future expansion.
- iii. The resort has 58 rooms, one conference hall and one bar and restaurant with a total plinth area of about 48000 Sft/ 4439 Sqm:

S. No.	Block Name	Facilities	Ground floor	First floor	Total built-up area
1	Old Block – 34 Rooms	Standard Rooms - 12, AC Deluxe Rooms - 20, Suite Rooms – 2	730.35	730.35	1460.7
2	Restaurant Block	Restaurant, Open seating, Kitchen and Stores, Ladies and Gents toilets	----	290.79	290.79
3	Conference Hall Block	Conference Hall, Lounge, Lobby, Souvenir Shop, Ladies and Gents Toilets	387.45	538.6	926.05
4	New Block – 24 Rooms	Ac Executive Rooms, AC Luxury Rooms, Presidential Suite, Public Utilities	1002.62	758.63	1761.25
<b>Total Built-up area</b>					<b>4438.72 or 4439</b>

- (iv) The resorts are proposed to be constructed on a land admeasuring 9.88 acres of site area and 07 blocks, with a total built up area of 19967.97 Sq.m and GoAP intends to complete by year 2022.
- (v) The proposed site for Development of Tourism project is located at Latitude 17° 46’ 49.72” N and Longitude 83°23’1.10” E.

- (vi) The project site is located around 11.76 km from Visakhapatnam railway station and the nearest town is Visakhapatnam which is located at 12.0 km distance from the site.
- (vii) The google image depicting the distance between the boundary of the proposed Rushikonda Tourism Project and boundary of Kambalakonda Wildlife Sanctuary Eco-sensitive Zone is 1.93 km. The Ministry of Environment, Forest and Climate Change, Govt. of India *vide* Gazette Notification S.O. 1366(E) Dated 28<sup>th</sup> April, 2017 notified an area of 30.51 Sq.Km. with clear boundaries with coordinates as Kambalakonda Wildlife Sanctuary Eco-sensitive Zone.
- (viii) The Rushikonda beach was awarded the most coveted “Blue Flag Certification” and is the only beach in the state which was selected by the Govt. of India for development to enable it to vie for the prestigious ‘blue flag’ certification.
- (ix) The Rushikonda Tourism Project is proposed to be taken up with a project cost of ₹240 Crores in two stages:
- Stage-I: Site preparation & Road connectivity works with a project cost of ₹92.00 Crores.
  - Stage-II: Construction of Buildings with a project cost of ₹148.00 Crores.
- (x) The total land use break-up details as:

Sl. No.	Block Name	Plot Size
	Total Hill area	61.0 acres
01.	VIJAYANAGARA BLOCK	1.60 acres
02.	KALINGA BLOCK	1.80 acres
03.	CHOLA BLOCK	0.65 acres
04.	PALLAVA BLOCK	0.43 acres
05.	GAJAPATHI BLOCK	0.30 acres
06.	VENGI BLOCK	0.20 acres
07.	EASTERN GANGA BLOCK	0.20 acres
	Blocks area	5.18 acres
	Landscape & Hardscape	4.70 acres
	Proposed project area	9.88 acres
	Future expansion area	51.12 Acres

- (xi) The project site area falls under CRZ-II as per the mapping done by IRS, Anna University.

(xii) The Area Statement of proposed building blocks as:

Sl. No.	Block Name	Facilities	Stilt	Ground floor	First floor	Total built-up area(Areas in Sqm.)
1.	Vijayanagar Block	Presidential Suite , Suite Rooms, Banquet Hall	--	3633.98	2194.65	5828.64
2.	Kalinga Block	Banquet Hall, Suite Rooms, Deluxe Suite Rooms, Presidential Suite Rooms	--	2986.48	2766.99	5753.47
3.	Chola Block	Conference Hall	--	1307.70	1482.175	2789.87
4.	Pallava Block	Suite Rooms, Conference Hall	--	1274.69	1081.08	2322.29
5.	Gajapathi Block	Recreational lounge, Business centre	391.58	549.01	494.01	1434.42
6.	Vengi Block	Private suite rooms	--	389.12	--	389.12
7.	Eastern Ganga Block	Restaurant - 225 Pax, Lounge, Kitchen -1 No. Toilets - 4Nos., Parking - 30 Nos.	--	821.30	628.97	1450.27
<b>Total Built-up area</b>						<b>19967.97</b>
						<b>19968 Sq.m</b>

- xiii. The buildings are proposed for construction in an extent of 5.18 acres.
- xiv. All the structures are proposed beyond the “No Construction Zone” i.e. at a distance more than 200M from HTL.
- xv. As per CRZ requirements, all the structures are proposed as Ground + First Floor construction with only 9m total height.
- xvi. The Forest Department has identified felling of 139 trees in the proposed project site and as per the APWALTA Act, 2002, double the number of trees removed, i.e.  $2 \times 139 = 278$  trees will be planted in the vacant site and NOC has been obtained from Government of Andhra Pradesh, Forest Department *vide* letter dated 12/03/2021.
- xvii. Extensive greenbelt and landscaping will be developed within the project site area (4.7 Acres) with native plant species in consultation with AP Forest Department which will enhance the local ambience of the surrounding area.
- xviii. The total water requirement is approx. 221.88 KLD, out of which domestic water (Fresh water) requirement is 160 KLD and flushing water demand is 62.0 KLD.
- xix. The proposed tourism project requires power of 250kVA. Solar power plant of 50kVA, which is 20% of the total power requirement, will be installed, in an area of 600 Sqm



- adjacent to the existing Solar Power System. The remaining 200kVA will be tapped from the power supply of APEPDCL.
- xx. Solid wastes from proposed project are of 608.9 kg/day which will be disposed off as per Hazardous Waste Management Rules, 2016.
  - xxi. The employment potential of the project is 600 persons (500 persons at construction phase and 100 in operation phase).
  - xxii. The parking provision follows the guidelines prescribed by NBC/MOEF&CC norms and also VMRDA norms as per Building policy of Andhra Pradesh.
  - xxiii. The building permissions in Andhra Pradesh are governed by AP Building Rules, 2017, as stipulated in G.O. Ms. No. 119 Dated, 28/03/2017 of MA&UD Dept.
  - xxiv. The Andhra Pradesh Coastal Zone Management Authority (APCZMA) has recommended the proposal for clearance *vide* their letter No. 279/CRZ/CON/2021, dated 23/03/2021.
  - xxv. The details of EMP Budget for the project as:

S. No.	Description	Item	Recurring cost in Lakhs (A)	Capital cost in Lakhs (B)
1.	Water pollution	STP @ 300 KLD – 1 No.	24.0	450.0
		RWH – 40 Nos. @ x 30,000/- each	0.5	1.5
2.	Noise Pollution	Acoustic Enclosure	1.0	4.0
3.	Energy Conservation	Solar Water Heating / Common lighting / Photo Voltaic Cell	20.0	200.0
4.	Solid Waste Management	Segregation of Dry waste & wet waste/ OWC	5.0	25.0
5.	Monitoring & Environment Statutory Compliances	Air, Water, stack, noise	2.5	0.0
6.	Landscaping/Greenbelt development	Plantation	10.0	50.0
7.	Occupational Health and Safety	PPE/Health check up	2.0	0.0
	<b>Total</b>		<b>65.0</b>	<b>680.5</b>

2. The Committee noted that project falls in CRZ-II area; however PP has proposed structures as Ground + First Floor construction with only 9 m total height, which is normally applicable for CRZ-III area. Committee suggested to submit rain water harvesting calculation, power supplementation through renewable Energy Resource and distance of the proposed project from the boundary of the Kambalakonda Wildlife Sanctuary Eco-sensitive Zone is 1.93 km. to all EAC (CRZ) Members as well as record of the Ministry and same has been received by Ministry.

3. Based on the deliberations held and submissions made, the Committee recommended the proposal for CRZ clearance subject to following conditions:
- (i) The Forest department has identified felling of 139 trees in the proposed project site and as per the APWALTA Act, 2002, double the number of trees removed, i.e.  $2 \times 139 = 278$  trees will be planted in the vacant site.
  - (ii) Extensive greenbelt and landscaping will be developed within the project site area (4.7 Acres) with native plant species in consultation with AP Forest Department which will enhance the local ambience of the surrounding area.
  - (iii) Prior Clearance from the Standing Committee of the NBWL shall be obtained, if applicable.
  - (iv) All conditions / recommendations stipulated by the Andhra Pradesh Coastal Zone Management Authority (APCZMA) *vide* their letter No. 279/CRZ/CON/2021, dated 23/03/2021, shall strictly be complied with.
  - (v) The project proponent shall ensure that the quality of treated effluent is strictly in conformity of the standards prescribed by CPCB / APPCB for discharge into water bodies / sea etc. and shall ensure that an in-built treated waste water quality checking mechanism in place before commencement of operation of the Hotels, Resort etc.
  - (vi) Construction shall be strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.
  - (vii) No permanent labour camp, machinery and material storage shall be allowed in CRZ area.
  - (viii) Temporary toilets shall be provided for all construction labour. Suitable toilet fixtures for water conservation shall be provided. Fixtures for showers, toilet flush in grand drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
  - (ix) Ground water shall not be extracted for operation of the project.
  - (x) Top soil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
  - (xi) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
  - (xii) Solid waste shall be managed as per Solid Wastes Management Rules, 2016.
  - (xiii) All effluent waste arising from the proposed development will be disposed of as per the norms prescribed by Central / State Pollution Control Board. There shall not be any disposal of untreated effluent into the sea /coastal water bodies. It shall be ensured that the waste water generated is treated in a STP as committed by the project proponent. The treated waste water shall be reused for landscaping, flushing and / or HVAC cooling purposes etc. within the development. The project proponent should also make alternate arrangement for situation arising due to malfunctioning of STP. There shall be regular monitoring of standard parameters of the effluent discharge from STP under intimation to the SPCB.
  - (xiv) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
  - (xv) A robust rainwater harvesting system shall be installed in consultation with the concerned authority. In addition, other water conservation measures shall be

- adopted for which a standard operating system shall be developed in a time bound manner during the development of the project itself.
- (xvi) The treated wastewater shall be recycled and reused to reduce the demand of fresh water.
  - (xvii) Ambient noise levels should conform to residential standards both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the ambient noise standards. Diesel power generating sets proposed as source of back-up power should conform to rules notified under the Environment (Protection) Act, 1986 for diesel generator sets.
  - (xviii) Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
  - (xix) Use of glass may be reduced by up-to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.

### **3.4 Proposal for laying of sea water intake and outfall in the Arabian Sea for Reverse Osmosis reject from Desalination plant at Veravel, Gujarat by M/s Grasim Industries Limited, Indian Rayon -CRZ Clearance reg.**

[IA/GJ/CRZ/204669/2021] [ F.No 11/14/2021-IA.III]

***“The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.”***

The proposal of M/s Grasim Industries Limited is for laying of sea water intake and outfall in the Arabian Sea for Reverse Osmosis reject from Desalination plant at Veravel, Gir Somnath, Gujarat. The project proponent made a presentation and provided the following information:

- i. The water requirement for running the plant is met by the water drawn from the Hiran dam II. However, during scant monsoon years, sufficient water is not available from the dam. The proposed project will eliminate the uncertain scarcity of water and ensure sustained and guaranteed water supply throughout the year for sustainable operation of the plant.
- ii. The Grasim Industries Limited; Unit-Indian Rayon, Veraval is proposing to install seawater intake system to pump 45,000 m<sup>3</sup>/d of water for their proposed desalination plant of 18,000 m<sup>3</sup> capacities.
- iii. The fresh water obtained from desalination plant will be used for various processes of the plant, thereby reducing its dependence on dam water supply. The reject water of 27,000

m<sup>3</sup>/ Day is proposed to be discharged at appropriate location in the sea through marine outfall and diffuser.

- iv. The desalination plant will be developed within existing premises of Grasim Industries Limited; Unit-Indian Rayon. 45,000 m<sup>3</sup> /d of water will be sourced from the sea through two intake pipelines.
- v. The details length of pipeline falls in CRZ Zone as :

Description	Length of Pipeline falls in CRZ Zonation (m)				Total Length
	CRZ II	CRZ IB	CRZ IVB	CRZ IVA	
Sea Water	690.21	363.31	32.11	929.52	2015.15
Reject Water	413.96	285.87	55.22	963.34	1718.39

- vi. The details of proposed pipeline will pass through as:

Sl. No.	Activity	CRZ category	Clause permitting activity (CRZ notification 2011)
1.	Pipeline for Seawater Intake and outfall	CRZ IB, CRZ II, CRZ IVA & CRZ IVB	8 I (i) b 8 II (v)

- vii. Total 3 pipelines = 2 pipelines of seawater intake and 1 pipeline of RO reject. Intake pipeline (2 Pipelines) = 630 m on offshore + 430 m onshore (Outside plant) + ~1173 m (Inside plant) Reject outfall pipeline = 1160m offshore + 430 m onshore (Outside plant) + ~1030 m (Inside plant). The pipeline details are as:

Sr. No.	Pipeline	Numbers of Pipeline	Pipe Dia. (mm) (HDPE Pipeline)	Length of Pipeline (m)	
				Outside Plant	Inside Plant
1	Intake Pipeline	2	630	630 m Offshore + 430 m Onshore	~1173 m
2	Reject Outfall Pipeline	1	450	1160 m Offshore + 430 m Onshore	~1030 m

- viii. The Intake Pipeline Parameters details are as:

Sl. No.	Description	Parameters
1.	Intake water flow rate	45000 m <sup>3</sup> /day (Total)
2.	Number of pipelines	Two Nos

3.	Flow through each pipeline	22500 m <sup>3</sup> /day
4.	Size and MOC of Pipeline	630 mm OD PN-10 PE-100 HDPE confirming to IS-4984/2016
5.	Media	Seawater
6.	Density of media	1023 kg/m <sup>3</sup>
7.	Temperature of media	35°C (max)
8.	Length of each pipeline	1060 mtrs
9.	Mode of seawater intake	Suction pumps erected at plant site.
10.	Capacity of Desalination plant	18000 m <sup>3</sup> /day (18MLD)
11.	Onshore section of Intake pipeline	430 mtr. (Preferably to be laid by Horizontal Guided boring method from Plant to LFP).
12.	Offshore section of Intake pipeline	630 mtr (To be laid by float and sink method on sea bed).
13.	Depth at Intake Point	~10 mtrs

ix. Outfall Pipeline Parameters details area as:

Sl. No.	Description	Parameters
1.	Reject flow rate	27000 m <sup>3</sup> /day (Total)
2.	Number of pipelines	One
3.	Size and MOC of Pipeline	450 mm OD PN-8 PE-100 HDPE confirming to IS-4984/2016
4.	Media	RO Reject
5.	Temperature of media	35°C (max)
6.	Length of pipeline	1590 mtrs
7.	Mode of disposal	Pumping system from plant
8.	Onshore section of Reject Outfall pipeline.	430 mtrs (To be laid underground with 0.5 mtr 'TOP' from Plant to LFP).
9.	Offshore section of Reject Outfall pipeline	1160 mtrs (To be laid by float and sink method on sea bed).
10.	Depth at Outfall point	~18 mtrs

- x. The Laying of Pipeline onshore is horizontal guided boring and offshore is Float and sinks method.
- xi. The total cost of the project is ₹74 Crores.
- xii. The employment potential during construction phase is 100 persons and operation phase is 35 persons.
- xiii. Domestic water source & consumption and generation details regular water requirement of 1 KLD for pipeline will be fulfilled by existing unit of Grasim Industries Limited; Unit-Indian Rayon.
- xiv. Domestic waste generation during operation phase will be around 6 kg per day and it will be disposed as per Municipal Solid Waste Rules.

- xv. Wastewater Details Wastewater generated from domestic use will be treated in existing wastewater treatment plant.
- xvi. RO reject water 27000 m<sup>3</sup>/day from the desalination plant will be discharged into sea as per final disposal point decided by NIO *via* outfall pipeline at selected location for various tidal conditions i.e. 20°54'32.40"N 70°20'19.60"E.
- xvii. Solid waste about 15-20% (~10 T per anum) of membrane elements will be replaced annually from 3<sup>rd</sup> year onwards and used membrane elements can be disposed at Common TSDF.
- xviii. The quantity of hazardous waste about 500 Kg/Annum, which is used oil or cotton waste generated from Pump house or RO system cleaning will be stored in existing unit of Grasim Industries.
- xix. The power required is about 5.2 kW per m<sup>3</sup> indicative power requirement, connected load 7100 kW, operating load 4500kW and power requirement source is Captive Power Plant of Grasim Industries Ltd. or Paschim Gujarat Vij Company Limited (PGVCL).
- xx. Gujarat Coastal Zone Management Authority (GCZMA) has recommended the project vide its letter No. ENV-10-2021-18-T, dated 08/03/2021.

2. Based on the deliberations held and submissions made, the Committee recommended the proposal for CRZ clearance subject to following conditions:

- (i) The water requirement for running the plant is met by the water drawn from the Hiran dam II and the sufficient water should be maintained to the dam throughout the year.
- (ii) No groundwater shall be extracted to meet with the water requirements during the construction phase of the project.
- (iii) No storage reservoir for sea water shall be permitted and only pipelines conveyance system shall be installed.
- (iv) RO reject water 27000 m<sup>3</sup>/day from the desalination plant will be discharged into sea as per final disposal point decided by NIO *via* outfall pipeline at selected location for various tidal conditions i.e. 20°54'32.40"N 70°20'19.60"E
- (v) The water quality and marine ecology at 500 m radius of outfall location should be monitored.
- (vi) Submarine pipeline should be laid with advise of national institute to avoid damage to marine ecology.
- (vii) All conditions/recommendations stipulated by the Gujarat Coastal Zone Management Authority (GCZMA) *vide* their letter No. ENV-10-2021-18-T, dated 08/03/2021, shall strictly be complied with.
- (viii) The project proponent shall assist in developing a prototype with CSIR- Central Salt and Marine Chemicals Research Institute (CSMCRI) as committed, to reuse the brine discharge for saltpans as migratory bird habitat instead of discharging into sea, while ensuring that the treated brine is safe for the birds and shall submit a report within one year to this Ministry. Necessary funds will be provided by the project proponent to the implementing agency
- (ix) No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction.
- (x) Any physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the project.

- (xi) Construction shall be strictly in accordance with the provisions of CRZ Notification, 2011 and as amended from time to time.
- (xii) No permanent labour camp, machinery and material storage shall be allowed in CRZ area.
- (xiii) Temporary toilets shall be provided for all construction labour. Suitable toilet fixtures for water conservation shall be provided. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.

**4.0 Any other item with the permission of the Chair.**

There being no agenda item left, the meeting ended with a vote of thanks to the Chair.

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