



सत्यमेव जयते

# PROCEEDINGS OF THE ADMINISTRATOR, STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, THIRUVANANTHAPURAM

(Present: *Anil.P.Antony*)

**Sub:SEIAA-Composite Environmental and CRZ Clearance for the proposed mining of heavy mineral sand in Re Survey No. 81/3 to 81/4, 81/7 to 81/13, 82, 83, 84/1 to 84/14, 85 to 93, 122 to 126, 127/1 to 127/4, 127/7 to 127/13, 128, 129/1, 129/4 to 129/16, 139/1 to 139/5, 139/9, 139/10, 140 to 142, 143/1 to 143/3, 143/6 to 143/10, 151/1, 151/2, 152, 153, 168 in Alappad Village and 1, 2/1, 2/8 to 2/18, 5/1 to 5/4 at Panmana Village, Karunagapally Taluk, Kollam District, Kerala State by Mr.A.J.Janarthanan- Granted – Orders issued.**

## State Environment Impact Assessment Authority, Kerala

**No. 610/SEIAA/KL/4639/14**

**Dated, Thiruvananthapuram.19.01.2021**

Ref: 1. Application received on 27.09.2014 from Sri.A.J.Janarthanan, Head Chavara Unit, IREL (Authorized by the Chairman & Managing Director, IREL), Kerala  
2. G.O(Rt.) No.29/2019/Env dt.12.04.2019.

### ENVIRONMENTAL CLEARANCE NO. 01/2021

Sl No.	Description	Details
1	Name of the project	Mining of heavy mineral sand in Alappad & Panmana village in Karunagappally Taluk, Kollam District.
2	Proposed Activity	Mining of Heavy Mineral Sand
3	Name of the Sector & Schedule No.(in the EIA Notification,2006)	Mining of Minerals Schedule 1(a) i Category B
4	Name & Address of the project Proponent	Mr. A.J Janarthanan, Head Chavara Unit.(Authorized by the Chairman & Managing Director, IREL) , IREL (INDIA) LIMITED Kollam, Kerala
5	Project Location	

	a)Block No. or Survey Nos.: Block no IV	Re Survey No. 81/3 to 81/4, 81/7to 81/13, 82, 83, 84/1 to 84/14, 85 to 93, 122 to 126, 127/1 to 127/4, 127/7 to 127/13, 128, 129/1, 129/4 to 129/16, 139/1 to 139/5, 139/9, 139/10, 140 to 142, 143/1 to 143/3, 143/6 to 143/10, 151/1, 151/2, 152, 153,168 at Alappad Village and 1, 2/1, 2/8 to 2/18, 5/1 to 5/4 at Panmana Village
	b)Revenue Village & Panchayat	Alappad & Panmana
	c)Taluk	Karunagapally
	d)District	Kollam
6	Geo Co-ordinates	Latitude N 9°02'15.8" to 9°02'16.8" and Longitude E 76°30'31.9" to 76°30'34.0"
7	Extent (in Acre/Hectare)	40.566 Ha.
8	Project Cost (in lakh)	Rs. 15 Crores
9	EMP Cost (Operation and Maintenance)	133 Lakhs
10	Production Details	Extraction of sand containing heavy minerals like ilmenite, Rutile, zircon, Monazite, Sillimanite etc., Production Capacity: 2,37,150 TPA to 7,50,000TPA.
11	Water Requirement	The dredge will be working in a pond of water and no effluents are generated during its operations. Water used for slurry operations is recycled.
12	Power Requirement	Power supply is available from Kerala Electricity Board(KSEB) 11KV line. Necessary distribution arrangement will be made in the mining area. No other fuels are used for energy.
14	Waste Management Details	No solid waste is generated in the mining operations. Tailing of DWUP consisting mostly of silica sand will be used for filling the mined out area. No liquid effluents are generated.
15	ToR Details	610/SEIAA/KL/4639/2014
16	Public Hearing Details	Held on 20/04/2018 at Collectorate of Kollam, 236 people were attended the public hearing.
17	Field Inspection Details	SEAC Members inspected the site on 14.01.2019
18	CER Details	1.50 Crores <ul style="list-style-type: none"> <li>• Periodical sea wall maintenance</li> <li>• Construction of 4 no.s of groins</li> </ul>

1. In the MoEF&CC letter dated 16<sup>th</sup> June 2020, SEIAA was directed to issue a composite Environmental and CRZ clearance for the project in accordance with the provisions of para 4.2(iii) of CRZ Notification, 2011 and amendments thereto and circulars issued thereon. Hence the Project Proponent, as per para 4.2(iii)CRZ Notification, shall obtain the clearance / recommendations of KCZMA Kerala, before the commencement



mining specially under the circumstances that project area comes under CRZ-1A and CRZ-1B where mining is not permitted.

2. KCZMA in its 96th meeting held on 07.07.2018 vide agenda no.96.03.14 discussed the proposal of IREL for expansion in detail and decided to recommend the proposal to MoEF&CC for considering the CRZ clearance for mining of heavy mineral sand subject to the condition that no mechanical mining will be allowed in CRZ IB.
3. The proposal was placed in the 104<sup>th</sup> meeting of SEAC held on 10<sup>th</sup> & 11<sup>th</sup> October 2019. The Committee decided to recommend for EC subject to the specific conditions that groundwater recharge structures should be constructed in the rehabilitated mining area in all the houses and plots provided as part of resettlement & rehabilitation plan should be provided with rainwater harvesting structures, in addition to the general conditions.
4. The budget earmarked for Environmental Management Plan (EMP) shall be ~ 0.46 Crores (Capital) & ~ 1.13 Crores (recurring/annum). which includes i) Rs 16.0 Lakh (Capital) & Rs 10 Lakh (recurring) for Meteorology including wave monitoring, ii) Rs 10.00 Lakh (recurring) for Topography maintenance, iii) Rs 10.00 Lakh (recurring) for Coastal Protection, iv) Rs 15.00 Lakh (Capital) & Rs 5.00 Lakh (recurring) for Water , v) Rs 5.0 Lakh (recurring) for Ecological Survey vi) Rs 15.00 Lakh (Capital) for Mangrove and wetland development, vii) ~10.00 Lakh (recurring) for Green belt development, ~18.00 Lakh (recurring) for Occupational Health & Biological Monitoring, ~10.00 Lakh (recurring) for Radiation Survey, ~10.00 Lakh (recurring) for Organisation Setup including salary (Only for additional man power), ~5.00 Lakh (recurring) for Training and meeting etc of the organizational Setup, ~5.00 Lakh (recurring) for Socio-economic development schemes. Amount proposed under EMP shall be kept in a separate bank account and should be audited annually. The PP should annually submit the audited statement and detailed report along with proof of activities viz. Photographs (before & after with geolocation date & time), purchase documents, sampling reports, photographs & Geo-location of the infrastructures/facilities developed etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
5. PP has submitted that the main factors of occupational health in Chavara Beach sand project are noise and radiation. Safety of employees during operation and maintenance etc shall be as per Mines Rules and Regulations. To avoid any adverse effects on the health of workers due to various pollutants, the following measures relating to safety and health which are practised in Chavara project shall be continued in proposed 40.566 ha expansion programme also:
  - i. Provision of rest shelters for mine workers with amenities like drinking water.
  - ii. All safety measures like use of safety appliances, safety awards, posters, slogans related to safety etc.
  - iii. Training of employees for use of safety appliances and first aid.
  - iv. Regular maintenance and testing of all equipment as per manufacturers guidelines.

- v. Periodical Medical Examination (PME) of all workers by a medical specialist so that any adverse effect may be detected in its early stage.
  - vi. The budget earmarked for occupational health & Biological Monitoring is Rs. 18 Lakhs (recurring).
6. The proposal was placed in the 105<sup>th</sup> meeting of SEIAA held on 22<sup>nd</sup>&23<sup>rd</sup> October 2020. As directed in the MOEF&CC letter No.11-36/2019-IA-III dated 25/06/2020. Authority decided to issue a composite Environmental and CRZ Clearance to IREL as per the mining plan for mining heavy mineral sand, subject to following Specific conditions and General conditions.

**Specific Conditions prescribed by MoEF&CC:**

- 7. The mining quantity shall be limited to 23000m<sup>3</sup> per km length as recommended by NCESS.
- 8. The monitoring of changes in shoreline along the Chavara coast (particularly the shores adjacent to the mining sites) shall be carried out by NCESS once in two years and report shall be submitted to the Regional Office of the Ministry.
- 9. No Groundwater shall be extracted in the CRZ areas to meet the water requirements of the project.
- 10. As per the Ministry's Office Memorandum F.No.22-65/2017-IA.III dated 1<sup>st</sup> May, 2018 and proposed by the project proponent, an amount of Rs.0.3crore i.e @ 2% of project cost shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as support to local government, schools, sanitation and health including construction of public toilets in the surrounding villages, as per need based assessment carried out. The activities proposed under CER shall be restricted to the affected area around the project. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report and to the District Collector. It should be posted on the website of the project proponent.

**Other specific conditions:**

- 11. As per MoEF&CC communication the mining quantity shall be limited to 23000m<sup>3</sup> per km length as recommended by NCESS.
- 12. **EC is subject to the final decision in OA 76/2019 of Hon'ble National Green Tribunal, (NGT) New Delhi.**
- 13. **Mining operations have to be carried out as per the approved mining plan and directions contained in the letter dated 17<sup>th</sup> September 2019 of Department of Atomic Energy, GOI; approving the extension of validity of Mining plan for NK Block no IV from FY 2019-20 to 2023-24.**



14. Lease agreement with Government of Kerala for mining in block IV has expired in February 2020.. The Project Proponent will commence mining only after execution of valid lease deed with Govt. of Kerala
15. The Project Proponent shall obtain all the statutory Clearance from Govt. of Kerala before commencement of work and scrupulously follow the decisions taken in the meeting held on 16.1.2019 and 17.1.2019, which was chaired by Honourable Chief Minister of Kerala for the sustainable mining and also to address the grievances of local inhabitants.
16. The project proponent shall follow the recommendation of the study report of NCESS in mining operations to ensure sustainable mining leading to Social and Ecological security of project region.
17. In response to the direction given by NGT in OA 76/2019, The report of the Joint committee submitted on 2.11.2019 constituted by NGT. In this report the committee has made some suggestion for sustainable mining by IREL. The project Proponent shall explore the possibilities of implementing suggestions in the best interest of sustainable mining.
18. Groundwater recharge and rainwater harvesting structures should be provided in the rehabilitated mined areas, covering all the houses and plots, included in the resettlement & rehabilitation plan.
19. Project proponent shall implement activities proposed in the EIA report to ensure the social and ecological security in the project region. SEAC will conduct regular field inspections to monitor the implementation activities mentioned in EIA report.
20. The project proponent shall make sincere efforts to address all genuine grievances expressed by the petitioners in W.P. (C) and in their written representation submitted on 23.06.2020 before SEIAA on priority, to enlist the support of local inhabitants for sustainable mining.
21. The Project Proponent shall submit half yearly compliance report to SEIAA and regional office, MoEF&CC Bangalore
22. As this is a Special project of Ecological, Economical, Social and Scientific importance, Authority decided to constitute a committee to monitor the EC conditions under the Chairmanship one of expert members of SEAC nominated by Chairman SEAC. The District Geologist, a responsible senior officer from IREL, a senior scientist from NCESS who is involved in preparation of the report and a representative from local NGO nominated by DC Kollam, shall be the members of the committee. The committee will meet once in 3 months and monitor the implementation of EC conditions and prepare an inspection report for the compliance EC conditions. The representative from IREL shall be the convener of the meeting and IREL shall provide all logistic support for conduct of meeting and field inspection.
23. Under CER in addition to the above activities suggested by MoEF&CC, the activities like Drinking water supply, Skill development, Education in colleges, Construction of

roads, Cross drains, Electrification, Solid waste management facilities, Rain water harvesting structures, Avenue plantation, Plantation in community area shall also be taken up.

**Standard Conditions: (As Ministry's O.M No 22-34/2018-IA.III dated 8.01.2019 & 16.01.2020)**

**I. Statutory compliance**

24. The Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.

25. The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA. II (M), dated 29th October, 2014, regarding "Impact of mining activities on Habitations issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

26. A copy of EC letter shall be submitted to concerned Panchayat / local NGO etc. by the project proponent.

27. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www.parivesh.nic.in](http://www.parivesh.nic.in)). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.

**II Water quality monitoring and preservation**

28. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department/ State Pollution Control Board.

**III Public hearing and human health issues**

29. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

30. Project Proponent shall make provision for the housing for workers/labours or shall construct labor camps within/outside ( company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. The housing may be provided in the form of temporary



structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

31. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

#### IV **Miscellaneous**

32. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to SEIAA Kerala, The MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.

33. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC & SEIAA Kerala.

34. In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore. Necessary assistance for entry and inspection should be provided by the project proponent.

Instances of violation if any shall be reported to the District Collector, Kollam.

The given address for correspondence with the authorised signatory of the project is Mr. A.J Janarthanan, Head Chavara Unit.(Authorized by the Chairman & Managing Director, IREL) , IREL (INDIA) LIMITED Kollam.



  
**Anil.P.Antony**  
**Administrator, SEIAA**

To,

Mr. A.J Janarthanan, Head Chavara Unit (Authorized by the Chairman &  
Managing Director, IREL)  
IREL (INDIA) LIMITED  
Chavara 691583  
Kollam  
Kerala

Copy to,

1. MoEF Regional Office, Southern Zone, KendriyaSadan, 4<sup>th</sup> Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.(through e-mail: [rosz.bng-mefcc@gov.in](mailto:rosz.bng-mefcc@gov.in))
2. Government of India, Department of Atomic energy, AnushaktiBhavan, ChhatrapatiShivajiMaharaj Marg, Mumbai 400 001 India.
3. The Principal Secretary to Government, Environment Department, Government of Kerala
4. The Director, Directorate of Environment & Climate Change, 4th Floor KSRTC Bus Terminal, Thampanoor, Thiruvananthapuram, Kerala 695001.
5. The District Collector, Kollam
6. The Director, Mining & Geology, Thiruvananthapuram -4.
7. The Member Secretary, Kerala State Pollution Control Board
8. The District Geologist, Kollam
9. The Tahsildhar, Karunagapally Taluk, Kollam District
10. The Secretary, Chavara Grama Panchayat, Kollam
11. The Chairman, SEIAA.
12. Website.
12. S/f
13. O/c

 20/1/21