ENVIRONMENTAL CLEARANCE			Government of India Ministry of Environment, Forest and Climate Change Issued by the State Environment Impact Assessment Authority(SEIAA), KERALA) To, The Managing Director THE KERALA CERAMICS LTD P.B.No 2, Kundara P.O -691501				
PARIVESH	(Pro-Active and Responsive Facilitation by Interactive,	and Virtuous Environmental Single-Window Hub)	under the provision Sir/Madam, This is in reference in respect of project states SIA/KL/MIN/455763/2023 of clearance granted to the pro- 1. EC Identification No. 2. File No. 3. Project Type 4. Category 5. Project/Activity inclus Schedule No. 6. Name of Project 7. Name of Company/Of 8. Location of Project 9. TOR Date	EC24B001KL136354 2481/EC1/2023/SEIAA New B 1(a) Mining of minerals China Clay project of The Kerala Ceramics Ltd			
	PARATESH (1)	RE 98/		•			



PROCEEDINGS OF THE STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY – KERALA, THIRUVANANTHAPURAM

(Present : Dr.H.Nagesh Prabhu IFS (Retd), Chairman, Shri.K.Krishna Panicker, Member, Dr.Rathan U. Kelker IAS, Member Secretary)

 Sub:- SEIAA - Environmental Clearance for the China Clay mining Project of The Managing Director, M/s The Kerala Ceramics Ltd., P.B. No. 2, Kundara P.O., Kollam
 - Granted – Orders issued.

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, KERALA

Proposal No. SIA/KL/MIN/455763/2023File No. 2481/EC1/2023/SEIAARef: 1. Application for EC from Sri. Satees Kumar P received *via* PARIVESH on 16.12.2023.2. Minutes of the 169th meeting of SEAC held on 7th,8th & 9th August 2024.

3. Minutes of the 147th meeting of SEIAA held on 27th & 28th August 2024.

ENVIRONMENTAL CLEARANCE NO. 217 /C/2024

The Managing Director, M/s Kerala Ceramics Ltd., P.B. No. 2, Kundara P.O., Kollam submitted an application vide paper read as 1st above for Environmental Clearance through PARIVESH for the mining of China Clay for an area of 1.6900 Ha. at Re-Sy Block No-10, Re-Sy Nos: 386/9-2, 386/10-2, 386/10, 386/21-2, 387/11, 387/13, 387/14, 387/16, 387/18, 387/18-2-2, 387/25, 387/26, 387/27, 387/28, 387/29, 387/35, 387/36, 387/37, 387/38, 387/39 & 392/1-2, in Perayam Village, Kollam Taluk, Kollam.

I. <u>Project Details</u>

SL. No.	Particulars	Details	
1	Name of the Project	China Clay mining project of M/s The Kerala Ceramics Ltd.	
2	Proposed Activity	Mining of China Clay	
3	Name of the Sector & Schedule No. (in the EIA Notification, 2006)	Category B2, Schedule 1(a) Mining of Minerals	
4	Name & Address of the Project Proponent	 Sri. Satees Kumar P., Managing Director, M/s The Kerala Ceramics Ltd., P.B. No. 2, Kundara P.O., Kollam, 691501 	
5	Project Locationa) Re Survey Block No.	10	
	b) Re. Survey No.	386/9-2, 386/10-2, 386/10, 386/21-2, 387/11, 387/13, 387/14, 387/16, 387/18, 387/18-2-2, 387/25, 387/26, 387/27, 387/28, 387/29, 387/35, 387/36, 387/37, 387/38, 387/39 and 392/1-2	
	c) Revenue Village & Grama Panchayat	Perayam Village & Perayam Panchayath	
	d) Taluk	Kollam	
	e) District	Kollam	
6	Geo Co-ordinates	As per the approved mining plan	
7	Extent (in Hectare)	1.6900	
8	Project Cost	Rs. 1,46,43,990/-	
9	Mineable Resource	The Mining & Geology Department shall remain the minable reserve as per specific condition no (4)	
10	Date & Field Inspection	26.02.2024	

II) EMP Details

Sl. No.		ption of Item	Budget Allocation in Lakh (Recurrin g)	Budget Allocation in Lakh (Recurring)	Remarks
1	Environmental Monitoring Cost a. Water Quality analysis			0.30	Surface and sub surface
	a. Water Qu	i)Air Pollution Monitoring		1.00	water Ambient Air monitoring within lease area in pre and post monsoon season
	b.Air	ii)Water sprinkling to control of fugitive emission during loading and unloading and haulage emissions		0.65	Water sprinkling, Tanker Water cost
	iii Greenbelt/I	Plantation	14.25	0.79	Plantation Cost for 33% saplings @ Rs. 1500/- (Total No. of saplings=950) Recurring Cost: Gardener cost of Rs.5,000/-per month for 10 months = 50,000/- and watering cost of Rs. 28,800/- per year.
	iv. Cost of re-grassing of the mining lease area at the end of life of mine		0.34		Re-grassing Cost for 1.1753 Ha of backfilled area= Rs 33.506/- (Seed Cost Rs 23,506 and Rs 10,000 Labour cost) (Seed cost: Rs 500/kg and per hectare around 40 Kg seeds will be required, therefore for 1.1753 hectare around 11.732 kg seeds will be required)
	c. Noise pollu	tion Monitoring		0.20	Recurring cost includes monitoring cost of noise measurement at different locations.

2.	Construction of Retaining wall around the waste dump		1.50	0.20	Construction of Retaining Wall around waste dump – (280m*1m*2.5m) @ Rs.700/m3
3.	Management	Municipal Waste (Provision of Bins for collection of waste)	0.05	0.02	Provision of Bins for collection of waste
4.	Fencing around prevent loss of v human movemen	vildlife and	1.78	0.20	Cost includes wire fencing around the mine pit 581 meter @Rs. 305/- along with sign boards & maintenance.
		a. Construction of the RWH system cum storage tank.	3.00	0.30	Construction of rainwater conservation structures and its regular maintenance
5.	Water conservation and management	 b. Construction of Garland drains & Settling tank 	1.52	0.50	Construction of garland drains along the peripheries of the proposed mine to prevent storm water from catchment area coming in contact with freshly excavated areas and these garland drains are connected with the settling tank at required intervals to let it free from any suspended particles before letting it discharge through natural slope.
6.	Occupational Safety and health		3.51	1.54	Manpower-14
	ΤΟ΄	ΓAL	25.95	5.70	

III) CER Details

Sl.	Area of Intervention	Amounts (Rs)
No.		
1	Drinking Water Project for local residents of Perayam	
	Grama Panchayath Structural steel fabrication and	Rs 3,00,000/-
	erecting work for carrying 1000L capacity water tank,	

	TOTAL CER COST	Rs. 10,66,650/-
	Maintenance cost in 9 years (@10,000 per year)	Rs. 90,000/-
	TOTAL	Rs. 9,76,650/-
10	Electrification Work	Rs. 25,000/-
9	Laying CPVC pipes of class2 to class6 and specials, lowering to the trenches already made.	Rs. 7,200/-
8	Laying CPVC pipes of class2 to class6 and specials, lowering to the trenches already made.	Rs. 52,200/-
7	Excavation trenches of required width for pipes cables etc including excavation for sockets and dressing of sides ramming of bottoms.	Rs 1,38,250/-
6	Supply of CPVC Piper, SRD 11, 25mm Dia	Rs. 14,000/-
5	Supply of CPVC Piper, SRD 13.5, 63mm Dia	Rs. 1,50,000/-
4	Supplying and installation of pump and its accessories in the proper locations	Rs. 30,000
3	Supplying and fixing of PVC over head tank of capacity 1000L, including all labour and material charges	Rs. 60,000/-
2	Design, Supply, installation and commissioning of new water filtration & disinfection system to purify the water to portable one of 15000 Ltr/day capacity	Rs. 2,00,000/-
	include cost and conveyance of material, all fabrication charges, material for RCC work, all labour charges etc	

- After due appraisal, in the 169th meeting, the SEAC recommended EC for the mine life of 10 years, subject to certain Specific Conditions in addition to the General Conditions.
- 3) In the 147th meeting of SEIAA, the Authority perused the proposal and noted the decisions of various SEAC meetings held on different dates. Authority noticed that the SEAC had appraised the project based on Form 1, Pre-Feasibility Report, Mining Plan, the additional details/documents obtained from the Project Proponent during appraisal and the field inspection report. The Kerala State Ground Water Authority vide Proceedings No. DGWD/423/2024-T4 dated 21/03/2024 issued NOC for the project. The Authority also noted that, the SEAC in its 169th meeting, recommended EC for the mine life of 10 years, subject to

The Authority noted that for the sustainable management of quarry operations, the approved mining plan is revised every five years till the project life of mine as per KMMC Rules, incorporating scheme of activities to be carried out for the next 5 years. Authority is of the opinion that it is essential to match these procedures and time lines followed in the department of Mining and Geology with the time lines of ECs issued for the sustainable management of quarry operations and protection of environment in the project region.

In the above circumstances, the Authority decided to accept the recommendations of 169th SEAC meeting and to issue Environmental Clearance initially for a **period of 5 years** from the date of execution of mine lease / permit and then to extend the EC period to cover the project life of 10 (Ten) years, subject to the review by SEAC at the end of every five years, to verify whether the Project Proponent has violated any of the EC conditions and thereby caused any damage to the Environment in the project region. The EC shall be subject to the Specific Conditions in addition to the general conditions.

- 1. The Project Proponent shall carry out quarrying as per the approved Mining Plan and the Specific Conditions mentioned hereafter. The Project Proponent should strictly follow the Kerala Minor Mineral Concession Rules 2015 and amendments thereby.
- 2. The EC shall be valid from the date of execution of permit/lease from the Department of Mining and Geology. The copy of the permit / lease order should be provided to the SEIAA before commencing the mining activity.
- 3. The EC issued will be subject to a review by SEAC after every 5 years through field verification to ensure that mining is carried out sustainably as per the EC conditions.
- 4. The mining should be restricted to an average depth of 10m below ground level as per the NOC from the Ground Water Department.
- 5. The pumping well of the company should be maintained as an observation well and water level should be monitored in it every day morning before pumping.
- 6. A separate log book should be maintained to record the water level of the observation well monitored in the morning and the log book should be submitted to the District Officer, Ground Water Department, Kollam for verification in every three months
- 7. Steps should be taken to establish and monitor observation wells in the buffer zone through the District Officer, Ground Water Department, Kollam.
- 8. Proper benches should be provided at an interval of every 1.5 m.

- 9. The excavation activity should not involve blasting.
- 10. The excavation activity should be restricted to 2m above the groundwater table at the site.
- 11. The excavation activity should not alter the natural drainage pattern of the area
- 12. The excavated pit should be restored by the Project Proponent for agriculture and other useful purposes.
- 13. Appropriate fencing all around the excavated pit should be made to prevent any mishap.
- 14. Measures should be taken to prevent dust emissions by covering excavated earth during transportation.
- 15. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to the excavation of earth.
- 16. Workers/laborers should be provided with facilities for drinking water and sanitation.
- 17. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of the proposed excavation.
- 18. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area.
- 19. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
- 20. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.
- 21. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
- 22. Measures incorporated in the CER should be implemented within 6 months from the date of EC.
- 23. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5.00 pm)
- 24. The overburden and topsoil should be stored separately near the mine site, safeguarded with protection walls, and used for reclamation immediately after completion of mining.
- 25. As per OM no F.No.22-65/2017-IA.III dated 30th September 2020, under Corporate Environmental Responsibility (CER) the Project Proponent should implement the Environment Management Plan (EMP)/CER as directed by SEAC during appraisal, covering the issues to address the environmental problems in the project region, from the

beginning of the project, indicating both physical and financial targets year wise. The EMP/CER shall be implemented in consultation with Local Self Govt. Institutions. A copy of the approved EMP/CER shall be made available to the concerned Panchayat for information and implementation support. The indicated cost for implementation of CER activities shall be 2% of the project cost.

- 26. As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16th January 2020 issued by MoEF&CC, in obedience to the directions of the Hon'ble Supreme Court the Project Proponent shall, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.
- 27. The violation of EC condition may lead to cancellation of EC and action under The Environment (Protection) Act 1986.
- 4) Environmental Clearance, under Notification S.O. No.1533 (E) dated 14.09.2006 of the Ministry of Environment & Forests, Government of India, is hereby accorded to Sri. Satees Kumar P., Managing Director, M/s The Kerala Ceramics Ltd., P.B. No. 2, Kundara P.O., Kollam, Kerala for the China Clay mining project for an area of 1.6900 Ha at Re Survey Block No-10, Re-Survey No- 386/9-2, 386/10-2, 386/10, 386/21-2, 387/11, 387/13, 387/14, 387/16, 387/18, 387/18-2-2, 387/25, 387/26, 387/27, 387/28, 387/29, 387/35, 387/36, 387/37, 387/38, 387/39 and 392/1-2 in Perayam Village, Kollam Taluk, Kollam, for the quantity reassessed by the Mining & Geology Department as per Specific Condition No. 4, initially for a period of 5 years from the date of execution of mine lease/permit and then to extend the EC period to cover the project life of 10 (Ten) years from the date of issuance of Permit from Department of Mining and Geology as per S.O.1807 (E) dated.12.04.2022 of MoEF & CC, subject to the Specific Conditions:

General Conditions

- 1. Proponent should obtain all necessary statutory clearances for mining.
- 2. Appropriate fencing all around the burrowed/excavated pit shall be made to prevent any mishap.
- 3. Proper retaining wall shall be provided for safeguarding the immediately adjacent property,

other buildings and civil structures, if necessary.

- 4. A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation or as specified in mining plan.
- 5. Mining shall be done as per mining plan and suggestions by SEAC.
- 6. The excavation shall not alter the natural drainage pattern of the area.
- 7. Appropriate measures shall be taken to prevent dust pollution, if any caused during clay mining.
- 8. Safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to burrowing/excavation of ordinary clay.
- 9. Provide 2m x 2m benches for mining depth greater than 3m to prevent slope failures, if requires. For soil and soft formation the benches of height 1.5m to 2m are to provide to prevent collapse of wall.
- 10. Removal of clay should be restricted above the ground water table at the site.
- 11. The top soil and over burden, if any shall be stacked in separate demarcated area and shall be used for reclaiming the excavated area. Proper measures shall be provided to prevent the erosion of the stacked material.
- 12. The burrowed/excavated pit shall be restored by the project proponent for useful purpose(s) as specified in the mining plan.
- 13. Measures shall be taken to prevent dust pollution, if any by covering of burrowed/excavated clay during transportation
- 14. Applicable labour laws for mining shall be followed. Proper masks and onsite facilities shall be provided to the workers. All safety measures shall be followed while cutting laterite using machines.
- 15. Mine has to be closed as per progressive mine closure plan and final mine closure plan.
- 16. If EC period is more than 6 months, half yearly compliance report shall be submitted to SEIAA.
- 17. The Environmental Clearance shall be liable to be cancelled in case of violation of any of the above conditions.
- 18. The minimum distance norm from the boundary/periphery of other properties buildings/civil structures as prescribed in KMMC Rules and other statutory rules and orders shall be followed.
- 19. Suitable indigenous plants should be planted around the mining area and sides of the haul road as green belt.
- 5) The Environmental Clearance issued will also be subject to full and effective implementation of all the undertakings given in the Application Form, mitigation measures as assured in the Environment Management Plan and the mining features including Progressive Mine Closure Plan as submitted with the application. The above undertakings and the conditions and the undertakings of the Mining Plan in (Mining), (Mines Drainage), (Stacking of Mineral rejects

and Disposal of waste), (Environment Management Plan) & (Progressive Mine Closure Plan) as submitted will deemed to be part of this Proceedings as conditions as undertaken by the project proponent, as if incorporated herein.

- 6) Validity of the Environmental Clearance will be initially for **Five (5) years** and then to extend the EC period to cover the project life of 10 (Ten) years, subject to the review by SEAC in every five years, or earlier review of EC in case of violation or non compliance of any of the conditions or genuine complaints from residents within the security area of the quarry.
- 7) Violation of any of the above Specific & General Conditions as applicable to the particular case will entail cancellation of the Environmental Clearance, in addition to legal action under the provisions of the Environment (Protection) Act, 1986. Non-compliance, if any shall be reported to the **District Collector, Kollam** by the State Level Environment Impact Assessment Authority.
- 8) The Half Yearly Compliance Report (HYCRs) with name of the project, EC No. and date, the period of submission with its contents, compliance report and environmental monitoring data & covering letter have to be uploaded in the PARIVESH Portal as per O.M. F.No.IA3-22/1/2022-IA-III(E)-17264 dated 14.06.2022 and the website of the Project Proponent. Hardcopy of HYCRs shall not be acceptable.
- The given address for correspondence of the Project Proponent is Sri. Satees Kumar P., Managing Director, M/s The Kerala Ceramics Ltd., P.B. No. 2, Kundara P.O., Kollam, 691501.

Sd/-Administrator, SEIAA For Member Secretary, SEIAA

To,

Managing Director, M/s The Kerala Ceramics Ltd., P.B. No. 2, Kundara P.O., Kollam 691501

Copy to:

- 1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block,Koramangala, Bangalore-560034 (through e-mail: <u>rosz.bng-mefcc@gov.in</u>).
- 2. The Secretary to Government, Environment department, Government of Kerala.
- 3. The Director, Directorate of Environment & Climate Change, Trivandrum
- 4. The Director, Mining & Geology, Kollam
- 5. The Member Secretary, Kerala State Pollution Control Board.
- 6. The District Collector, Kollam.
- 7. The District Geologist, Kollam.
- 8. The Environmental Engineer, Kerala State Pollution Control Board, Kollam.
- 9. The Tahsildhar, Kollam Taluk, Kollam.
- 10. The Secretary, Perayam Grama Panchayath, Kollam.
- 11. The Chairman, SEIAA
- 12. Stock File/Office Copy
- 13. Website