



Validity expires on 03-01-2021

***Proceedings of the State Environment Impact Assessment Authority
Kerala***

*Present: Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member and Sri. P. Mara Pandiyan I.A.S
Member Secretary.*

Sub: - Environmental clearance for the proposed quarry project in Survey Nos. 15/7, 15/15, 16/5, 16/2, 20/1, 19/1, 15/9 part, 21/5, 21/6 part, 16/4-1 and 16/4, at Thottapuzhassery Village, Thiruvalla Taluk, Pathanamthitta District, by M/s Panachayil Industries -E.C- Granted.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 145/SEIAA/EC4/2746/2013

Dated: 04-01-2016

- Read:-*
1. Application dated 7-10-2013 from Sri. Aby Mathew, Managing Partner, M/s Panachayil Industries, West Othara P.O, Thiruvalla, Pathanamthitta District.
 2. Minutes of the 21st meeting of SEIAA held on 4-11-2014
 3. Minutes of the 25th meeting of SEIAA held on 14/15-2-2014
 4. Minutes of the 32nd meeting of SEAC held on 12/13-8-2014
 5. Minutes of the 35th meeting of SEAC held on 17/18-10-2014
 6. Minutes of the 35th meeting of SEIAA held on 9-4-2015
 7. Minutes of the 41st meeting of SEAC held on 16/17-6-2015
 8. Minutes of the 40th meeting of SEIAA held on 3 /4-8-2015
 9. Minutes of the 45th meeting of SEAC held on 11/12-9-2015
 10. Minutes of the 43rd meeting of SEIAA held on 16-10-2015
 11. Minutes of the 46th meeting of SEIAA held on 14-12-2015

ENVIRONMENTAL CLEARANCE NO. 122 / 2015

Sri. Aby Mathew, Managing Partner, M/s Panachayil Industries, Thottapuzhassery, Pathanamthitta District vide application received on 07.10.2013, has sought Environmental Clearance under EIA Notification, 2006 for the proposed quarry project in Survey Nos. 15/7, 15/15, 16/5, 16/2, 20/1, 19/1, 15/9 part, 21/5, 21/6 part, 16/4-1 and 16/4, at Thottapuzhassery Village, Thiruvalla Taluk, Pathanamthitta District, for an area of 4.0429 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 of Ministry of Environment and Forests. It is

further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dated 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. Other details are as under:

Brief description of the project		Quarry project with an area of 4.0429 ha. & production capacity of 2,40,000 MTA
Category/Subcategory & Schedule		1(a) Mining of minerals. Category B, Mining Lease area between 0 to 50 ha.
GPS co-ordinates		Latitude (N) 9° 22' 36.75" to 9° 22' 26.12"
		Longitude (E) 76° 41' 41.58" to 76° 41' 31.71"
	Minimum and maximum height of excavation (MSL)	105 m. MSL and 145 m. MSL
	Life of mine proposed	13 years
	Ultimate depth of mining (in MSL)	105 m. MSL
	Distance from the adjacent quarry	M/s Kuzhuvamonnai Industry, Kuravankuzhy, 500 m., W
	Details of project cost	Rs. 14.65 Crores
ABOUT THE PROJECT		
Environmental Parameters Considered		
WATER		
	Water requirement & sources	The total water requirement is about 5.5 KLD (Domestic – 1.5 KLD, Dust suppression – 2 KLD & Plantation – 2 KLD). The source of water is from storm water pond / wells.
	RWH units proposed	Rain water collection pond
	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No impoundment, damming, culverting, realignment or other changes to the hydrology of surface water courses.
	Water quality meeting	Water quality should meet requirements after the treatment of water (filtration, disinfection &

	requirements	sedimentation).
	Does it have provisions for use of recycled water	No
LAND		
	Proximity to forest lands	No
	Access road to the site –Width & Condition	8 m. tarred road, W side
	Storage of explosives /hazardous substances	The magazines are located 3 km., SE from the site. Explosives will be stored as per Explosives Act/Rules.
	Facility for solid waste management	The municipal solid waste from the labour quarter will be suitably disposed.
	Proneness of the area for landslides	No
	Top soil, overburden etc.	Top soil – 11,464 cu.m. Overburden – 22,929 cu.m.
AIR		
	Likely emissions affecting environment	Diesel engine emissions & emissions from movement of vehicles like dumpers, trucks, tankers etc. will also generate.
ENERGY		
	Energy requirement	The total power requirement will be 75 kW for compressors, which will be drawn from diesel engine.
	Energy sources	From diesel engine.
	Extent of usage of alternative energy resources	No
BIODIVERSITY		
	Presence of any endangered species or red listed category	No
	Loss of native species and genetic diversity	For the quarrying activity all of native tree species, shrubs, herbs, climber etc. existing at site will be cleared.
	Likely displacement of fauna	No
	Any introduction of alien / invasive species	No
SOCIAL ASPECTS		

	Proximity to nearest habitation	101 m., NW
	CSR related to the project / allocation / time frame (details mandatory)	As a part of Corporate Social Responsibility, it is proposed to spend minimum of Rs. 6.75 lakhs per annum for different activities in consultation with local Grama Panchayat. Bio-diversity fund - 1% of the profit of the company will be allotted for local Bio-diversity Management Committee conservation activities.
GENERAL		
	Eco restoration programmes	The year wise programme of afforestation for the life of mine, about 3,000 trees will be planted. The main aim of the green belt development is to restore the ecosystem to its original form to a maximum possible extent by designing the green cover with the same native species.
	Litigation/court cases, if any, against the project (Provide details)	Nil as declared
	Details of Authorised Signatory	Sri. Aby Mathew, Managing Partner, M/s Panachayil Industries, West Othara P.O, Thiruvalla, Pathanamthitta District-689551.
	Details of NABET approved EIA consultant organisation	Environmental Engineers & Consultants Pvt.Ltd., A1-198, Janak Puri, New Delhi-110058

2. The application was considered in the 21st meeting of SEAC held on 4th November 2013. The item was deferred seeking additional clarifications from the proponent. The major concern of the Committee with respect to the project was regarding the location of the project as it was found that the project site is encircling the property of another person which blocks his accessibility to the plot if quarrying activities are permitted in the present project site. Considering the same, the Committee was of the opinion that permission could not be granted to 30 per cent of the area for which Environmental Clearance is sought at present which in turn will incur a heavy loss to the proponent. The Committee reiterated that it is not at all feasible and legally standing for permitting quarrying activities in the said area, since if the incumbent approaches the court projecting his difficulty to survive in the midst of quarrying activities hampering his normal life, the proponent may not be able to conduct quarrying activities. Hence the Committee directed the proponent to obtain consent to conduct quarrying activities from the person owning the neighbouring plot of the project site. To this end the proponent has provided in writing that the neighbouring plot is owned by Sri. S.C. Thomas and there is no dwelling house in the said plot. It is

also stated that they have provided sufficient accessibility to that property of Sri. S.C. Thomas for access to his plot and will maintain it in future also.

3. The proposal was placed for reconsideration in the 25th meeting of SEAC held on 14th and 15th February 2014. On verification of the additional clarifications provided by the proponent, SEAC recommended the project for environmental clearance under the usual general conditions for mining projects. Subsequently the matter was placed for consideration in the 27th meeting of SEIAA. SEIAA returned the proposal to SEAC to examine all the land ownership issues in detail and report. The item was placed before SEAC in its 32nd meeting held on 12th and 13th August 2014 and deferred for obtaining the consent from owners of the piece of land marked as 'others' property in the surface lay out plan for quarrying. The proponent has submitted consent from Mr. Binu K. Mathew for conducting quarrying activities in Sy. Nos. 16/3, 17/8, 18/1 and 21/5 (part). The proposal was placed in 35th meeting of SEAC held on 17th and 18th October 2014. The committee verified the possession certificate and found that all the Sy.Nos. mentioned in the application is in the name of M/s Panachayil industries. The item was recommended under usual conditions for mining projects.

4. The proposal was placed in the 35th meeting of SEIAA held on 9th April 2015. The Authority has decided to obtain approved Mining Plan for appraisal by SEAC as per the Kerala Minor Mineral Concession Rules -2015. The proponent has submitted the approved mining plan. The proposal was placed in the 41st SEAC held on 16th and 17th June 2015. The Committee appraised the proposal based on the Mining Plan, Prefeasibility Report, and all other documents submitted along with the Form I application and decided to concur with the decision of the 35th meeting of SEAC and recommended the issuance of Environmental Clearance with the following specific conditions, in addition to the general conditions stipulated for mining projects.

1. On the closure of mine at least 10% of the mined area should be formed into a water body by harvesting rain water.
2. To the extent possible local biodiversity management Committee should be involved in the environmental management/restoration activities.

5. The proposal was placed in the 40th meeting of SEIAA held on 3rd and 4th August 2015. Authority found that the mining area is 4.0429 ha in Thottappuzhassery village, Pathanamthitta district, which is a riparian midland. As already decided by the Authority site inspection is necessary in such cases and decided to refer the case to SEAC for site inspection and recommendations thereon. The proposal was considered in the 45th meeting of SEAC held on 11th and 12th September 2015. Committee reiterated its stand on site inspection observed earlier that the need for the site inspection for appraisal of a proposal is solely the discretion of SEAC. The above fact is detailed under 'Scoping' in Para 7 of notification of MoEF on 14-09-2006. The quarry site under consideration is situated in the midland and not a part of Western Ghats and do not fall under any ecologically sensitive locality. Further the area has already been visited by Committee Member Sri. John Mathai earlier and the above factors are considered when the SEAC recommended the item twice in its 35th and 41st meetings. In 41st meeting reviewed appraisal on the basis of the new mining plan and decided to concur with the decision of the 35th meeting of SEAC. Therefore the Committee decided that there is no reason to change the earlier recommendation.

6. The proposal was again placed in the 43rd SEIAA held on 16-10-2015. In the light of the report that a Member of the SEAC had already visited the site, the Authority resolved to obtain a

copy of the report of the site visit. It is seen that field inspection was conducted in November 2013. The major observations are as follows:

- 'Additional land has been purchased for the project around the core area.
- No settlements seen are within the lease area and around.
- Few settlements are reported in the eastern side but beyond visible range.
- The public road connecting Pullad and Thadiyoor is beyond 500 m from the project area.
- Land use is mostly rubber plantations with mixed vegetation.
- Proper arrangements for the storm water drainage not seen. It is reported that storm water will be directed to the abandoned quarry on the north western side.
- Overburden thickness is high in the flat crestal portions.
- Sub-vertical section of the existing quarry is seen at the edge of the lease area in a precarious condition.
- Temples, schools, Hospitals are about 1.5 km away from the boundary of the proposed quarry. Charal Kunnu is about 1 km south east of quarry site.

In this context quarrying may be initiated in the elevated portions progressing down the slope with a bench height of not more than 6 m and width not less than 5m. The sub vertical sections of already mined surface need to be stripped in a planned way to reduce the slope. The sections that are already quarried may be reclaimed using the overburden. Additional provision must be made for stacking the overburden within the lease area for reclamation of completely quarried sections. Storm water drains are to be designed to prevent entry of quarry waste into the nearby water bodies. A portion of it has been harvested for quarry operations. The crusher unit manufacturing sand that utilises the quarried material is located away from the quarry. The transportation of the material should not cause inconvenience to the local population. The access to the proposed quarry is a narrow private road of the entrepreneur. The road beyond and to the crusher unit may be kept in good condition. The location of infrastructure like office, Rest room, canteen, magazine, workshop etc. within the lease area must be shown in the plan'.

7. Considering the above field visit report, the proposal was placed before SEIAA held on 14-12-2015 for decision on the recommendations of the 41st meeting of SEAC and site inspection report. The Authority examined the site inspection report and decided to grant environmental clearance subject to the specific recommendations recommended by SEAC in para 4 above and the suggestions in the site inspection report, and the mitigation measures undertaken in the EMP in the PFR.

8. Environmental clearance is therefore granted to the proposed quarry project M/s Panachayil Industries, in Survey Nos. 15/7, 15/15, 16/5, 16/2, 20/1, 19/1, 15/9 part, 21/5, 21/6 part, 16/4-1 and 16/4, at Thottapuzhassery Village, Thiruvalla Taluk, Pathanamthitta District, for an area of 4.0429 hectares subject to the specific conditions recommended by SEAC in para 4, conditions suggested in the Inspection Report of SEIAA quoted in para 6 above, and the mitigation measures undertaken in the EMP in the PFR and Mining plan submitted.

9. The 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 Chapter 4 of the PFR on Environment Management and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above undertakings

and the conditions and undertakings in Chapter 4 (Mining), Chapter 5 (Blasting), Chapter 6 (Mine Drainage), Chapter 7 (stacking of mineral rejects and disposal of wastes) Chapter 11 (EMP) of the Mining Plan and the entire Progressive Mine Closure Plan as submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

10. Validity of the environmental clearance will be five years from the date of this clearance, subject to earlier review in the event of violation or non- compliance of any of the conditions stipulated herein.

11. Compliance of the conditions herein will be monitored by the Directorate of Environment and Climate Change or its agencies and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.

- i) Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.
- ii) Instances of violation if any shall be reported to the District Collector, Pathanamthitta to take legal action under the Environment (Protection) Act, 1986.
- iii) The given address for correspondence with the authorized signatory of the project
Sri. Aby Mathew, Managing Partner, M/s Panachayil Industries, West Othara P.O, Thiruvalla, Kerala-689551.

Sd/-

Member Secretary, SEIAA
&
Addl. Chief Secretary
Environment & Forests Department
Government of Kerala.

To,

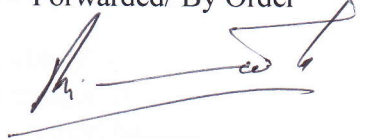
✓ Sri. Aby Mathew,
Managing Partner,
M/s Panachayil Industries,
West Othara P.O,
Thiruvalla, Kerala- 689551.

Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034
2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala
3. The District Collector, Pathanamthitta
4. Director, Dept. of Environment and Climate Change, Govt. of Kerala, Tvm-24
5. Director, Mining & Geology, Thiruvananthapuram -4.
6. The Secretary, Thottappuzhassery Grama Panchayat, Maramon P.O., Kozhenchery, Pathanamthitta.
7. Chairman, SEIAA, Kerala

8. Website
9. S/F
10. O/c

Forwarded/ By Order



Administrator
(SEIAA)



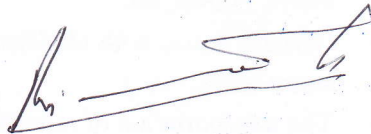
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA
GENERAL CONDITIONS (for mining projects)

- (i) Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
- (ii) Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- (iii) Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
- (iv) Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- (v) Sprinklers shall be installed and used in the project site to contain dust emissions.
- (vi) Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
- (vii) At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumpings and overburden and planted with indigenous plant species that are eco-friendly.
- (viii) Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
- (ix) ***The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mine.***
- (x) Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
- (xi) Control measures on noise and vibration prescribed by KSPCB should be implemented.
- (xii) Quarrying activities should be limited to day time as per KSPCB guidelines.
- (xiii) Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
- (xiv) A licensed person should supervise/ control the blasting operations.
- (xv) Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
- (xvi) Overburden materials should be managed within the site and the old quarries, if any, should be reclaimed and restored.
- (xvii) Height of benches should not exceed 5 m and width should not be less than 5 m.
- (xviii) Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
- (xix) ***Maximum depth of mining from general ground level at site shall not exceed 10m***
- (xx) No mining operations should be carried out at places having a slope greater than 45°.
- (xxi) Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.
- (xxii) The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
- (xxiii) Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
- (xxiv) The transportation of minerals should be done in covered trucks to contain dust emissions.
- (xxv) The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
- (xxvi) Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
- (xxvii) Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.

or other structures, not being any facility for mining shall be provided

- (xxix) 200 m buffer distance should be maintained from forest boundaries.
- (xxx) Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity.
- (xxxi) All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.
- (xxxii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- (xxxiii) The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (xxxiv) The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- (xxxv) The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- (xxxvi) A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
- (xxxvii) The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data **(both in hard copies as well as by e-mail)** and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the Directorate of Environment and Climate Change, Govt. of Kerala.
- (xxxviii) The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public.
- (xxxix) The proponent should provide notarized affidavit *(indicating the number and date of Environmental Clearance proceedings)* that all the conditions stipulated in the EC shall be scrupulously followed.
- (xl) The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project




b Member Secretary, SEIAA Kerala