

Proceedings of the State Environmental Impact Assessment Authority Kerala-

(Present Prof. (Dr.) K.P.Joy, Chairman, Dr.J.Subhashini, Member, Dr.Nivedita.P.Haran IAS, Member Secretary & Additional Chief Secretary to Government (Environment Department)

Sub: SEIAA Kerala - Proposed Quarry project of M/s Metarock Pvt. Ltd., Aruvikkara Village & Panchayath, Nedumangad Taluk, Thiruvananthapuram District, C/o. "Lalas", Thattamala, Kollam-691020 - Environmental Clearance - Accorded

Environmental Clearance

No. 235/SEIAA/KL/851/2013

dated, Thiruvananthapuram 31-10-2014

Ref:- 1. Application dated 24.02.2014 submitted by the Managing Director, Metarock Pvt. Ltd., "Lalas", Thattamala, Kollam-691020

2. Minutes of 26th meeting of SEAC held on 20th & 21st March 2014

3. Minutes of 32nd meeting of SEAC held on 12th & 13th August 2014

4. Minutes of 35th meeting of SEAC held on 17th & 18th October 2014

5. Minutes of the 34th meeting of SEIAA held on 24th October 2014



ORDER

1. Sri. N. Vinodlal M/s Metarock Pvt. Ltd., "Lalas", Thattamala, Kollam-691020, vide his application received on 24.02.2014, has sought Environmental Clearance under EIA Notification, 2006 for building stone quarry project in Sy. No.s 339/5, 339/6, 339/7, 339/7-2, 339/7-3, 339/7-4, 339/7-5, 339/7-6, 339/7-7, 339/14, 339/15, 339/16, 339/17, 339/18, 339/19, 339/20, 339/24, 339/25, 339/26, 340/9, 340/10, 340/11, 340/20, 340/20-1, 341/4, 341/5, 341/6, 341/7, 341/9-1, 341/9-2, 341/9-3, 341/9-4, 341/9-5, 341/10, 341/11, 341/12, 341/13, 342/2, 342/3, 343/9, 345/1, 345/1-3, 345/1-2, 345/1-16, 345/1-22, 345/1-6-1, 355/26, 341/2-1, 341/2-2 & 342/4 at Aruvikkara Village & Panchayath, Nedumangad Taluk, Thiruvananthapuram District, Kerala for an area 7.3401 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-11012/12/2013-IA-II (I) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

The basic information of the project is as follows:

Name of project	Building Stone Quarry of Metarock Pvt. Ltd
Brief description of the project	Open cast mining
Category/Subcategory & Schedule	Category E/B2 & Schedule I (a)
Location Syno/ district, Taluk/ village etc.	Sy. No. 339/5, 339/6, 339/7, 339/7-2, 339/7-3, 339/7-4, 339/7-5, 339/7-6, 339/7-7, 339/14, 339/15, 339/16, 339/17, 339/18, 339/19, 339/20, 339/24, 339/25, 339/26, 340/9, 340/10, 340/11, 340/20, 340/20-1, 341/4, 341/5, 341/6, 341/7, 341/9-1, 341/9-2, 341/9-3, 341/9-4, 341/9-5, 341/10, 341/11, 341/12, 341/13, 342/2, 342/3, 343/9, 345/1, 345/1-3, 345/1-2, 345/1-16, 345/1-22, 345/1-6-1, 355/26, 341/2-1, 341/2-2 & 342/4 in Village & Panchayat - Aruvikkara, Taluk - Nedumangad, District - Thiruvananthapuram, Kerala
GPS co-ordinates	Longitude: 77° 01' 23.98" E to 77° 01' 35.80" E. Latitude: 8° 33' 13.91" N to 8° 33' 26.10" N
Extent of area (in hectares)	7.3401 hectares

Minimum and maximum height of excavation (MSL)	Highest 140m MSL and Lowest 80m MSL
Life of mine proposed	23 years
Ultimate depth of mining (in MSL)	80m MSL
Distance from the adjacent quarry	Bluestar Granites, Cheriyakonni within 500 m.
Capacity of production	3,00,000 MTA
Details of Project Cost	Rs. 5.454 Crores
CRZ recommendations	Not Applicable
Forest clearances	Not Applicable

ABOUT THE PROJECT

Environmental parameters	Mitigation Measures
WATER	
Water requirement & sources	The total water requirement is about 17 KLD in which 2 KLD is for domestic which would be sourced from open well, 12 KLD for dust suppression system in mine as well as ancillary unit (M Sand & Crusher Unit) and 3 KLD for plantation purposes and will be sourced from storm water pond. The source of water is from storm water pond / well.
RWH units proposed	Yes, Rain water collection pond
Facilities for liquid waste treatment	Not applicable
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.
Does it have provisions for use of recycled water	No
LAND	
Proximity to forest lands	No
Access road to the site - Width & Condition	7 m. tarred road NE
Storage of explosives /hazardous substances	Yes, Explosives will be stored as per Explosives Act/Rules.
Facility for solid waste mgmt	The municipal solid waste will be suitably disposed.
Topographic features/ slope	The topography of the lease area is rock area. The slope of the lease area are :- Section 'B - B' = 19° Section 'L - L' = 22° Highest level = 140 m MSL, middle of the area Lowest level = 80 m MSL, S side

Top soil, overburden etc.	Top soil — 44,021 cu.m. Overburden — 66,032 cu.m.
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AIR

Air quality meeting requirements	Yes
Noise level meeting requirements	Yes
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.

BIODIVERSITY

Presence of any endangered species or red listed category	No
Loss of native species and genetic diversity	Yes, For the quarrying activity all of native tree species, shrubs, herbs, climber etc. existing at site will be cleared.

SOCIAL ASPECTS

Proximity to nearest habitation	104 m. , N
CSR components suggested	Bio-diversity fund - As part of Access and Benefit Share (ABS), 1 percent of annual profit of the firm would be given to Biodiversity Management Committee of the Panchayath through the concerned Grama Panchayath towards the restoration of biodiversity loss due to quarrying activities.

GENERAL

Does it propose environment management plan	Yes
Does it have eco restoration programmes	Yes, The year wise programme of afforestation for the life of mine, about 7,000 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)	No
Details of Authorised Signatory	Sr. H. Vinodh, Managing Director "Lalas", Thannamala, Kollam-691020.
Details of NABET approved EIA consultant organisation	M/s Enkay Enviro Services Pvt. Ltd., 24-B, Dadu Marg, Gopal Bari, Ajmer Road, Jaipur, Rajasthan-302001. QCI List at Sr. No. 43 as per NABET list of accredited consultant organizations, Rev. 18 on 5 th March, 2014.

2. The proposal was placed as agenda item no. 26.07 before the 25th SEAC meeting held on 20th and 21st March 2014. The project proponent made a brief presentation of the proposal. The Committee found that this is an existing quarry working from 1996 and out of the total 34.16 hectares of land owned by the proponent, the lease area consists of 7,3401 hectares, which is partly Government (0.955 hectares) and partly private land. Sy. No. 342/4 in the present proposal is Government land and the proponent has provided the copy of NOC (valid up to 2013) issued to him by District Collector, Thiruvananthapuram for conducting quarrying activities in the said quarry of 34.16 hectares area.

AIR

Air quality meeting requirements	Yes
Noise level meeting requirements	Yes
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.

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Presence of any endangered species or red listed category	No
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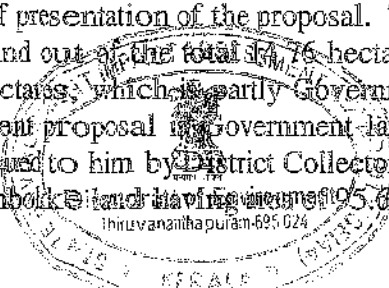
SOCIAL ASPECTS

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GENERAL

Does it propose environment management plan	Yes
Does it have eco restoration programmes	Yes, The year wise programme of afforestation for the life of mine, about 7,000 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)	No
Details of Authorised Signatory	Sri. N. Vinodlal, Managing Director Lalas, Thattamala, Kollam-691020.
Details of NABET approved EIA consultant organisation	M/s Enkay Enviro Services Pvt. Ltd., 24-B, Dadu Marg, Gopal Bari, Ajmer Road, Jaipur, Rajasthan-302001. QCI List at Sr. No. 43 as per NABET list of accredited consultant organizations, Rev. 18 on 5 th March, 2014.

2. The proposal was placed as agenda item no. 26.07 before the 26th SEAC meeting held on 20th and 21st March 2014. The project proponent made a brief presentation of the proposal. The Committee found that this is an existing quarry working from 1996 and out of the total 14.76 hectares of land owned by the proponent, the lease area consists of 7.3401 hectares, which is partly Government (0.956 hectares) and partly private land. Sy. No. 342/4 in the present proposal is Government land and the proponent has provided the copy of NOC (valid up to 2013) issued to him by District Collector, Thiruvananthapuram for conducting quarrying activities in the said purnambole land having an area of 95.60 ares.



The Committee asked the proponent whether they will obtain renewal of NOC to conduct quarrying activities in the site. The proponent stated that they have already obtained renewed NOC and agreed to produce copy of the same. The proponent has also not provided copy of land tax receipt for Sy. No. 339/19 and is hence directed to provide the same. The Committee also wanted to verify the former title deeds of the land under consideration of the present project to ascertain whether the land is assigned for plantation purposes or whether quarrying is permitted in the said land. Regarding proof of authorized signatory, the proponent has provided certificate from a Chartered Accountant regarding the authorized, issued and paid up share capital of the firm. But Committee directed that Certificate from Company Secretary regarding Board of Directors of the firm to be provided as proof of authorized signatory, after the receipt of which only it could be ascertained whether the resolution given as proof of authorized signatory is sufficient.

The Committee was also doubtful as to whether any settlements are there around the project area and decided to ascertain the same during site visit. The proponent was also directed to provide stringent dust suppression measures and to leave 100 m safe buffer distance from nearby residences. It was also found that the area has high overburden thickness and hence the proponent was directed to specify the location for stacking the overburden. The major point of concern for the Committee was the presence of 380 mg/l sulphur content in the water sample, especially in stored rain water from the site, which showed high acidic values of 3.7.

The Committee directed the proponent to recheck the values and to identify the source of sulphur and to make provisions to address the effects of the same. The proponent has provided the cadastral map duly signed by Village Officer but Sy. No. 356, which is not part of the present proposal, is also seen marked in the map and hence the proponent was directed to provide clarification in writing whether quarrying is proposed in that Sy. No. also.

The following discrepancies were also found in the area survey plan submitted by the proponent and was hence directed to provide necessary clarifications/documents to clear the same:

- (i) The total area given in the table of the sy. plan is 896.51 ares. Sy. Nos. 339/23, 341/3, 341/9, 343/2, 343/3 and 343/19 which is not part of the present proposal is seen marked in the sy. plan. Also, the total area of these Sy. Nos. could not be calculated from the table given in the plan as these Sy. Nos. are not specifically given in the table.
- (ii) All the Sy. Nos. (with sub division number) mentioned in the proposal is given in the table of the area sy. plan but the Sy. Nos. 339/7-2, 339/7-3, 339/7-4, 339/7-5, 339/7-6, 339/7-7, 340/20-1, 341/9-1, 341/9-2, 341/9-3, 341/9-4, 341/9-5, 345/1-3, 345/1-2, 345/1-16, 345/1-22, 345/1-6-1, 341/2-1 and 341/2-2 which is part of the present proposal is not seen specifically marked in the survey plan.

The Committee also found that in the undertaking provided by the consultant regarding the responsibility of the proposal submitted Sy. Nos. 339/23-1, 339/23-2, 343/2, 343/3, 343/19, 356/5-2, 356/5-5 and 356/6 which are not part of the present proposal is also mentioned and hence the proponent was directed to provide fresh undertaking from the consultant undertaking the responsibility of the proposal submitted with only the Sy. Nos. mentioned in the proposal.

3. Considering the above, the item was deferred for site visit to verify the former title deeds of the land under consideration of the present project to ascertain whether the land is assigned for plantation purposes or whether quarrying is permitted in the said land and to assess the proximity of settlements to the project area. The proponent was also directed to provide the following to SEAC for further consideration of the proposal:

1. Copy of renewed NOC obtained for quarrying in Government land bearing Sy. No. 342/4.
2. Copy of land tax receipt for Sy. No. 339/19.
3. Certificate from Company Secretary regarding Board of Directors of the firm.
4. Location for stacking the overburden, to be specified
5. Details of provisions made for dust suppression.
6. Assurance in the form of affidavit that 100 m safe buffer distance shall be left from the nearby residences for quarrying activities.
7. Identification of the source of sulphur detected in the water samples and provisions made to address the effects of the same.

clarification in writing as to whether quarrying is proposed in Sy. No. 356, which is not part of the present proposal, as that Sy. No. is also seen marked in the cadastral map.

9. Necessary clarifications/documents regarding items (i) and (ii) above.

10. Fresh undertaking from the consultant undertaking the responsibility of the proposal submitted, incorporating only the Sy. Nos. mentioned in the proposal.

4. As per the decision taken by the committee, a site visit was conducted by a team deputed by SEAC on 10th June 2014. Further, on submission of the additional clarifications by the proponent, the application was placed for reconsideration in the 32nd SEAC meeting as agenda item no. 32.19. SEAC recommended the proposal as per the following specific condition in addition to the general conditions stipulated for mining projects, subject to the production of revised area survey plan by competent authority confirming the sub-survey numbers.

1. Outer boundary pillars of the lease area with different survey numbers should be erected with the help of village officer.

5. The proposal was placed for reconsideration in the 35th SEAC meeting held on 17th and 18th October 2014 as agenda item no. 35.25. The Committee verified the additional clarifications/documents submitted by the proponent and found that the earlier stipulated specific condition has thus been complied with by the proponent. The proponent has also submitted the revised area survey plan duly signed by the Village Officer, Aruvikkara, wherein, the Sy. No. 341/2 which is part of the present proposal is not seen marked. Hence it is decided to exclude Sy. Nos. 341/2-1 and 341/2-2 having a total extent of area of 22.53 ares. Thus the extent of mining for which E.C. could be given would be 711.48 ares. SEAC recommended the proposal as per the following specific condition that the outer boundary pillars of the lease area with different survey numbers should be erected with the help of village officer. The general conditions for mining projects would also apply.

6. Subsequently, the proposal was placed in the 34th SEIAA meeting held on 24.10.2014 as an agenda item KLA/34.42. The Authority approved the proposal for issue of environmental clearance subject to the general and three special conditions in the inspection report. Quarrying shall confine to 711.48 ares only as the area fall in Sy.Nos. 341/2-1 and 341/2-2 having a total extend of 22.53 ares are excluded as per the cadastral map. Other conditions as per the recommendations of SEAC would apply. EC will be for a period of five years only.

7. Environmental Clearance under EIA notification 2006 is accorded for the proposed quarry project of Sri. Vinodlal for M/s Metarock Pvt. Ltd., subject to all the mining features, Environmental Management Plans as undertaken in the EMP submitted to SEIAA which will form part of this proceedings on if incorporated herein, and the following additional specific conditions, and this general conditions on mining of minor mineral appended hereto:

1. Outer boundary pillars of the lease area with different survey numbers should be erected with the help of village officer (Also as per condition No. xxxviii of general conditions annexed).

2. Steep cuttings are seen in the old quarried faces. Bench formation is being practised in the working area. However top portion where quarrying is proposed has fairly thick OB. This need to be removed and stored in designated places and working of the quarry must follow a top to bottom approach. In this process the east facing slopes must be dealt with care to avoid unstable conditions.

3. Mechanism must be provided to channelise the water, arrest soil movement, desiltation and clarification of water before it is let out. Presently part of the storm water is collected in an old pit. Part of the storm water along with the dental material is let out to the SE side with out any treatment.

4. Facility for the storage of top soil and overburden is randomly done and not in designated sites. The present practise of dumping it in easterly slopes may require modification. There is a need to preserve overburden for restoration of the quarry during the closure.