

## Proceedings of the State Environment Impact Assessment Authority Kerala

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

SEIAA- Environmental Clearance for the proposed quarry project in Sy. Nos. 31/1 Part-1 & 2 Block-33 Kalanjoor Village & Panchayath, Adoor Taluk, Pathanamthitta District, by M/s Darshan Granites (P) Ltd. Granted. Orders issued.

#### STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 435/SEIAA/EC4/2995/2014

dated, Thiruvananthapuram 23-12-2015

Read: 1. Application dated 26-5-2014 submitted by Sri. T.K. Sundaresan, Managing Director, M/s Darshan Granites (P) Ltd., Aswathy, Sivankovil Road, Punalur, Kollam-691305

- Minutes of the 33<sup>rd</sup> meeting of SEAC held on 2/3-9-2014
   Minutes of the 45<sup>th</sup> meeting of SEAC held on 11/12-9-2015
- 4. Minutes of the 43<sup>rd</sup> meeting of SEIAA held on 16-10-2015
- 5. Judgment dated 2-3-2015 in W.P. No.4864/15 by M/s Darshan Granites Pvt. Ltd
- 6. Letter dated 24-11-2015 from the Managing Director, M/s Darshan Granites Pvt.
- Ltd., Pothupara, Kulathumon P.O., Koodal, Pathanamthitta.

# Environmental Clearance No. 110/2015

Sri. T.K. Sundaresan, Managing Director, M/s Darshan Granites (P) Ltd., Aswathy, Sivankovil Road, Punalur, Kollam-691305 vide his application received on 24.6,2014, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 31/1 Part-1 & 2 Block-33 Kalanjoor Village & Panchayath, Adoor Taluk, Pathanamthitta District, Kerala of 4.07 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.

The proposed project site falls within 9° 9' 12.66" N to 9° 9' 1.66" N and 76° 54' 29.92" E to 76° 54' 21.26" E. The land use classification as per revenue records is rocky land with Government land. The lease area consists of 4.07 hectares, which is partly Government and partly private land. The present land use is rocky land with quarrying activities. The current proposal is for the existing quarry with pit area of 0.31 hectares and mineral specific. Hence no alternate site was examined. Forest land is not involved in the project. The proposed production

capacity is 1,60,000 MTA. The expected life of mine will be 10 years. 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 (Crusher Unit) and 3 KLD for plantation purposes and will be sourced from storm water pond. The total man power will be about 41 persons. The total power requirement will be 75 kW, which will be operated by diesel engine. The mining will be done by open cast semi-mechanized method of mining. The height and width of the bench will be maintained at 5-5 m. The exploitation of mineral will be done from 255 m. MSL to 180 m. MSL in conceptual phase. The top soil of 6,105 m<sup>3</sup> will be generated from the mining operations, which will be properly stacked and will be utilized for plantation over the reclaimed areas. About 10,175 m<sup>3</sup> of overburden will be generated throughout the mine life. These wastes will be utilized within the pit for laying of haul roads. At the end use, OB can be reutilized as soil base for plantation. At the end of life of mine, the reclaimed area will be suitably planted (about 4,000 trees will be planted in the lease area) leaving no void. 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. The sewage to the tune of 1.6 KLD generated from the mine office will be diverted to the septic tank followed by soak pit. Other details of the case are as under:

Distance from the adjacent quarry	Vajra Granites, 1.5 km, SW Rs.2.5 Crores				
Details of project cost					
Enviro	nmental Parameters Considered				
<del>-</del>	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 (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	Not applicable				
treatment					
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 requirements	Water quality should meet requirements after the treatment of water (filtration, disinfection & sedimentation).				
Does it have provisions for use of recycled water	No				
	LAND				
Proximity to forest lands	Teak forest – 100 m.				
Access road to the site – Width & Condition	6 m. tarred road, NW				
Storage of explosives /hazardous substances	Explosives will be stored as per Explosives Act/Rules.				
Facility for solid waste management	The municipal solid waste will be suitably disposed.				

Proneness of the area for	No						
Significant land disturbance resulting in erosion, subsidence & instability	No						
Top soil, overburden etc.	Top soil - 6,105 cu.m Overburden - 10,175 cu.m						
	AIR						
Likely emissions affecting environment	Diesel engine emissions & emissions from movement of vehicles like dumpers, trucks, tankers etc. will also generate						
BIODIVERSITY							
Presence of any endangered species or red listed category	No						
Loss of native species and genetic diversity	For 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	248 m., NW						
CSR related to the project / allocation / time frame (details mandatory)	CSR for education, community development, health and empowerment						
	GENERAL						
Litigation/court cases, if any, against the project (Provide details)	No						
Does it have eco restoration programmes	The year wise programme of afforestation for the life of mine, about 4,000 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						
Right & nature of ownership of land	Govt. land						
Is the property forest land/govt. land/own land	Govt. land						
Details of Authorised Signatory	Sri. T.K. Sundaresan, Managing Director, M/s Darshan Granites (P) Ltd., Aswathy, Sivankovil Road, Punalur, Kollam-691305 Mob:9447100954 Email: darshangranites@gmail.com						
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.						

3. The proposal was placed in 33<sup>rd</sup> SEAC held on 2<sup>nd</sup> and 3<sup>rd</sup> September 2014 as agenda item no.33.15. The Committee found that the lease area is only 4.07 hectare and a crusher unit is

also associated with the project. There is a forest land at a distance of about 500 m from the project site. The Committee directed the proponent to provide a buffer distance from the forest land. The proponent informed that there is no litigation/complaint against the project. The committee decided the proposal for field visit and also directed the proponent to submit the details regarding the litigation specified in the NOC issued by the District Collector. Field visit was carried out by sub-committee of SEAC on 19-9-2014 and the major observations are as under:

The project is an active quarry located about 4 km east of Athirunkal in Kalanjoor Panchayat, Pathanamthitta district. Quarry area falling partly in Govt land and partly in own land is moderately sloping to the south, exposing hard rock, mostly charnockite-gneiss intercalation. Pockets of weathered rock with limited OB seen. Being an elevated land, streams are not seen in the site but a minor stream seen to the south beyond the lease area. Reserve forest with teak plantation is also seen to the south.

#### Following points have been made out:

- 1. The present NOC expires shortly and hence a fresh NOC is required from Revenue Dept. to quarry the Govt. Poramboke land for another 10 years.
- 2. In the surface layout plan the extent of forest land, Govt land and property of others to be clearly and accurately demarcated.
- 3. 15 m minimum distance to be left from Village boundary.
- 4. Present practise of dumping OB in elevated parts to be discontinued. OB must be stored in designated places in the lower level. Part of it can be used for restoration of already mined pit.
- 5. Ultimate depth of mine should be above 175 m above MSL.
- 6. The approach road to the quarry from Athirunkal road need to be maintained in pristine condition by the proponent.
- 7. Storm water disposal mechanism is under implementation.
- 8. The crusher units are encased to reduce dust emission.

Other items from general condition and CSR may be added.

4. The proposal was again placed in the 45<sup>th</sup> meeting of SEAC held on 11<sup>th</sup> and 12<sup>th</sup> September 2015 based on the documents such as NOC issued by the District Collector regarding pending litigation, Mining Plan as approved by District Geologist, letter of intent and site inspection report submitted by the proponent. The proponent informed the Committee that proposed area is a government land and Government have issued NOC for quarrying for 12 years. The lease period for the project is valid up to 25-11-2016. Elevation of the project area is from 190 m MSL to 255 m MSL. In the NOC submitted with the application, it is noted that a court case is pending against the project. In the certificate issued by District Collector, Pathanamthitta dated 18.10.2014, it is stated that no court case is pending against the project on verification of available documents. The Committee appraised the proposal based on the Mining Plan, Prefeasibility Report, field inspection reports and all other documents submitted along

with the Form I application and decided to recommend for issuance of Environmental Clearance with the following specific conditions, in addition to the general conditions stipulated for mining projects.

- 1. Minimum 15 m distance to be left from Village boundary.
- 2. Present practise of dumping OB in elevated parts to be discontinued. OB must be stored in designated places in the lower level. Part of it can be used for restoration of already mined pit.
- 3. Ultimate depth of mine should be above 190 m Average MSL.
- 4. The approach road to the quarry from Athirunkai road should be maintained in proper condition by the proponent.
- 5. Storm water disposal mechanism should be established.
- 6. To the extent possible local biodiversity management Committee shall be involved in the environmental management/restoration activities.
- 7. Reclamation and eco-restoration should be done by planting native species.
- The proponent submitted a representation on 08-09-2015 in connection with the changing of their consultant M/s Enkay Enviro Services Pvt. Ltd to M/s Environmental Engineers & Consultants Pvt. Ltd. as per the O.M No. J-11013/41/2006-1A.II (1) dated 17-03-2010 issued by MoEF. The proponent has also submitted the joint undertaking certificate of M/s Environmental Engineers & Consultants Pvt. Ltd. The proposal was placed in the 43<sup>rd</sup> SEIAA held on 16<sup>th</sup> October 2015. Quarry area falling partly in Govt. land and partly in own land. The lease for the project is valid up to 25-11-2016. The Committee Recommend for issuance of Environmental Clearance with seven specific conditions, in addition to the general conditions stipulated for mining projects. The Authority deliberated in detail on the need for distinct demarcation of the private and government lease lands in the quarries, to avoid encroachments and environmental impacts in areas not permitted for mining. It was decided that there shall be a condition that the private and government lease lands shall be demarcated clearly with survey stones. Also the GPS locations of the private and government land shall be taken and recorded in all documents related to the leases/ consents and clearances so that the government land used for mining can be identified at any time. On the recommendations of SEAC in this case, the Authority resolved that E.C as per recommendations of SEAC may be given on production of orders by the proponent, permitting quarrying in the government land involved. Validity of the lease will be up to 25-11-2016. If the land lease (revenue) is not renewed the E.C. will automatically cease.
- 5. As per the decision taken by 43<sup>rd</sup> SEIAA, the proponent has submitted the NOC dated 20-9-2004 issued from District Collector, Pathanamthitta for quarrying in the Govt. land for 12 years. The documents called for having been submitted and on being satisfied that there are no other quarry in operation within 500 meters of this quarry, and there is no notified protected areas, wild Life sanctuaries, or Ecologically Sensitive Areas within 200 meters from the periphery of the mining area and there is proper undertaking that the committed CSR activities will be implemented the State Environmental Impact Assessment Authority, Kerala hereby accord environmental clearance under the EIA notification 2006, for the quarry project of Sri.

- T.K. Sundaresan, Managing Director, M/s Darshan Granites (P) Ltd., Aswathy, Sivankovil Road, Punalur, Kollam-691305 from 4.07 hectares of Govt.land in Sy. Nos. 31/1 Part-1 & 2 Block-33 Kalanjoor Village & Panchayath, Adoor Taluk, Pathanamthitta District.
- 6. 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 the Environment Management Plan, (pages 30 to 56) 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 these proceedings as conditions as undertaken by the proponent, as if incorporated herein.
- 7. Validity of the environmental clearance will be up to 25-11-2016 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.
- 8. 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 authorised signatory of the project is Sri. T.K. Sundaresan, Managing Director, M/s Darshan Granites (P) Ltd., Aswathy, Sivankovil Road, Punalur, Kollam-691305.

Sd/P. MARA PANDIYAN, I.A.S,
Member Secretary (SEIAA)
&
Addl. Chief Secretary
Environment & Forests Department
Government of Kerala.

To,

Sri. T.K. Sundaresan, Managing Director, M/s Darshan Granites (P) Ltd., Aswathy, Sivankovil Road, Punalur, Kollam-691305.

### Copy to:

- MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E& F Wing, Ilblock, Koramangala, Bangalore-560034.
- 2. Addl. Chief Secretary to Government, Environment Department
- 3. The District Collector, Pathanamthitta
- 4. The Director, Department of Environment & Climate Change
- 5. The Director, Mining and Geology Department, Govt. of Kerala
- 6. The Secretary, Kalanjoor Grama Panchayat, Kalanjoor P.O., Adoor Taluk, Pathanamthitta-689694
- 7. Chairman, SEIAA
- ✓8. Website
  - 9. Stock File
  - 10. O/C.

Forwarded/By Order

Administrator, SEIAA



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# STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA <u>GENERAL CONDITIONS</u> (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.
- (XXVIII) A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit

#### 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.

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(x1) 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

Member Secretary, SEIAA Kerala