



Validity expires on 18-9-2020

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 -Application for environmental clearance for the quarry project in Sy. No. 71/1-2, 71/1-3, 75/2-2 at Ayyampuzha village, Aluva Taluk, Ernakulam District, Kerala by Sri. P. S. R. Koteswara Rao – General Manager M/s Soma Enterprise Limited- E.C- Granted

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No.774/EC3/697/2015/SEIAA

dated, Thiruvananthapuram 19-10-2015

- Read:-**
1. Application dated nil from Sri. P. S. R. Koteswara Rao, General Manager, Soma Enterprise Limited, Godown Road, Cheranalloor, Kochi- 682034.
 2. Judgment dated 5-8-2015 of the Hon. High court of Kerala in W.P. No s 21524 and 22920 /2015.
 3. Minutes of the 46th meeting of SEAC held on 29/30-9-2015.
 4. Minutes of the 42nd meeting of SEIAA held on 1-10-2015.

ENVIRONMENTAL CLEARANCE NO. 82/2015

Sri. P. S. R. Koteswara Rao, General Manager, Soma Enterprise Limited, Godown Road, Cheranalloor, Ernakulam District vide his application received on 02.03.2015, sought Environmental Clearance under EIA Notification, 2006 for their building stone quarry in an area of 0.7327 Ha in Sy. No. 71/1-2, 71/1-3, 75/2-2 at Ayyampuzha Village, Aluva Taluk, Ernakulam District. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

DETAILS OF THE PROJECT

1.	Category/Sub category & Schedule	Category B2, 1(a),i	
2.	Whether the project site falls within ESZ-1 of WGEEP report or ESA of HLWG	No	
3.	GPS readings in WGS 84 datum	Latitude 10°14'13.0"N	Longitude 76°28'51.1"E
		10°14'12.7"N	76°28'53.2" E
		10°14'10.1"N	76°28'47.5"E

		10°14'09.5"N	76°28'51.2"E
4.	Distance of the mining area from the nearest human settlement	>1.3 km	
5.	Right & nature of ownership of land	Own land	
6.	Is the property forest land/govt. land/own land	Own land	
7.	Extent of land in hectares	0.7327 ha	
8.	Proposed production capacity	7762 m ³ / yr	
9.	Ultimate depth of mining (in MSL)	20 m	
10.	Quantity of topsoil estimated to be removed	NA	
11.	Method of mining	Mechanized Open cast	
12.	Underground mining if any proposed	No	
13.	a) Accreditation with serial number of QCI / NABET	NABET/EIA/1316/RA001	
14.	Proposals for Corporate Social responsibility	Provided (c.f.pg. no. 81)	
15.	Total cost of the project with details	71.55 lac	
16.	Soft copy of the proposal (in PDF format)	Yes	
17.	Details of Authorized Signatory	Sri. P. S. R. Koteswara Rao, General Manager, Soma Enterprise Limited, Godown Road, Cheranalloor, Cochin – 682 034.	
18.	Details of NABET approved EIA consultant organization	ABC Techno Labs, No.2, 2 nd street, Thangam colony, Anna nagar West, Chennai- 600 040 Ph: +91 -422 -2453737	

Environmental Management Plan

Land Environment	
Mine management	Undertakings by project proponent
Land use change	<p>In order to minimize the adverse effects , the following mitigation measures will be adopted :</p> <p><input type="checkbox"/> Construction of check dams and collecting channel all around the foot of the hill to prevent soil erosion during the monsoon season and also to collect the storm water for various use within the mine area</p> <p><input type="checkbox"/> Green belt development along the boundary of area</p> <p><input type="checkbox"/> The pit area will be used as a water storage and also as</p>
Land use change	<p>ground water recharge pit and can be utilized for domestic or industrial use with proper treatment</p> <p><input type="checkbox"/> Proper barricading and monitoring of the water stored area will be taken up to prevent accidents.</p>

Water Environment	
Domestic waste water	<ul style="list-style-type: none"> <input type="checkbox"/> The storm water will be used for dust suppression and green belt development etc <input type="checkbox"/> At the end of mining the void or unreclaimed area at the lower elevations of the pit will be utilized for water storage /ground water recharge. This water can be utilized for industrial/ domestic/agricultural purpose after necessary treatment Domestic sewage to a tune of 0.75 KLD generated from the mine office will be delivered to the septic tank followed by soak pit.
Excavation, loading, transportation	<ul style="list-style-type: none"> <input type="checkbox"/> Laying of haul roads as per the standards, black topping of permanent haul roads and service roads to avoid or eliminate air – borne dust <input type="checkbox"/> To avoid the dust generation from the drilling operations, wet drilling operations will be adopted <input type="checkbox"/> Drill machines will be equipped with dust collectors <input type="checkbox"/> Use of appropriate explosives for blasting and avoiding over changing of blast holes <input type="checkbox"/> Controlled blasting techniques will be adopted <input type="checkbox"/> Watering of haul roads and other roads at regular intervals <input type="checkbox"/> Provision of dust filters /mask to workers working at highly dust prone and affected areas <input type="checkbox"/> Provision of green belt all along the periphery of the mine area <input type="checkbox"/> Periodical monitoring of ambient air quality in and around the mine area. The extracted mineral will be conveyed to the crusher unit within the quarry and transported to the end user by adopting following measures so as to minimize dust emissions. <input type="checkbox"/> In case of the long distance transportation, the trucks after loading will be covered with tarpaulin sheets <input type="checkbox"/> Speed of the vehicles will be maintained within the prescribed limits <input type="checkbox"/> Truck will not be over loaded and will be maintained to the body level
The sources of noise contributing to environment in this mine and surrounding area are mainly due to drilling, blasting, loading and unloading of mineral and movement of trucks.	<p>The major noise generating source from the proposed activity is working machinery, drilling, blasting and flying of vehicles. The following preventive measures will be taken to bring down the noise level</p> <ul style="list-style-type: none"> <input type="checkbox"/> Proper maintenance of machinery and equipments and also improved design on machines <input type="checkbox"/> Use of personnel protective devices i.e. earmuffs and earplugs by workers working in high noise areas <input type="checkbox"/> Creation of wild green belts of dense foliage between mine areas and residential colonies

The sources of noise contributing to environment in this mine and surrounding area are mainly due to drilling, blasting, loading and unloading of mineral and movement of trucks.	<input type="checkbox"/> It is proposed that the proposed mine operates only ten hours a day <input type="checkbox"/> Conducting periodical medical check up for any noise related health problems <input type="checkbox"/> Proper training to personnel to create about adverse noise level effects <input type="checkbox"/> Planned noise monitoring at suitable locations in plant and outside locations for proper effective remedial actions.
Socio-Economic	
Employment generation	Measures to improve the socio economic conditions of the area: <input type="checkbox"/> Local people (15) will be employed on priority basis as per their skills <input type="checkbox"/> Direct and indirect development of the society <input type="checkbox"/> As a part of corporate social responsibility, it is proposed to spend Rs. 2.0 Lakhs/annum for various local development activities like conducting medical checkups for the local people, road development, improvisation or development of temples, providing scholar ships for the back ward and girl students, physically handicapped etc. <input type="checkbox"/> Medical facilities to the workers employed at site

2. Approved mining plan has been submitted. The applicant filed W.P. No. 22920/15 to direct SEIAA to grant EC forthwith, they being the contractor of the Kochi Metro Rail project and the time lines on competition of works are affected due to non- availability of metal. The case was disposed of on 05.08.2015 holding that even though the quarrying is for a public purpose it requires EC and that the petition being engaged in the work of a prestigious public project, it is only proper that the EIA authority expedite the process and finalize the consideration at any rate within one month from the date of receipt of copy of the judgment.

3. The case was placed in the 46th meeting of SEAC held on 29/30-9-2015. The committee recommended the case for grant of E.C subject to the usual conditions. The case was considered by SEIAA in its 42nd meeting held on 1-10-2015. The Authority decided to grant E.C subject to the usual conditions for mining projects.

State Environmental Impact Assessment Authority, Kerala hereby accord environmental clearance for the quarry project of M/s Soma Enterprise Limited, Godown Road, Cheranalloor, Kochi- 682034.in Sy. No. 71/1-2, 71/1-3, 75/2-2 at Ayyampuzha village, Aluva Taluk, Ernakulam District, Kerala under the EIA notification 2006, with the following specific conditions , in addition to the general conditions stipulated for mining projects as appended hereto:

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.
- (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

200 m buffer distance should be maintained from forest boundaries.

Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity.

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.

In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.

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.

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.

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.

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.

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.

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.

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.

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