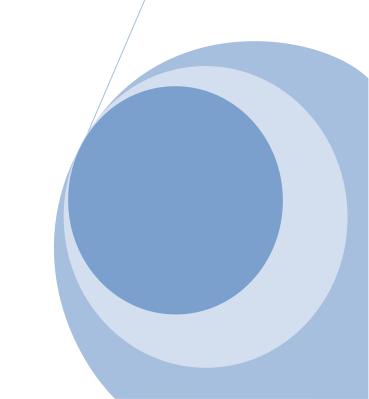


October 2017 - March 2018

M/s. Sri Lakshmi Stone Crusher

(Quarry project)
Kannur District
Kerala



M/s SRI LAKSHMI STONE CRUSHER

BUILDING NO.VIII/14, 27TH MILE, PO POOLAKUTTY, NEDUMPOYIL KANNUR, KERALA-670650 Ph:0490-2448400

0+ 20 06 2018

The Additional Principal Chief Conservator of Forests (C) Ministry of Environment, Forests & Climate Change, 4th Floor, E& F Wing, Kendriya Sadan, Koramangala, Bangalore - 560034

Ref: Order No. 09/KNR/2017/DEIAA

:- Environmental Clearance No. 14/2017

Sub: - Environment Clearance - Quarry project at Kanichar Village, Iritty

Taluk, Kannur District, Kerala - Compliance Report - Second half
Reg.

Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 0.9898 Ha. by order No. 09/KNR/2017/DEIAA, dated 01-07-2017 by District Environmental Impact Assessment Authority, Kannur, Kerala. The compliance report of Second half (October 2017 – March 2018) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully,

M/s Sri Lakshmi Stone Crusher

Encl: - As Above

Copy to: 1. The Chairman & The Member Secretary

State Environment Impact Assessment Authority (SEIAA) 'Devi Kripa', Pallimukku, Pettah P.O., Thiruvananthapuram,

Kerala - 695 024.

2. DEIAA, Kannur

TO THE CONDITIONS OF

ENVIRONMENTAL CLEARANCE ORDER

NO: 09/KNR/2017/ DEIAA

Dated: 01-07-2017

BY

DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (DEIAA) FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

SURVEY NO. 1561

KANICHAR VILLAGE, IRITTY TALUK,

KANNUR DISTRICT, KERALA

BY

M/s. SRI LAKSHMI STONE CRUSHER KANNUR DISTRICT, KERALA

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INTRODUCTION

Quarry project of **M/s. Sri Lakshmi Stone Crusher** is situated at Survey No. 1561, Kanichar Village, Iritty Taluk, Kannur District, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by District Environmental Impact Assessment Authority (DEIAA), Kannur on 01-07-2017. As part of general condition No.37 of Environmental Clearance order, half yearly compliance report needs to be submitted by the project proponent. The compliance report of Second half to the specific conditions and general conditions of the Environmental Clearance order for the period of October 2017- March 2018 is being submitted.

COMPLIANCE REPORT

(SPECIFIC CONDITIONS)

PART A

PART - A - SPECIFIC CONDITIONS

01	A mines manager shall be appointed to control ,direct, manage	complied
	and supervise the quarrying operations required under the mines	
	Act ,1952	

To control, direct, manage and supervise the quarrying operations in the quarry the project proponent has appointed a mines manger as per the Mines Act 1952. The certificate of Mines engineer and Form D is attached as **Annexure No8**.

02	Health and welfare for the persons employed shall be implemented	complied
----	--	----------

The health and welfare of the persons employed in the quarry site is implemented. The project is keeping a First aid box in the project site. In association with Primary Health Centre of Local Self Government, the project proponent has conducted health check up for the labours. Other facility of housing, food, water and sanitation is provided by the project proponent.

03	Controlled blasting should be practiced and blasting shall be done Complied	
	only during day time. The mitigate measures for control of ground	
	vibration to arrest the fly rocks and boulder should be	
	implemented.	

The project proponent has practicing controlled blasting with ordinary/ elctric delayed detonator. The blasting time in the quarry is in day time at 9.00-10.30 am, 2-3 pm and 4.00 - 5.30pm. No work will be there in the quarry site at Night. The mitigate measures to arrest ground vibration and fly rock is detailed in General condition No. The photograph of the board showing blasting time is attached as **Plate No.4**

04	Plantation shall be done which includes a green belt of adequate	Being
	width around the mining lease area excluding the rocky area, along	Complied
	roads, overburden dumps and non-mineralized area by planting	
	suitable native species in consultation with the local	

DFO/Agriculture department.

The green belt is important in the mining site. The project proponent has started to plant various saplings in the project site to develop a green belt around the project area. Avenue tress also planted along the road side to minimise the dust emission. The project has taken the suggestion of agricultural department to plant the native species.

The drains should be regularly de silted and maintained properly check dam and gully checks shall be constructed wherever to required to arrest siltation.de siltation shall be done every year before the onset of monsoon

To arrest the quarry waste entering in to the public drain and stream, the project has constructed De siltation chambers. These chambers will be de silted during summer season.

Fencing shall be maintained properly all around the lease area. Complied

The project has done fencing around the lease area using the barbed metal wire. The project proponent is maintaining the fencing properly.

07	The CSR need redrafting with inclusion of felt needs of the locality	Complied
	with special emphasize for implementing ground water recharging	
	water recharging techniques in and at the vicinity of the proposed	
	site.	

The project proponent has redrafted the CSR by including the ground water recharging techniques.

80	Appropriates sign boards should be displayed.	Complied	l
----	---	----------	---

Appropriate sign boards are installed in the project site. **Plate No.5** shows the photograph of Sign Boards

09	The blasting time must be displayed and strictly adhered to.	Complied
----	--	----------

To notice the labours and general public about blasting a board containing blasting time has displayed in the project site. The blasting time is 9.00-10.30 am, 2-3 pm and 4.00 - 5.30pm. The photograph of the board showing blasting time is attached as **Plate No.4**

10	Dust suppression mechanism must be in place.	Complied	
----	--	----------	--

Dust Suppression mechanism has implemented in the project site.

13	A separate small plot to be maintained in the p	remise to preserve	Being
	rare and endemic species. If any, listed in	n the biodiversity	Complied
	assessment etc.		

The project has started to plant various saplings in the project site. The Project has demarcated a small plot to preserve the endemic species.

14	The PPV values must be less than 10 mm/sec.	Noted

The project proponent is using electric/ordinary delayed detonators. Blasting will be controlled by a qualified person. Therefore the project proponent can limit the PPV under 10 mm/sec

15	The green belt shall be provides around the periphery.	being
		complied

The project has provided Green belt around the project area. This will reduce air and noise pollution.

16	Where the height of the bench formed during earlier workings	Noted
	exceeds the maximum each of the excavator engaged for work,	
	such bench height shall be reduced from top to bottom.	

The extraction of minerals will be from top to bottom. The maximum height of all benches will be 5 meters.

17	Loose or hanging rock or mineral boulder on the side wall shall be	Being
	dressed down before engaging persons for work at the bottom of	Complied
	the bench.	

The project proponent deploys JCB like vehicles to remove the loose or hanging mineral boulders on the side wall. The labours will work on the bottom bench only after clearing such loose minerals form the side wall.

18	Permanent boundary pillars should be fixed by the proponent	complied
	before commencing quarrying	

To demarcate the mining area, permanent Boundary pillars were fixed at each end of the lease area.

19	No quarry blasting to be undertaken and sustained till warning time	Noted
	limit expires and /or when continues 48 hours cumulative rainfall	
	exceeds 8 cm and blasting shall be resumed until 24hrs. of rain	
	free situation arises in the quarry locality based on the evaluation	
	by the revenue officials.	

This condition will comply by the project proponent when such situation arises.

20	All waste dumps and topsoil dumps shall be properly stabilized by	Being
	using coir mats or bio regeneration .proper drainage system shall	Complied
	be provides so the water is properly diverted away from the dump	
	slopes with no disturbance to the stability of the slopes.	

The waste dumps and topsoil dumps are stabilised by using coir mats or bio regeneration. Proper drainages are constructed by the project proponent, which will help to manage the storm water during monsoon season.

21	All dumps slopes shall be sufficiently stabilized by using No	oted
	appropriate species mix of grass .creepers, shrubs &trees. This	
	shall be done in consultation with the forest department and local	
	research institution and experts in stabilization of mine dumps.	

The overburden and topsoil stacking is progressing, once it is attain its maximum capacity, the project will plant appropriate grass on the dump to prevent sliding and soil erosion.

22	Garland drains of at least 2m width shall be provided all along 7.5	Noted
	m buffer zone to divert the water from entering the quarrying	
	slopes. These drains shall be cleaned every year before the	
	monsoon season.	

The project proponent has constructed garland drain to catch the rain water along 7.5 m buffer zone. This can divert the storm water entering the quarrying slopes.

23	The water from the garlands drainage shall directed to the silt	Being
	settling ponds. The clarified overflow from silt settling ponds shall	complied
	be directed to a Rain Water Harvesting (RWH) pond before	
	releasing the clarified water to the natural watercourse.	

The water from the garlands drainage will direct to the silt settling ponds. The clarified overflow from silt settling ponds shall be directed to a Rain Water Harvesting (RWH) pond before releasing the clarified water to the natural watercourse.

24	A retaining wall of stone rubbles with wire mesh, of sufficient width	Will be
	and strength (not less than 2m)shall be constructed at the bottom	complied
	of the slope of the quarry .lease area to arrest any likely roll of	
	boulders during heavy rainfall.	

The project will construct a retaining wall with stone rubbles at the bottom of the slope. This will prevent sliding and slumping. This will be done at appropriate place in the mining area.

COMPLIANCE REPORT

(GENERAL CONDITIONS)

HEALTH

O1 First Aid kit provide in the work site. It shall be periodically Complied maintained property .some labourers shall be trained on First Aid.

The project proponent is keeping first aid box in the project site. The training on first aid has provided to selected labours.

02 Whole some drinking water should be provided. Complied

In the project area drinking water will available at all time.

O3 Premises should be maintained as wet to suppress the dust. complied

The project proponent splashing water on haulage roads and loading and unloading point to reduce the emission of dust

O4 Sanitary type of latrines and urinals should be provided. Complied

In the project site the project proponent has given sanitary type of latrine and urinals to every labour.

05 Resting place should be provided for workers. Complied

To get proper rest to the labours, the project has arranged adequate rest rooms in the project area. **Plate No. 6** shows the photograph of resting room.

06 'No Smoking' board should be exhibited according to COTPA Act. Complied

'No Smoking' board has exhibited according to COTPA Act. **Plate No. 7** shows the photograph of No smoking board

07	Work should not be done in night.	Complied

No work will be carried out in the quarry during night time. The working time of quarry is from 7 am to 6 pm.

80	Details of nearest hospitals, shortest route to hospitals and contact	Complied
	no etc. Should be available.	

Details of nearest hospital, Fire station, Police station, etc are available in the project site. **Plate No. 8** shows the photograph of details of emergency contact numbers.

09	Approach roads should be maintained properly.	Being
		complied

To arrest the dust emission and easy transportation the approach road has been properly maintaining by the project proponent

COMPLIANCE REPORT

(GENERAL CONDITIONS)

PART B

PART - B - GENERAL CONDITION

01	Rain Water Harvesting capacity should be installed as per the	prevailing Complied
	provisions of KMBR / KPBR, unless otherwise specified.	

Compliance:

As part of water conservation and to collect rain water from the entire mining area, the project has developed one rain water harvesting pond in the quarrying area.

02	Environment Monitoring Cell (EMC) as agreed under the affidavit filed	Complied	
	by the proponent should be formed and made functional.		

Compliance:

To monitor and evaluate the works done under the conditions stipulated in the EC order, the project proponent has formed an Environmental Monitoring Cell (EMC) with Mr. C.G George as head of the monitoring cell. The EMC meeting will arrange regularly for a sustainable environment. The details of the EMC members is given in **Table No. 1**

Table 1 - Environmental Monitoring Cell (EMC)

SI. No.	Post Name				
1	Head of monitoring cell	C G George			
2	Member	Nigil			
3	Member	Chandrasekhar G P			

03	Suitable avenue trees should be planted along either side of the tarred	Complied
	road and open parking areas, if any, inclusive of approach road and	
	internal roads.	

The green belt can reduce the adverse effect of mining industry. To reduce air and noise pollution, the project proponent has planted 150 different avenue trees along either side of the road. There is also natural vegetation including trees, shrubs and climbers are presents in the sides of road and parking area. The project could plant more suitable avenue trees along either side of the tarred road and open parking areas, where there is less vegetation. The photograph of the avenue tress is attached as **Plate No.1.**

04	Maximum	possible	solar	energy	generation	and	utilization	shall	be	Will	be
	ensured as	s an essei	ntial pa	art of the	project.					Comp	olied

Compliance:

The project is intending to use maximum renewable energy to reduce electrical consumption from KSEB. As part of this, the project proponent will install a solar panels/solar street light in the project site.

05	Sprinklers shall be installed and used in the project site to contain dust	Complied
	emissions.	

Compliance:

To prevent dust emissions from the road while transportation of materials, the project splash the haulage road and critical areas with the help of vehicles in regular intervals. The sprinklers are also installed in the critical area to reduce the dust emission. The photograph of the sprinklers is attached as **Plate No.2**.

06	Eco-restoration including the mine closure plan shall be done at the own	Noted
	cost of the project proponent.	

Compliance:

Eco restoration is in an integral part of mining activity. The eco restoration and the mine closure plan will be done at the own cost of the project proponent as per the approved mining plan.

07	At least 10 percent out of the total excavated pit area should be retained	Will be	l
	as water storage areas and the remaining area should be reclaimed with	complied	
	stacked dumping and overburden and planted with indigenous plant		
	species that are eco-friendly, if no other specific condition on		
	reclamation of pit is stipulated in the EC.		

The proponent has initiated steps to plant indigenous species as part of concurrent eco restoration. The project will retain 10 percent of total excavated pit as rain water storage area after closure of the mine. The remaining area will be reclaimed with stacked dumping of overburden and top soil. As part of its eco – restoration plan, the project will plant indigenous plant species that are eco – friendly on the reclaimed area.

80	Corporate Social Responsibility (CSR) agreed upon by the proponent	Complied
	should be implemented.	

Compliance:

As part of inclusive growth of the community, the project proponent executes various activities under Corporate Social Responsibility of the firm with the consultation of Panchayath. The main activities were under the sectors of education, housing, health etc. The details of CSR provided in the period of second half is mentioned in the **Table No.2**

Table No.2 – Detail of performed activities under CSR

Sectors	Activities	Partners	Beneficiaries	Amount spent in Rs.
Education				
	Donation for	Anugraha	Public	15,000
	Library	Vayanashala		
	Donation	Education Aid	Students	5,000
	Donation	Kolakkad GLPSchool	Students	5,000

	Donation	Kommeri GLPSchool	Students	2,000
Arts, Sports	Donation For	Sree Krishna	Public	2,000
& Festival	Festival	Jayanthi		
	Donation For	onation For Aaryaparamba Thira Public		1,500
	Festival	Maholsavam		
	Donation For	Sree Maachola	Public	5,000
	Festival	Bhagavathi Kavu		
	Donation For	St.Sebastian Church,	Public	10,000
	Festival	Elapeedika		
	Donation For	St. Joseph	Public	15,000
	Festival	Church,Malayampady		
Health	Donation for	Unni Ashan chihilsa	Nikhil	35,000
	Treatment	sahaya fund		
	Donation for		AM Paulson	25,000
	Treatment			
	Donation for	National Delith	Public	1,500
	Treatment	Federation		
	Donation for	Accident Aid	Public	10,000
	Treatment			
	Donation for		Nandagopal	5,000
	Treatment			
Infrastructure	Donation For		P Chandran,	1,00,000
Development	ment House Poolakutty			
	Construction			
	Donation For		Sivaraman, Mile	1,00,000
	House poolakutty		poolakutty	
	Construction			

	Donation For Road Construction		Regi, Mile poolakutty	1,00,000
Social	Donation for Environment	Green Build	Public	10,000
Donation		Farmers Association Karshaka Sangam	Public	3,000
Donation		Kerala Karshaka Sangam	Public	2,000
	Donation	Sree Narayana Bhaktha sangam	Public	1,000
	Donation	Study camp	Students	1,000
	Donation	Thanal Purusha sangam	Public	7,500
		Total		4,61,500

09	The lease area shall be fenced off with barbed wires to a maximum	Complied
	height of 4ft around, before starting of mining. All the boundary	
	indicators (boards, stores, markings etc) shall be protected at all times	
	and shall be conspicuous.	

As part of clear demarcation and to prevent falling of animals/human being/dumping of garbage etc, the project installed fencing around the area where Environmental Clearance obtained. All the boundary indicators (boards, stores, markings etc) will be protected at all times and shall be conspicuous.

10	Warning alarms indicating the time of blasting (to be done at specific	complied
	timings) has to be arranged as per stipulations of Explosive Department.	

As per the stipulation of Explosive department, the project has installed warning alarm in the quarry site. This alarm can intimate the general public that the blasting is going to happen.

11	Control measures on noise and vibration prescribed by KSPCB should	Complied
	be implemented.	

Compliance:

To reduce noise and vibration, the following measures are adopting in the project site.

- Proper maintenance of machinery and equipments
- The machineries like breaker and excavator has well sound proof cabin so that the machine operators can work without stress due to the sound.
- > Personal protective devices i.e., ear plugs are provided to workers working in high noise areas.
- The mining activity held in day time only.
- Noise level at quarry site checked periodically.

Blast vibrations and control measures

- Controlled blasting technique is adopted in this project in order to reduce blast vibrations.
- Ordinary detonators are using for the blasting
- ❖ The maximum charge per delay is not more than 10kg to limit the PPV values to 10mm/sec.
- Optimum delay sequence and stem to column ratio is maintaining to minimize the ground vibration intensity.

12	Quarrying	activities	should	be	limited	to	day	time	as	per	KSPCB	Complied
	guidelines/	specific co	onditions	.								

To reduce the adverse impact of the quarry to the local community, quarrying activities are limited to day time only as per KSPCB guidelines. The proposed working time of the quarry will be from 7.00am to 6.00 pm.

1	3	Blasting should be done in a controlled manner as specified by the	Complied
		regulations of explosives department or any other concerned agency.	

Compliance:

The blasting is carrying out in controlled manner by using ordinary/electric delayed detonators. All blasting activities are carried out under the supervision of qualified persons with the specified regulations of explosive department. The blasting time in the quarry is in day time at 9.00-10.30 am, 2-3 pm and 4.00 - 5.30pm. The photograph of the board showing blasting time is attached as **Plate No.4**

14	A licensed person should supervise/control the blasting operations.	Will	be
		Compli	ied

Compliance:

The project has appointed a mines manager to supervise/control the blasting operations for the exploitation of minor minerals from the project site. The certificate of Mines engineer and Form D is attached as **Annexure No8**.

15	Access roads to the quarry shall be tarred to contain dust emissions that	Being
	may arise during transportation of materials.	Complied

Compliance:

To contain dust emissions, the project has maintaining the access roads to the quarry site. The project splashes water on the road to arrest the dust production during summer season.

16	Overburden materials should be managed within the site and used for	Complied
----	---	----------

reclamation of mine pits as per mine closure plan/ specific conditions.

Compliance:

The Over burden and top soil need to extract during the time of mining, these natural resources being staked in the project site. This will be used for plantation, haulage roads and land filling in the mining area. No overburden will let out from the project site. The staked overburden will be used for eco -restoration during the closure phase of mine.

17	Height of the benches should not exceed 5m, and width should not be	Complied
	less than 5m, if there is no mention is the ining plan/specific conditions.	

Compliance:

To enhance the safety and environment sustainability, the project explore the minerals by creating benches. The benches will not exceed 5 -6 meters of height. The width of the bench is having minimum of 5 meters. The photograph o the benches is attached as **Plate No. 3**

18	Mats to reduce fly rock blast to a maximum of 10 PPV should be	Noted
	provided.	

Compliance:

The project proponent is using ordinary/electric delayed detonator. The blasting is under the supervision of qualified person. The blasting through delayed detonators can reduce the incident of fly rock. The project assures that the PPV will be below 10 in all blasting.

19	Maximum depth of mining from general ground level at site shall not	Will	be
	exceed 10m.	compli	ed

Compliance:

The project proponent will follow the approved mining plan for the exploration of building stone. Therefore mining depth will not exceed beyond 10 meter or not below the level of the nearest stream bed, whichever is less.

20	No mining	poperations	should	be	carried	out a	at places	having	а	slope	Noted	
	greater	than 45 ⁰ .										

Compliance:

All section in the mining area is under the prescribed degree of slope therefore No mining operation is carried out with a slope greater than 45⁰.

21	Acoustic enclosures should be provided to reduce sound amplifications	Being
	in addition to the provisions of green belt and hollow brick envelop for	Complied
	crushers so that the noise level is kept within prescribed standards	
	given by CPCB/KSPCB.	

Compliance:

To reduce the impact of sound to the labours in the mine, the project has provided ear plugs. Vegetation around the mining area will help to reduce noise and air pollution. This helps the noise level kept within prescribed standards.

22	The workers on the site should be provided with the required protective	Complied
	equipments such as ear muffs, helmet, etc.	

Compliance:

To ensure the safety of labours in working site, the project has provided adequate Personnel Protective Equipments (PPE) such as helmets, ear plugs, safety belts, glows, etc.

23	Garland drains with clarifiers to be provided in the lower slopes around	Complied
	the core area to channelize storm water.	

The project proponent ensured that all storm water from the mining area is flowing in to the pond created at mining area. The project proponent has created garland drains in the lower slopes. The project will create garland drains where it is necessary in the project area for the effective storm water management.

24	The transportation of minerals should be done in covered trucks to	complied
	contain dust emissions.	

Compliance:

The project assure that the loaded trucks are covered with appropriate sheets to avoid dust emission from the vehicle while transportation of materials.

2	5	The proponent should plant trees at least 5 times of the loss that has	Being
		occurred while clearing the land for the project.	complied

Compliance:

The project proponent has started to plant various saplings in the project area as a compensation of loss of trees while the project is clearing the land for mining. The project proponent is planning to plant more tree saplings in the project site.

26	Disposal of spent oil from diesel engines should be as specified under	Being
	relevant Rules/Regulations.	complied

Compliance:

The volume of used oil is used as lubricant in the project site. The excess used oil will be sold only to the approved recyclers.

27	Explosives should be stored in magazines in isolated place specified	complied
	and approved by the explosives department.	

Compliance:

Explosives are stored in magazine. The magazine situated in an isolated place specified and approved by the explosives department. The area surrounded to the magazine was fenced with barbed metal wire. The photograph o the magazine is attached as **Plate No. 9**

28	A minimum buffer distance of 100m meter from the boundary of the	complied
	quarry to the nearest dwelling unit or other structures, not being any	
	facility for mining shall be provided.	

Compliance:

To keep a safe zone to the residents, community resource and public infrastructure, the norms of Kerala State Pollution Control Board regarding the distance criteria of houses, roads, rivers and worship places is adhered by the project.

29	100 m buffer distance should be maintained from forest boundaries.	Complied	
----	--	----------	--

Compliance:

The project has left more than 100 meters as buffer distance from the project site.

30	Consent from Kerala Pollution Control Board under Water and Air Act(s)	Complied
	should have been obtained before initiating activity.	

Compliance:

The project has obtained consent from KSPCB under Water and Air Act(s). The copy of certificate of "Consent to Operate" (Renewal) from Kerala State Pollution Control Board is provided in **Annexure No. 1.**

ſ	31	All	other sta	tutory clearar	nces s	hould	have been	obtained, as	applicable,	Complied
		by	project	proponents	from	the	respective	competent	authorities	
		inc	luding tha	at for blasting	and st	torage	e of explosiv	/es.		

Compliance:

The certificates obtained from concerned statutory authorities are enclosed in **Annexure No.1, 2, 3, 4 & 5.** The details are given in **Table No 3**

TABLE 3 – APPROVALS FROM COMPETENT AUTHORITIES

Name of the Statutory approval	Name of the Statutory authority		
"Consent to Operate"	Kerala State Pollution Control Board		
Environmental Clearance order	State Environmental Impact Assessment Authority, Kerala		
Explosive License	Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)		
License for quarry operations	Gram Panchayath		
Permit order	Directorate of Mining and Geology		

32	In the case of any change(s) in the scope of the project, extent quantity,	Will be
	process of mining technology involved or in any way affecting the	complied
	environemental parameters/impacts as assessed, based on which only	
	the EC is issued, the project would require a fresh appraisal by this	
	Authority, for which the proponent shall apply and get the approval of	
	this Authority.	

Compliance:

At present the project is running as per plan submitted in Environmental Impact Assessment Authority, Govt. of India and approved mining plan. There is no change in the scope of the project. The project will seek for a new Environmental clearance In the case of any change(s) in the scope of the project.

33	The Authority reserves the right to add additional safe guard measures	Noted						
	subsequently, if found necessary, and to take action including revoking							
	of the environment clearance under the provisions of the Environmental							
	(Protection) Act 1986, to ensure effective implementation of the							

suggested safeguard measures in a time bound and satisfactory manner.

Compliance:

To enhance environmental sustainability and conserve natural resources, the project is willing to add all possible additional safe guard measures subsequently if the authority found necessary.

The stipulations by Statutory Authorities under different Acts and Noted

Notifications should be complied with, including the provisions of Wate

(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.

Compliance:

The stipulated orders and directions under different act and notification including EIA notification will be scrupulously followed. A brief list of various Acts and notifications which are followed by the proponent is given below

- ➤ Kerala Minor Mineral Concession Rules, 2015.
- ➤ Mines Act, 1952
- > Explosive Rules, 2008
- > Kerala Panchayat Raj Act, 1994
- Water Pollution (Prevention & Control) Act, 1974
- > Air Pollution (Prevention & Control) Act, 1981
- > Environment Protection Act, 1986
- > EIA Notification, 2006 / 2009
- ➤ The Kerala Promotion of Tree Growth in Non-Forest Areas (Amendment) Act, 2007.

35	The project proponent should advertise in at least two local news	Complied
	papers widely circulated in the region, one which (both	
	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 the copy of the same signed in all pages should be forwarded to the office of this authority as confirmation.

Compliance:

An advertisement in two local newspapers regarding Environmental Clearance accorded to the quarry project was given within the stipulated period and the copy of the same was submitted at SEIAA Kerala. The copy of the advertisement given in two local newspapers is provided at **Annexure No.6.** The details of the news papers are given in the **Table No.4.**

Table No.4- Details of advertisement in news papers

SI. No.	News paper	Language	Date of edition
1	Mangalam	Malayalam	21-10-2017
2	The Hndu	English	21-10-2017

36	A copy of the clearance letter shall be sent by the proponent to	Complied
	concerned Grama/District Panchayath / 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.	

Compliance:

A copy of the Environment Clearance letter was submitted to the Panchayat Office. The project proponent did not receive any suggestions / representation from anywhere while the processing the proposal therefore did not give the copy of clearance latter to

anyone. At present the project does not have a website this will be created soon. The copy of the acknowledgement is attached as **Annexure No.7**

37	The proponent shall submit six monthly reports on the status of	Complied
	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 State Environment Impact	
	Assessment Authority (SEIAA) office.	

Compliance:

The compliance report is being submitted along with the results of monitored data to the District Environmental Impact assessment Authority, Kannur, State Environmental Impact assessment Authority, Kerala and the Regional Office of MoEF&CC, Bangalore both in hard copy as well as mail. The Monitoring result of Ambient air. Sound and water is attached as **Annexure Nos 8, 10 & 11.**

38	The details of Environmental Clearance should be prominently displayed	complied
	in a metallic board of 3 ft x 3ft 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.	

Compliance:

The details of the Environmental Clearance are displayed in the project site. The project proponent has placed the metallic board as specified in the conditions of Environmental Clearance order. The extent of lease area boundary will depict soon. The photograph of metallic board is attached as **Plate No.10**

39	The proponent should provide notarized affidavit (indicating the number	Complied

and	date	of	Environmental	Clearance	proceedings)	that	all	the	
cond	ditions	stipı	ulated in the EC	shall be scru	pulously follow	ed.			İ

An assurance in the form of affidavit was already submitted to DEIAA

40	No change in mining technology and scope of working should be made	Noted
	without prior approval of the SEIAA, No further expansion or	
	modification in the mine shall be carried out without prior approval of the SEIAA, as applicable.	

Compliance:

At present, the project proponent is not intending to expand the area of mine, technology and scope of working. The project will appear SEIAA for Environment Clearance if the project wants to expand its scope. The mining is progressing as per submitted plan.

41	The project proponent shall ensure that no natural water course and/or	Noted
	water resources shall be obstructed due to any mining operations.	
	Necessary safeguard measures to protect the first order streams, if any	
	originating from the mine lease shall be taken.	

Compliance:

The project proponent will take all necessary safeguards to prevent contamination of stream as well as ground water. The project proponent will install additional clarifiers in the project site to prevent sediments and wastes from quarry site to enter in to the main stream. There is no stream originating from the mining area.

42	Monitoring of Ambient air Quality to be carried out based on the	Complied
	notification 2009, as amended from time to time by the Central Pollution	
	Control Board. Water sprinkling should be increased at places loading	
	and un loading points & transfer point to reduce fugitive emissions.	

Compliance:

The project proponent monitored the ambient air quality as per National Ambient Air quality Standard (NAAQS). The project has increased the splashing of water and installed sprinklers at loading, unloading and transfer points. This activity can reduce the fugitive emission of dust

The top soil, if any, shall be temporarily stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The Over Burden (OB) generated during the mining operations shall be staked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the bump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.

Beiing complied

Compliance:

The natural resources like top soil and overburden are being stacked in a designated place within the project site. Only topsoil will be used for plantation. Overburden will be used for landfill and to construct haulage roads in the mining area. The excess will be stored in a designated place as per the direction of District Environment Impact Assessment Authority (DEIAA).

44 Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc., The drains shall be regularly de silted particularly after monsoon and maintained properly.

complied

Compliance:

The project proponent has constructed effective garland drains to catch all the storm water during the time of monsoon season. These channels will be directed to the rain water collection pond. All sediments and silts will be settled at the bottom of the pond and only cleared water let out. The water from the pond is used for splashing of water on roads to arrest the dust.

45 Effective safeguard measures such as regular water sprinkling Noted shall be carries out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5}, such as haul road, loading an un loading points and transfer points – it shall be ensured that the Ambient Air Quality Parameters confirm to the norm prescribed by the Central Pollution Control Board in this regard.

Compliance:

The project proponent is regularly spraying water in critical areas prone to air pollution with the help of vehicle and sprinklers. The project proponent will increase the number of sprinklers in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points.

46	Fugitive dust emission from all the sources should be controlled	complied
	regularly. Water spraying arrangements on haul roads, loading and	
	unloading and at transfer point should be provided and properly	
	maintained.	

Compliance:

The project proponent splashes water in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points. The sprinklers and vehicle for water spraying will be properly maintained.

47	Measures should be taken for control of noise levels below 85 dBA	Complied
	in the work environment.	

Compliance:

The main sound generating activities in the mining industries are the playing of jack hammer, breaker, vehicles and blasting operations. The level noise from all these activities will not go beyond 85dBA. The project proponent will take appropriate action to reduce the sound by employing possible measures.

48	A separate Environmental Management Cell with suitable qualified	Complied
	personal should be set up under the control of a senior executive,	
	who will report directly to the Head of the Organization.	

Compliance:

To monitor all conditions stipulated in the Environment Clearance and environment Management Plan, the project proponent constitutes an Environment Monitoring Cell with Mr. C.G George as the head of the Cell.

49	The funds earmarked for environmental protection and CSR	Being
	activities should be kept in separate account and should not be	complied
	diverted for other purpose. Year wise expenditure should be	
	reported to the State Environment Impact assessment authority	
	(SEIAA) office.	

Compliance:

The project proponent executes many activities under Corporate Social Responsibility (CSR) for community development. To implement these activities in a good manner, the project proponent will open an account for keeping the funds earmarked for environmental protection and CSR.

50				F &CC located				be
	monitor authoritie	compliance es should ext	of the end full	stipulated conc	ditions. The office	The project er(s) of the	comp	lied
	regional	Office	by	furnishing	the	requisite		
	data/infor	rmation/monit	oring re	ports.				

Compliance:

The project proponent scrupulously follows the condition stipulated in the EC order and keeping all records with a good documentation system. The project will extent all possible cooperation to the officers form regional office of MoEF &CC and can produce all data/information/reports when they are asking for the same.

51	Any appeal against this environmental clearance shall lie with the	Noted
	National Green Tribunal, if preferred within a period of 30 days as	
	prescribed under section 16 of the National Green tribunal Act,	
	2010.	

52	Concealing the factual data or submission of false/ fabricated data	Noted
	and failure to comply with any of the conditions mentioned above	
	may result in withdrawal of this clearance and attract action under	
	the provisions of Environment (Protection) Act, 1986.	

53	The	SEIAA	may	revoke	or	suspend	the	order,	for	non	Will	be
	imple	ementatio	on of a	ny of the	spe	cific or this	impl	ementat	ion o	f any	comp	olied
	of a	ny of th	e abo	ve condi	tions	s is not s	atisfa	ctory. T	he S	EIAA		
	rese	ves the	right to	alter/mo	odify	the above	cond	litions o	r stip	ulate		
	any f	urther co	onditio	n in the ii	ntere	est of enviro	onme	nt protec	ction.			

Compliance:

The project proponent has been implementing conditions stipulated in this Environment Clearance order. The project can execute all possible measures in the project site for the conservation of environment.

54	The above conditions shall prevail not withstanding anything to the	Will be
	contrary, in consistent, or simplified, contained in any other permit,	complied
	license on consent given by any other authority for the same	

project.	

Compliance:

The project will give priority to the conditions stipulated in the Environment clearance Order.

55	This order is valid for a period of 5 years or the expiry date of mine	Noted
	lease period issued by the Govt. of Kerala, whichever is earlier.	

5	56	The environmental clearance will be subject to the final order of the	Noted
		courts in any pending litigation related to the land or project, in any	
		court of law.	

57	The mining operation shall be restricted to above ground water	Will be
	table and is should not intersect ground water table.	complied

Compliance:

The project proponent is following approved mining plan for the extraction of building stones. The project will restrict its mining operations above the ground water table.

5	8	All vehicle used for transportation and within the mine shall have	complied
		"PUC" certificate from authorized pollution taking centre. Washing	
		of all vehicles shall be inside the lease area.	

Compliance:

As part of reduce air pollution, the project proponent is monitoring the pollution level of all vehicles playing in the project site. This monitoring has conducting in authorized pollution checking centre.

59	Project proponent should obtain necessary prior permission of the	Noted
----	---	-------

competent authorities for drawl of requisite quantity of surface water and ground water for the project.

Compliance:

At present, the need of prior approval is not necessary to draw ground water and surface water for the project.

60	Regular monitoring of flow rates and water quality upstream and	Being
	down streams of the springs and perennial nallahs flowing in and	complied
	around the mine lease area shall be carried out and reported in the	
	six monthly report to SEIAA.	
		1

Compliance:

There is no stream or springs flowing in and around to the mine lease area. The project installed de siltation trap and other mechanism to prevent sediments and wastes from the mining area entering in to the public drainage system.

61	Occupational health surveillance programe of the workers should	complied
	be under taken periodically to observe any contractions due to	
	exposure to dust and take corrective measures, if needed.	

Compliance:

The project proponent has started occupational health surveillance programme in association with Primary Health Centre (PHC) of Kerala government for the labours working in mining area and crusher.

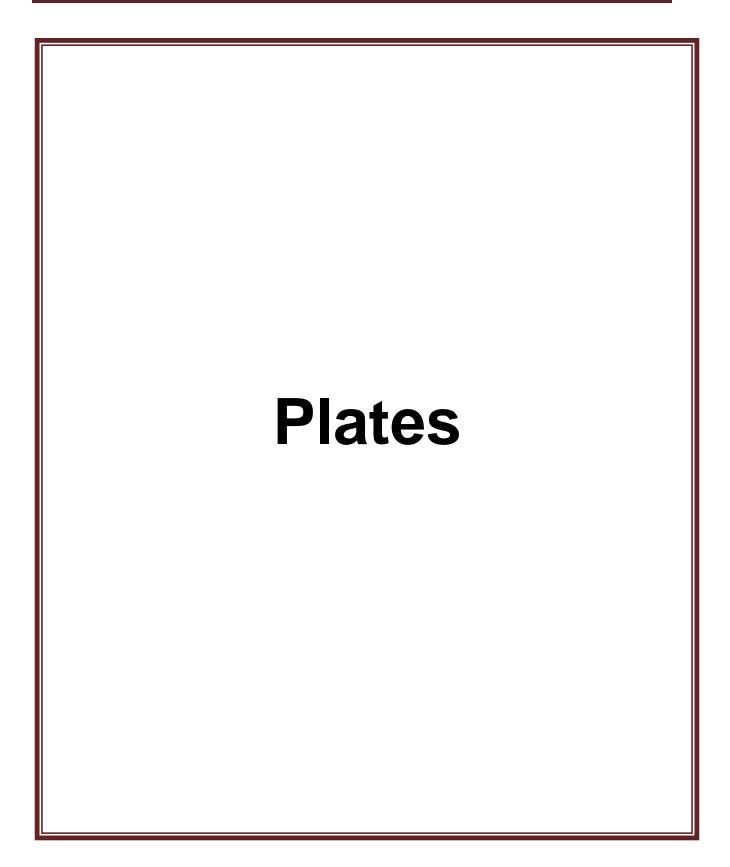
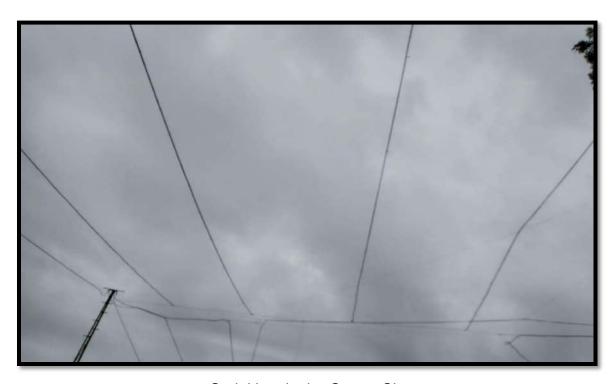


Plate 1



Avenue Tree

Plate 2



Sprinklers in the Quarry Site

Plate 3



Mining- Benches





Blasting Time
Plate 5



Sign Boards





Resting Room
Plate 7



No Smoking Board

Plate 8



Emergency Contact Numbers
Plate 9

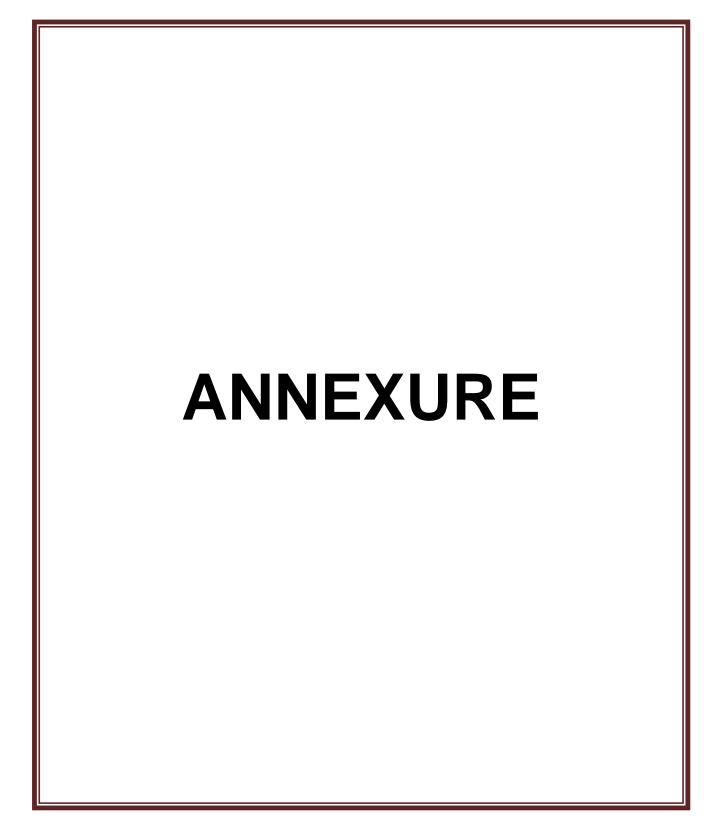


Magazine

Plate 10



Metallic Board







KERALA STATE POLLUTION CONTROL BOARD

FILE NO. :PCB/KNR/ICO/3200/2015 Date of issue :2017-07-07

CONSENT VARIATION ORDER

Consent No: PCB/KNR/ICO/424/2016

 $Ref: 1.\ PCB/KNR/ICO/424/2016\ dated\ 20/05/2016\ 2.\ Environmental\ Clearance\ No.09/KNR/2017/DEIAA\ dated\ 01/07/2017\ and\ valid\ upto\ 30/06/2020$

The 'Integrated Consent to Operate' issued as per reference above to M/s SREELAKSHMI STONE CRUSHER,27TH MILE, P.O.POOLAKKUTTY,VIA.NEDUMPOYIL-670650 is hereby modified & issued to M/s SREELAKSHMI STONE CRUSHER,27TH MILE, P.O.POOLAKKUTTY,VIA.NEDUMPOYIL-670650 The consent(s)/ variation order(s) cited under reference are integral part of this consent variation order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

I. GENERAL

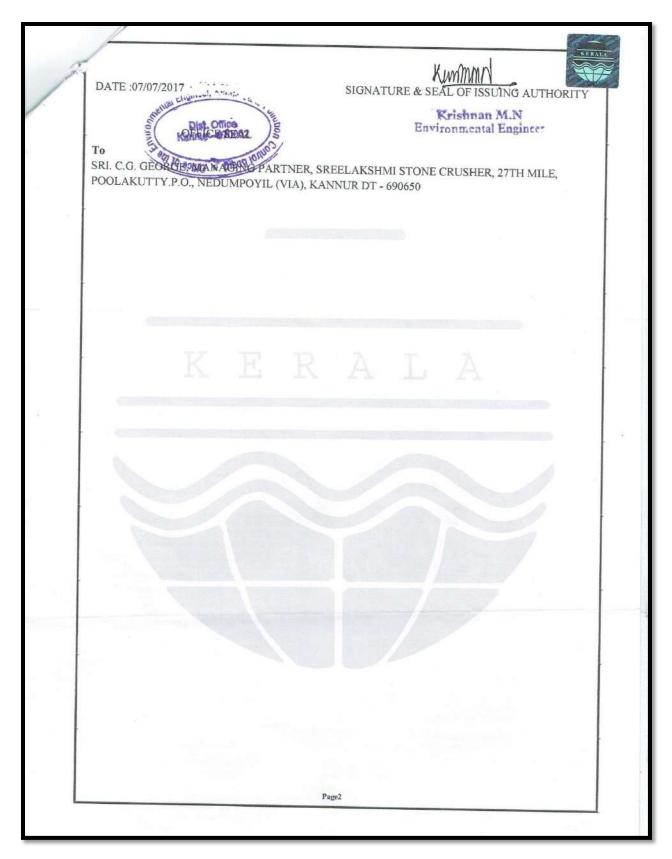
S.No.	Items	Description
1	AREA OF QUARRYING (HECTARE)	0.9898
2	Capital Investment(in Lakhs)	25
3	VALIDITY	30/06/2020

II. CONDITIONS

- 5.2 Application for renewal of consent shall be submitted before 31/03/2020.
- 5.8 Deleted.
- 5.9 Deleted.
- 5.12 Deleted.
- 5.13 Deleted.
- 5.14 Deleted.

All other conditions of the Integrated Consent to Operate issued as per reference above remain unchanged.

Page!



Copy of Consent form PCB



Validity expires on 30.06.2020

Proceedings of the District Environment Impact Assessment Authority Kannur

Present: Sri.Mir Mohammed Ali I.A.S, Chairman; Sri. O Jayarajan I.F.S (Rtd), Member Sri.Suneel Pamidi.I.F.S , Member and Sri. S Chandrasekar, I.A.S. Member Secretary.

Sub: DEIAA- Environmental clearance for the proposed Granite (Building Stone) Quarry project of M/s Sri Lakshmi Stone Crusher, 27 Mile, Poolakutty.P.O., Nedumpoyil, Kannur District for an area of 0.9898 Hectares in Survey No. 1561 of Kanichar Village, Iritty Taluk, Kannur District

DISTRICT ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KANNUR

No. 09/KNR/2017/DEIAA

Dated, .01/07//2017, Kannur

Ref:1. Online Application dated 28/04/2017 from Mr.C.G.george, Managing Partner, M/s Sri Lakshmi Stone Crusher, 27 Mile, Poolakutty.P.O., Nedumpovil,.

- Minutes of the 5th meeting of DEAC held on 04/05/2017.
 Minutes of the 6th meeting of DEAC held on 15/06/2017.
 Minutes of the 7th meeting of DEIAA held on 28/06/2017.

ENVIRONMENTAL CLEARANCE NO. 14/2017

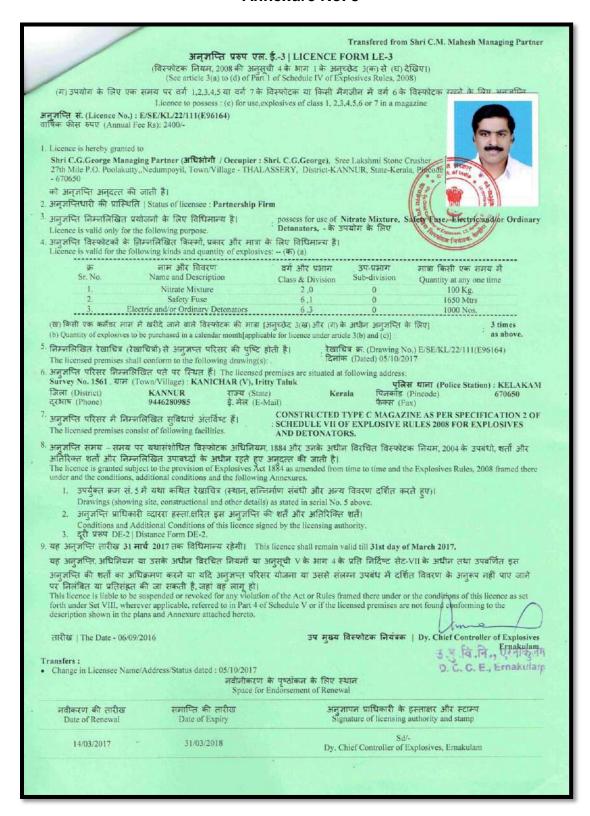
Sri.C.G.George, Managing Partner, M/s Sri Lakshmi Stone Crusher, 27 Mile, Poolakutty P.O., Nedumpoyil, Kannur, Kerala-670650, vide his application received on 28/04/2017, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project for an area of 0.9898Hectares in Survey No. 1561 of Kanichar Village, Iritty Taluk, Kannur District The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 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) dtd. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. As per gazette notification no SO 190(E)dtd 20/01/2016, Government of India and GO(Ms)no.05/2016/Envt Dtd 04/04/2016,Govt:of Kerala, DEIAA and DEAC constituted for considering the applications for environmental clearance less than 5 hectares in individual cases and 25 hectares in cluster

The proposed project site falls within 11°50'50.41"N to 11°50'53.87"N

75°46'54.94"E to 75°46'59.15"EThe land area consists of 0 9898 hectares, which is private land.

Page 1 of 8

Copy of Environmental Clearance



Copy of Explosive

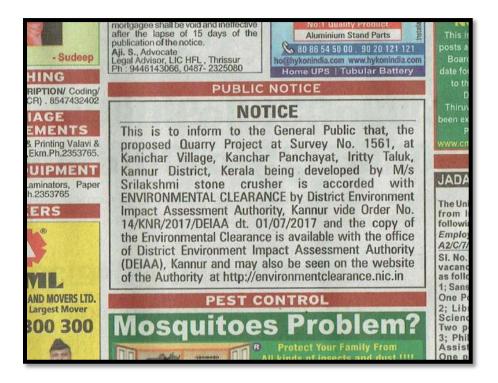


Copy of license from Gram Panchayat



Copy of Lease





Advertisement in Newspaper

M/s SRI LAKSHMI STONE CRUSHER

BUILDING NO.VIII/14, 27TH MILE, PO POOLAKUTTY, NEDUMPOYIL KANNUR, KERALA-670650 Ph:0490-2448400

The Secretary, Kancihar Panchayat, Iritty Taluk, Kannur District, Kerala.

Dt. 03/07/2017

Sub:- Environmental Clearance (E.C.) - Proposed Quarry Project at Survey No. 1561, Kanichar Village, Kanichar Panchayat, Iritty Taluk, Kannur District, Kerala - Submission of the E.C. Order - Compliance to the condition of Environment Clearance - Reg.

Respected Sir,

- This refers to the Environmental Clearance obtained to the proposed Quarry Project at Survey No. 1561, Kanichar Village, Kanichar Panchayat, Iritty Taluk, Kannur District, Kerala vide Order No. 09/KNR/2017/DEIAA dt. 01/07/2017.
- We hereby submit a self attested copy of the Environment Clearance Order No. 09/KNR/2017/DEIAA dt. 01/07/2017. This is in compliance to the condition of the E.C. Order.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours respectfully,

for Srilakshmi stone crusher,

C.G George, (Managing Partner)

Encl: As above

SUTHESAN MANIMALI SECRETARY, Number Grama Panchayet Sichar - 670674 Pin: 0490 2412065, 9496049152

Copy of Acknowledgement

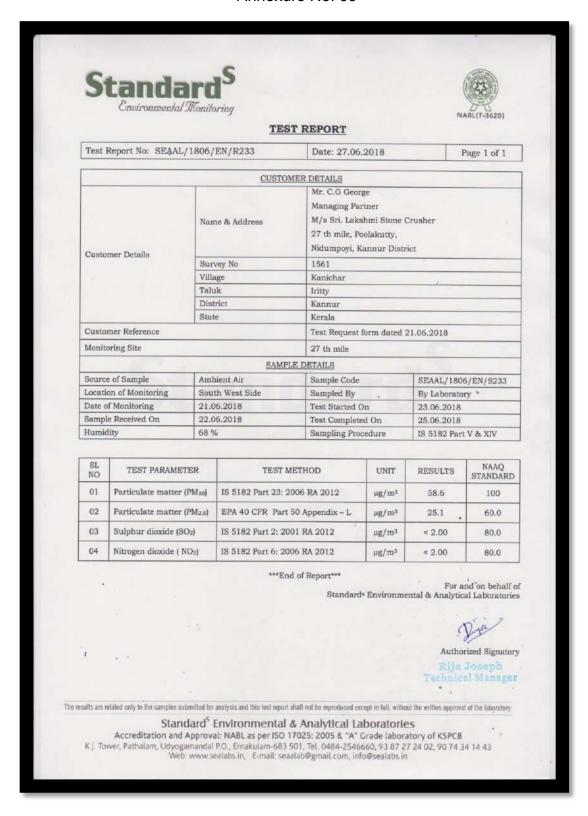
FORM D [See clause (a) of rule 10 and clause (m) of sub-rule (1) of rule 40] NOTICE

To:

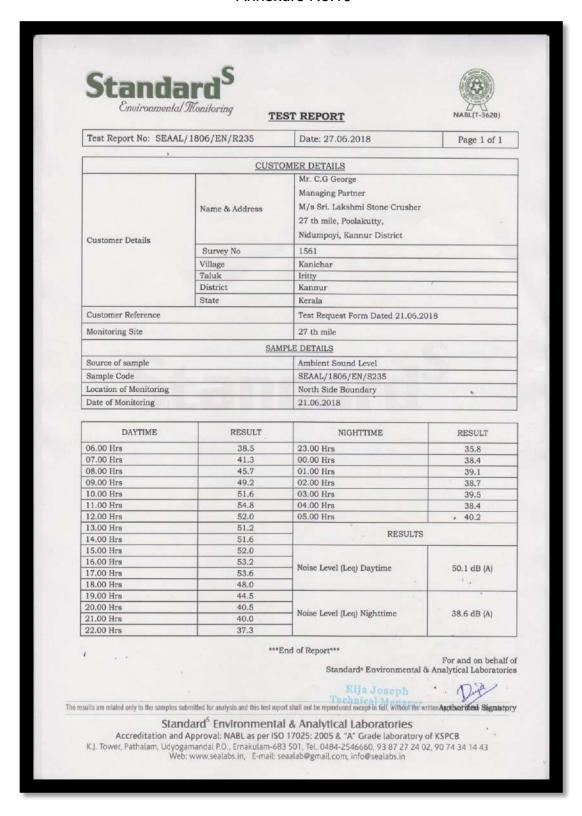
1			M/S Srilakshmi Stone crusher
*	a.	Name of Mine	Office: 27 th Mile , Poolakutty P.O, Nidumpoyil – 670 650.
			Kannur District, Kerala State.
	b.	Name of Mineral	Granite Building Stone
		Situation of Mine	Village: Kanichar Village, Post office: Poolakutty P.O
	3383		Town: Nidumpoyil, Taluk:Iritty District: Kannur, State: Kerala State.
	d.	Date when work was first started	02.01.2008
2	a.	Name & postal address of present owner(s)	Shri.C.G.George , Managing Partner Srilakshmi stone crusher 27 th mile Poolakutty PO Iritty Taluk, Kannur District, Kerala State – 670 650
	b.	Name & postal address of agents if any	
3	a.	Name & postal address of manager if any	Mr.Chandrasekhara G P , S/o Kumaraswamy G P Deogiri PO Sandur, Bellary , Karnataka -583112
	b.	His age	32 Years
	c.	His qualification	Diploma in mining
	d.	His experience in Mining	4 years in open casting
4		ner working are likely to ended below ground	Yes in future
5	a.	Maximum depth of open cast excavation measured from its highest to its lowest point	Above ground 4 metersfrom its highest to lowest poin
	b.	Date when depth exceeded 6 meter	Not Yet
6			Nitrate Mixture
	a.	Nature, amount and kind of	Slurry emulasion explosives
		explosives used if any	Class 2 division 0
_			Class 6 division 3
	b.	Date when explosives were first used	06.09.2016



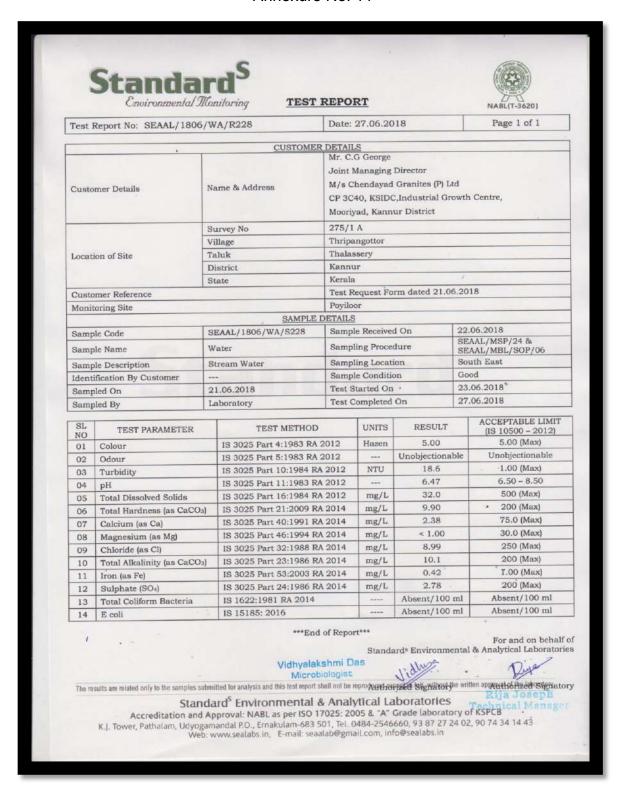
Certificate of Mines manager



Result of Air



Result of Sound



Result of Water