

M/s Thomsun Sands &
Metals Pvt. Ltd

COMPLIANCE REPORT

OCTOBER 2021 – MARCH 2022

KOTTAYAM DISTRICT
KERALA

THOMSUN SANDS & METALS

CHEMPAKAPARA, ERUMELY, KOTTAYAM-686509, KERALA, INDIA
GST NO:32AAHFT6158M2ZQ, MOB: 9946109712

Dt. 16-06-2022

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 :- File No. 936/SEIAA/EC4/4473/2015

Sub :- Environment Clearance – Quarry project of M/s Thomson sands & Metals Pvt. Ltd is situated at Erumely South Village, Erumely Panchayath, Kanjirappally Taluk, Kottayam District, Kerala– Compliance Report – Second Half - Reg.

Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 4.23 Ha. by order No. 936/SEIAA/EC4/4473/2015 dated 08-02-2017 by State Environmental Impact Assessment Authority, Kerala. The compliance report of **Second half** (October 2021 –March 2022) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,
Yours respectfully,

For M/s Thomson sands & Metals Pvt. Ltd

For 
Mr. K. V Abraham
Managing Partner



Copy to:-
The Member Secretary
State Environment Impact Assessment Authority (SEIAA),
Thiruvananthapuram, Kerala.

Encl: - As Above

COMPLIANCE REPORT
TO
THE CONDITIONS
OF
ENVIRONMENTAL CLEARANCE ORDER
NO: 963/SEIAA/EC4/4473/2015
DATED: 08.02.2017

BY
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
(SEIAA)
FOR
BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT
SURVEY NO. 120/1-23 AT ERUMELY SOUTH VILLAGE,
ERUMELY PANCHAYATH, KANJIRAPPALY TALUK,
KOTTAYAM DISTRICT, KERALA

BY
M/S THOMSUN SANDS & METALS PVT LTD
KOTTAYAM DISTRICT
KERALA

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INTRODUCTION

The quarry project of **M/s Thomsun Sands & Metals Pvt. Ltd** is situated at Survey No. 120/1-23 at Erumely South Village, Erumely Panchayath, Kanjirappaly Taluk, Kottayam District, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by State Environmental Impact Assessment Authority on 08-02-2017. 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 2021 – March 2022** is being submitted.

SPECIFIC CONDITIONS

PART - A – SPECIFIC CONDITIONS

1	Should be Fenced all around.	Complied
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Compliance:

To demarcate the lease area, the project proponent has installed fencing around the project site.

2	The approach road needs widening and surfacing even though it is located within the estate.	Complied
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Compliance:

To contain traffic and for trouble free transportation of materials, the project proponent has widened the approach road even though it is located in the estate.

3	The limited patch of natural vegetation seen in the upper part adjacent to the proposed area should be preserved as such.	complied
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Compliance:

The project proponent has been preserving the limited patch of natural vegetation seen in the upper part adjacent to the proposed area.

4	A small plot should be set apart for the rehabilitation of rare plants seen in the area.	Complied
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Compliance:

There is no rare plants noticed in the project area. However, the project proponent has set a small plot in the project site for the rehabilitation of rare plants seen in the area.

5	The entire quarry should be provided with catch water drain. The storm water from the upper slopes to be channelized into the drain and clarified before it is let out.	Complied
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Compliance:

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 drainages where it is necessary in the lower slopes of the project area for storm water management.

6	A RWH structure should be created for the storage of rain water.	Complied
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Compliance:

To harvesting rain water, the project proponent has developed rain water harvesting pond in the project site to collect rain water falling in the entire mining area.

GENERAL CONDITIONS

GENERAL CONDITIONS

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

Rain water harvesting is a mitigation measure prescribed in Environment Management Plan. To collect rain water from the entire project land, the proponent has developed one rain water harvesting pond in the quarrying area. Rain water is mainly used for gardening, wetting of roads, Washing of sand and splashing for contain dust emission.

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

The Environmental Monitoring Cell (EMC) has formed to evaluate and monitor specific and general conditions stipulated in the Environmental Clearance (EC) order. The EMC convene regularly for monitoring the mining and environmental activities.

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

The green belt can reduce the adverse effect of mining industry. To reduce air and noise pollution, the project proponent has planted few avenue trees along either side of the road. There are natural vegetations including trees, shrubs, herbs and climbers also present in the sides of road and parking area.

04	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	Complied
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Compliance:

The project proponent has installed solar street lights to maximum possible solar energy generation and utilization.

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

To reduce air pollution and to prevent dust emissions from the road while transportation of materials, the project proponent does splash the haulage road and critical areas with the help of vehicles in regular intervals. The sprinklers are also installed in the project site. This helps to suppress dust during the time summer season.

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

As part of eco restoration, the project proponent has started to plant various saplings within the project area. The mine closure plan will be done at own cost of project proponent as agreed in the proposal.

07	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 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.	Agreed to comply
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Compliance:

The project proponent 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

proponent has initiated steps to plant indigenous species as part of concurrent eco restoration.

08	Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented.	complied
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Compliance:

As part of Corporate Social Responsibility (CSR)/ Corporate Environmental Social Responsibility (CER) the project proponent spent amount in various sectors.

09	The lease area shall be fenced off with barbed wires to a maximum 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.	Complied
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Compliance:

As part of demarcation of lease area and to prevent falling of animals/human being/dumping of garbage etc, the project proponent has erected barbed metal wire fencing around the mining area with height of 4 ft before the starting of mining. All the boundary indicators are protected at all times and clearly visible at any time in a notifiable way.

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

The project proponent has installed warning alarms in the quarry site as per the stipulation of Explosive department. This warning alarm is properly working prior to the blasting time.

11	Control measures on noise and vibration prescribed by KSPCB should be implemented.	complied
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Compliance:

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

- Proper maintenance of machinery and equipment
- 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.
- ❖ 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.
- ❖ Using NONEL for blasting

12	Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.	Complied
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Compliance:

To reduce the inconvenience of community, the quarrying activities are limited to day time only as per KSPCB guidelines.

13	Blasting should be done in a controlled manner as specified by the regulations of explosives department or any other concerned agency.	complied
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Compliance:

The blasting is done in controlled manner by using NONEL. All blasting activities are carrying out with the specified regulations of explosive department.

14	A licensed person should supervise/control the blasting operations.	Complied
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Compliance:

To supervise/control exploitation of minor minerals including blasting at the project site the project proponent has appointed licensed person (Mines manager) in the project site.

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

To contain dust emissions, the project proponent has tarred the access road and maintaining in good manner. The project proponent 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 reclamation of mine pits as per mine closure plan/specific conditions.	complied
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Compliance:

The overburden and topsoil extract during the time of mining, these natural resources is staked in the project site. This is being used for plantation, haulage roads and land filling in the mining area.

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

To enhance safety and conserve environment, the project proponent extracted the minerals by creating benches. The benches does not exceed 5 meters of height and the width of the bench is having minimum of 5 meters.

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

The mat is using during blasting time to prevent fly rock. The correct quantity of explosive is used under the supervision of qualifies person.

19	Maximum depth of mining from general ground level at site shall not exceed 10m.	complied
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Compliance:

Mining depth does not exceed beyond 10 meter or not below the level of the nearest stream bed.

20	No mining operations should be carried out at places having a slope greater than 45°.	Noted
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Compliance:

No mining operation is carried out with a slope greater than 45°.

21	Acoustic enclosures should be 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.	complied
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Compliance:

To reduce the impact of sound to the labours in the unit, 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. The project proponent is trying to enhance the vegetative cover by planting more tree saplings. Enclosures provided for DG.

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

The project proponent has provided adequate Personnel Protective Equipment (PPE) such as helmets, ear plugs, safety belts, gloves, etc. to the labours in working site as part of safety.

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

The project proponent has provided Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.

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

The project proponent assures the trucks are covered before it leaving the project site to arrest the dust emission while transportation of materials.

25	The proponent should plant trees at least 5 times of the loss that has occurred while clearing the land for the project.	Complied
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Compliance:

The project proponent has been planting various saplings in the project area as a compensation of loss of trees while clearing the land for mining.

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

The project proponent is using the used oil as lubricant for shutters and other equipment. The spent oil sold only to the recyclers.

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

As per the stipulation of competent authority, the project proponent has been keeping the explosives in magazine. The magazine was situated in an isolated place specified and approved by the explosives department.

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

To prevent possible fly rock and vibration to nearby houses, the norms of Kerala State Pollution Control Board regarding the distance criteria of residences, roads, rivers and worship places is adhered by the project.

29	100 m buffer distance should be maintained from forest boundaries.	Noted
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Compliance:

There is no forest near to the project site.

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

The project proponent 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**.

31	All other statutory clearances should have been obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.	Complied
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Compliance:

The certificates obtained from concerned statutory authorities are enclosed in

Annexure No. 1, 2, 3, 4 & 5

1. The consent from PCB
2. Environmental Clearance
3. Explosive License
4. Panchayath License
5. Lease order from Dept. Mining and Geology.

32	In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental 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.	Agreed to comply
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Compliance:

The project proponent will apply for 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 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.	Agreed to comply
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Compliance:

The project proponent is aware and agreed with right of authority to add additional safe guard measures 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.

34	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.	Complied
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Compliance:

The stipulations by Statutory Authorities under different Acts and Notifications are 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.

35	The project proponent should advertise in at least two local news 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.	Complied
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Compliance:

The project proponent advertised in two local news papers widely circulated in the region, one which 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 made within 10 days from the date of receipt of the Clearance letter and the copy of the same signed in all pages was forwarded to the office of this authority as confirmation

36	A copy of the clearance letter shall be sent by the proponent to 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.	Complied
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Compliance:

A copy of the Environment Clearance letter was submitted to the Panchayat Office. The copy of Environmental clearance is uploaded in the website.

37	The proponent shall submit six monthly 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 State Environment Impact Assessment Authority (SEIAA) office.	Complied
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Compliance:

The compliance report is regularly submitted along with the results of monitored data to the State Environmental Impact assessment Authority, Kerala and the Regional

Office of MoEF&CC, Bangalore as Email. The results of monitored data are provided at **Annexure No. 6, 7 & 8.**

38	The details of Environmental Clearance should be prominently displayed 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.	Complied
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Compliance:

The details of Environmental Clearance are prominently displayed 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 extant of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public.

39	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.	Complied
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Compliance:

The proponent has provided notarized affidavit (indicating the number and date of Environmental Clearance proceedings that all the conditions stipulated in the EC shall be scrupulously followed.

40	No change in mining technology and scope of working should be made 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.	Noted
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Compliance:

At present, the project proponent is not intending to expand the area of mine, technology and scope of working. If the project proponent wants to expand its scope the project proponent will appear in front of SEIAA for Environment Clearance.

41	The project proponent shall ensure that no natural water course and/or 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.	Complied
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Compliance:

There is no such natural water course or thodu is flowing along the project site. The project proponent will ensure the natural runoff of storm water. No stream is originating from the lease area.

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

The project proponent has monitored the ambient air quality as per National Ambient Air Quality Standard (NAAQS), during the time of appraisal of the project. The project proponent is intending to increase splashing of water and installation of sprinklers at loading, unloading and transfer points.

43	The top soil, if any, shall be temporarily be 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°.	complied
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	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.	
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Compliance:

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

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
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Compliance:

The project proponent has constructed effective garland drains to catch all the storm water during the time of monsoon season. These channels are be directed to the rain water collection pond. All sediments and silts settled at the bottom of the pond and only cleared water is letting out.

45	Effective safeguard measures such as regular water sprinkling 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	complied
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	prescribed by the Central Pollution Control Board in this regard.	
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Compliance:

The project proponent is regularly checking the pollution of all vehicles in the site and spraying water in critical areas prone to air pollution with the help of vehicle. The project proponent has fixed sprinklers in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points. The ambient air quality is monitoring with the help of an approved laboratory.

46	Fugitive dust emission from all the sources should be controlled regularly. Water spraying arrangements on haul roads, loading and unloading and at transfer point should be provided and properly maintained.	complied
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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 has increased the number of sprinklers in critical area to reduce the dust emission such as loading and un - loading points, haul roads and transfer points.

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

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

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

To monitor all conditions stipulated in the Environment Clearance and environment Management Plan, the project proponent has constituted an Environment Monitoring Cell.

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

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

50	The Regional Office of MoEF &CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the regional Office by furnishing the requisite data/information/ monitoring reports.	Agreed to comply
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Compliance:

The project proponent 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.

51	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred within a period of 30 days as prescribed under section 16 of the National Green tribunal Act, 2010.	Noted
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There was no appeal against this EC at NGT within 30 days.

52	Concealing the factual data or submission of false/ fabricated data	Complied
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	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.	
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No data concealed for obtaining EC and data submitted was true and correct.

53	The SEIAA may revoke or suspend the order, for non implementation of any of the specific or this implementation of any of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Complied
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Compliance:

The project proponent is being implemented the conditions stipulated in the Environment Clearance order. The project proponent can execute all possible measures in the project site for the conservation of environment.

54	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.	Complied
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Compliance:

The project proponent has given priority to the conditions stipulated in the Environment clearance Order for its execution.

55	This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Govt. of Kerala, whichever is earlier.	Complied
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The PA has got one year covid extension and applied at SEIAA for revalidation of EC.

56	The environmental clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.	Noted
57	The mining operation shall be restricted to above ground water table and is should not intersect ground water table.	complied

Compliance:

The project proponent has restricted its mining operations above the ground water table.

58	All vehicle used for transportation and within the mine shall have “PUC” certificate from authorized pollution taking center. Washing of all vehicles shall be inside the lease area.	Complied
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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 conducts only in authorized pollution testing center.

59	Project proponent should obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project.	Noted
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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 down streams of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly report to SEIAA.	Noted
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Compliance:

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

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

The project proponent has conducted an occupational health surveillance program for the labours working in mining area in association with Primary Health center.

ANNEXURE

Annexure No.1

FILE NO : PCB/KTM/QR/274/2014
Date of issue : 24/03/2018



KERALA STATE POLLUTION CONTROL BOARD

CONSENT TO

OPERATE/AUTHORISATION/REGISTRATION

ISSUED UNDER

The Water (Prevention & Control of Pollution) Act, 1974
The Air (Prevention & Control of Pollution) Act, 1981

and

The Environment (Protection) Act, 1986

As per Application No. :7097756
Dated:09-03-2018

TO

M/s M/S THOMSUN SAND & METLAS (QUARRY UNIT)
C/o Sri.K.V. ABRAHAM,
THOMSUN ESTATE,
CHEMPAKAPPARA,
ERUMELI P.O.,
KOTTAYAM

Consent No. :PCB/KTM/ICO/R1/4280/2018
Valid Upto :07/02/2022

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1. GENERAL

1.1. This integrated consent is granted subject to the power of the Board to withdraw consent, review and make variation in or revoke all or any of the conditions as the Board deems fit.

1	VALIDITY	07/02/2022
2	Name and Address of the establishment	M/S THOMSUN SAND & METLAS (QUARRY UNIT) M/S THOMSUN SAND & METLAS (QUARRY UNIT), C/O SRI.K.V. ABRAHAM, THOMSUN ESTATE, CHEMPAKAPPARA, ERUMELI P.O., KOTTAYAM 686509
3	Communication	Telephone :- 9061190526 Fax :- 00 E-mail: deltahcg2016@gmail.com
4	Occupier Details	Sri .K.V. ABRAHAM, KUTTIPTARAMBIL(H), KALATHIPADDY, VADAVATHOOR P.O., KOTTAYAM
5	Local Body	ERUMELI
6	Survey Number	120/1-23
7	Village	ERUMELI SOUTH
8	Taluk	KANJIRAPALLY
9	District	KOTTAYAM
10	Capital Investment(Rs in Lakhs)	Rs 250 Lakhs
11	Scale	Small
12	Category	RED
13	Annual fee(Rs)	Rs 35000/-
	Total Fee remitted(Rs)	Rs 243750/-
14	RAW MATERIAL	PRODUCTS
	Granite boulder @600 Metric Tonnes	Granite rubble @600 Metric Tonnes
15	Total Power Required (HP)	75 KW

2. CONDITIONS AS PER

The Water(Prevention and Control of Pollution)Act, 1974

- 2.1 In case of generation of trade effluent from the industry, effluent treatment system consisting of treatment units having adequate capacity established as per the Integrated Consent to Establish issued shall be operational at all times during which the industry is functional. Additional facilities required, if any, to achieve the standards laid down by the Board u/s 17(1) (g) of the Water Act shall also be made along with.
- 2.2 Water consumption: 15000 l/d
- 2.3 Effluent generation: 1000 l/d
- 2.4 The characteristics of effluent after treatment shall confirm to the following tolerance limits:

Sl.NO.	Characteristics	Unit	Tolerance Limit	
			Sewage	Trade Effluent

2.5 Mode of disposal of treated effluent: Septic tank -Soak pit

3. CONDITIONS AS PER

The Air(Prevention and Control of Pollution)Act, 1981

3.1 Adequate air pollution control measures shall be operational at all times during the functioning of the industry. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be made along with.

Stack No.	Sources of Emission	Emission Rate(Nm3/Hr)	Stack Height above		Control Equipment
			Ground Level	Roof Level	

3.2 Emission characteristics shall not exceed the following:

Sl.No.	Parameter	Limiting Standards (mg/Nm3)
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4. CONDITIONS AS PER

The Environment (Protection) Act, 1986.

4.1 The operation of the industry shall be strictly in compliance with the provisions of the Noise Pollution (Regulation and Control) Rules 2000.

4.2 Used lead acid batteries shall be disposed of as per the Batteries (Management and Handling) Rules, 2001

4.3 Hazardous waste generated, if any, shall be handled as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

4.3.1 Activities for which Authorisation is granted

Collection		transport	
Reception		Storage	
Treatment		Reprocessing/Disposal	

4.3.2 Type, quantity and mode of storage/collection/disposal of hazardous wastes shall be as follows:

Sl.No.	Hazardous Waste	Schedule Category	Quantity Tonne/year
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Mode of	
Storage	Disposal

4.4 E-waste shall be disposed off safely as per the E-Waste (Management)Rules, 2016.

5. SPECIFIC CONDITIONS

- 5.1. This consent is granted on the basis of Environmental Clearance and other particulars submitted by the applicant and any violation or noncompliance will lead to withdrawal of the consent and stringent action.
- 5.2. For renewal of the consent in case of continuance of discharge/operation of the industry, application in the prescribed form shall be submitted through the web portal of the Board for Online Consent Management & Monitoring system on or before 06.11.2021. Late application will be accepted with a fine or late fee as applicable.
- 5.3. The PM10 in ambient air at the boundary shall not exceed 100µg/m3.
- 5.4. The PM2.5 in ambient air at the boundary shall not exceed 60µg/m3.
- 5.5. The sound level (Leq) at 1m outside the boundary of the site should not exceed the ambient noise standard applicable to the adjoining area.
- 5.6. The quarry shall not be operated between 6.00 p.m. and 6.00 a.m.

SHIJU M ADigitally signed by SHIJU M A
Date: 2018.03.24 13:04:39 +05'30'

DATE :24/03/2018

SIGNATURE & SEAL OF ISSUING AUTHORITY
ENVIRONMENTAL ENGINEER,DISTRICT
OFFICE,KOTTAYAM

To

M/s THOMSUN SAND & METLAS (QUARRY UNIT),
C/o Sri.K.V. ABRAHAM,
THOMSUN ESTATE,
CHEMPAKAPPARA,
ERUMELI P.O.,
KOTTAYAM

Application No : 7097756

1. This digitally signed document is legally valid as per the Information Technology Act 2000

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Copy of Consent form PCB

Annexure No.2**Validity expires on 07.02.2022**

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

*Present: Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member &
Sri. V.S.Senthil I.A.S Member Secretary*

Sub: SEIAA - Environmental clearance for the quarry project in Sy. No. 120/1-23 at Erumely South Village Erumely Panchayath, Kanjirappally Taluk, Kottayam District, Kerala by Mr.K.V.Abraham, M/s Thomsun Sands & Metals Pvt. Ltd – E.C Granted-Orders issued

State Environment Impact Assessment Authority, Kerala

No. 963/SEIAA/EC4/4473/2015**dated, Thiruvananthapuram 08.02.2017**

- Ref:**
1. Application dated 27.10.2015 from Sri. K.V.Abraham, M/s Thomsun Sands & Metals Pvt. Ltd
 2. Minutes of the 58th meeting of SEAC held on 28/29-06-2016
 3. Minutes of the 62nd meeting of SEAC held on 6/7-09-2016
 4. Minutes of the 60th meeting of SEIAA held on 27-10-2016

ENVIRONMENTAL CLEARANCE NO.15/2017

Mr.K.V.Abraham, Managing Partner, Thomsun Estates, Chempakapara, Erumely P.O, Kottayam District -686 509 vide his application received on 27/10/2015, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No.120/1-23 at Erumely South Village, Erumely Panchayath, Kanjirappally Taluk, Kottayam District, Kerala for an area of 4.23 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) dt. 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 Latitude 9°28'22.26"N to 9°28'31.19"N and Longitude 76°51'12.47"E to 76°51'22.71"E. The land use classification as per revenue records is private own land. The lease area consists of 4.23 hectares. The current proposal is

Page 1 of 14

for the new building stone quarry project. The proposed project is for quarrying of 1, 50,000MTA of building stone. The Other details are as follows;

I. Project details			
1.	File No.	963 / SEIAA / EC4 / 4473 / 2015	
2.	Name /Title of the project	M/s Thomsun Sands & Metals	
3.	Name and address of project proponent.	Mr. K.V. Abraham, Managing Partner, M/s Thomsun Sands & Metals, Thomsun Estates, Chempakapara, Erumely P.O., Kottayam District, Kerala-686509	
4.	Owner of the land	Private Own Land	
5.	Survey No. District/Taluk/ and Village etc.	Survey Nos. 120/1-23, Erumely South Village, Erumely Panchayat, Kanjirappally Taluk, Kottayam District, Kerala	
6.	Nature of the proposal – lease or permit with evidence.	New Quarry Project	
7.	Date of submission of Application	27-10-2015	
8.	Brief description of the project.	Quarry project with an area of 4.23 hectares. & Production capacity 1,50,000 MTA	
9.	Details of Authorized Signatory and address for correspondence	M/s Thomsun Sands & Metals, Mr. K.V. Abraham, Managing Partner Thomsun Estates, Chempakapara, Erumely P.O., Kottayam District, Kerala-686509	
II. Land Details			
10.	a) Extent of area in hectares	4.23 hectares	
11.	b) Is the property forest land/Govt. land/own land/patta land	Private own land	
12.	c) Quantity of top soil/over burden produced and managed	Topsoil :15,015 cu. m. Overburden : 5,460 cu. m	
13.	d) Latitude and Longitude	Latitude (N)	09°28'22.26"N to 09°28'31.19"N
		Longitude (E)	76°51'12.47"E to 76°51'22.71"E
14.	e) Topography of land and elevation	Part of the proposed land is exposed rock and there is no vegetation in that area. Some part of the proposed land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc. The highest elevation of the lease area is 195 m. MSL and lowest is 130 m MSL. As the proposed area is low height hillocks, the drainage of the lease area is towards North-West. No habitants are located in the lease area	
15.	f) Slope analysis	Slope: towards North-West	
16.	g) Will there be any significant land disturbance	No	

	resulting in soil erosion, subsidence & natural drainage.	
17.	h) Access road to the site width and condition	8m tarred road, SW
18.	i) Will there be any adverse impact on the aesthetics of the proposal site	No
III. Mining details		
19.	a) Minimum and Maximum height of excavation.	135 m MSL and 195 m MSL
20.	b) Life of mine proposed.	About 17 years
21.	c) Underground mining if any proposed	There will be no underground mining activities.
22.	d) Method of Mining	Open cast semi-mechanized method of mining.
23.	e) Distance from the adjacent quarry	There is no quarry in operating within 500m from the quarry.
24.	f) Cluster condition if any	No. There is no quarry in operating within 500m from the quarry.
25.	g) Has "No cluster certificate" submitted?	Yes. Cluster certificate submitted along with our application Page No. 190
26.	h) Distance from nearby habitation	No human habitation within 500m radius.
27.	i) Distance from nearby forest, if applicable	1. Mannamaruthy Reserve Forests, about 8 km. SW 2. Ponthenpuzha Forest, 8 km., W
28.	j) Distance from protected area, Wildlife Sanctuary, National Park etc.	None within the study area.
29.	k) Distance from nearby streams/rivers/National Highway and Roads	Water bodies :- 1. Manimala River, about 2 km., NW 2. Korattypuzha, 5 km., E 3. Pampa River, 7.5 km., SE Highway :- SH-44 5km. W.
30.	l) Is ESA applicable? If so distance from ESA limit	Not falling in ESA
31.	m) Has approved	Yes. Submitted along with the application.

	mining plan, prepared by RQP submitted?	
32.	n) Capacity of production in TPA	1,50,000 TPA
33.	o) Details of mining process	The mining will be done by open cast semi-mechanized method of mining. The bench height and width will be maintained 5 m. Excavated material is transported to the crusher unit proposed to be installed within the complex for further processing. The ultimate depth of the mine workings is estimated to reach upto 130 m. MSL
IV. Details of Project cost		
34.	a) Land cost	Rs. 2.50 Crores.
35.	b) Plant and Machinery	
36.	c) Total Cost	
37.	V. Financial Statement including funding source and details of insurance etc.	Insurance: Insurance to the quarry workers would be provided through insurance company Source of funding = Own source & Bank loan
38.	Management Plan	<p>Air Pollution</p> <p>Mining activities will generate certain quantities of dust during drilling, blasting, loading and transportation operations. The following measures will be taken to mitigate the fugitive dust from different operations.</p> <ul style="list-style-type: none"> ➤ Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust. ➤ To avoid the dust generation from the drilling operations, wet drilling method will be adopted. ➤ Drill machines will be equipped with dust collectors. ➤ Use of appropriate explosives for blasting and avoiding overcharging of blast holes. ➤ Controlled blasting techniques will be adopted. ➤ Watering of haul road and other road at regular intervals. ➤ Provision of dust filters/ mask to workers working at highly dust prone and affected areas. ➤ Provision of green belt all along the periphery of the lease area. ➤ Periodical monitoring of ambient air quality in and around the lease area. <p>The extracted mineral will be transported from the quarry to the end user by adopting following measures so as to minimize dust emissions.</p> <ul style="list-style-type: none"> ➤ In case of long transportation the trucks after loading will be covered with tarpaulin sheets.

			<p>➤ Speed of the vehicles will be maintained within the prescribed limits. Trucks will not be over loaded and will be maintained to the body level.</p>	
		Water Pollution	Provision of a storm water collection pond of total capacity about 8,000 KL. The water requirement for sprinkling on sources of dust emission, on roads, landscaping etc. can be met from the stored rainwater in the pond.	
		Noise	<p>The major noise generating source from the proposed activity is working machinery, drilling, blasting and plying of vehicles. The following control measures are to be undertaken to bring down the noise levels:-</p> <ul style="list-style-type: none"> ➤ Proper maintenance of machinery, equipments and improvement on design of machines. ➤ Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas. ➤ Creation of wide green belt of dense foliage between mine areas and residential colonies. ➤ related health problems ➤ Proper training to personnel to create awareness about adverse noise-level effects. ➤ Planned noise monitoring at suitable locations in the plant and outside location for proper effective remedial actions. 	
		Solid Waste Management	<p>Topsoil Management A total estimated quantity of 15,015 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.</p> <p>Overburden Management About 5,460 cu. m of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation</p>	
		Eco-restoration	The year wise programme of eco-restoration for the life of mine, about 2,750 trees will be planted in an area of 2.7581 ha. The main aim of the green belt development is to restore the eco-system to its original form to a maximum extent by designing the green cover with the same native species.	
39.	VI. Whether Environment Management Plan or Eco	Yes		

	restoration Plan satisfactory?	
40.	VII. Does it suggest mitigation measures for each activity	Yes
41.	VIII. If Pre-Feasibility Report (PFR) satisfactory	Yes.
42.	IX. Does it need public hearing	No Public Hearing required because of the project comes under below 25 ha.
43.	X. Details of litigation and Court verdict if any	No litigation is pending against the lease area/ applicant of the proposed lease area in any court of law.
44.	XI. Details of public complaint, if any	Nil
45.	XII. Details of statutory sanction required	a. Mine Lease b. NOC from Pollution Control Board c. Environment Clearance from SEIAA / MoEF d. NOC from Explosive Dept.
46.	XIII. If CRZ recommendation applicable?	Not Applicable
PART B		
Environment Impact Assessment and Mitigation Measures		
Impact on water		
47.	a) Details of water requirement per day in KLD	The total water requirement is about 15 KLD in which 1 KLD is for domestic which would be sourced from open well, 12 KLD for dust suppression system in mine & in Ancillary Unit and 2 KLD for plantation purposes and will be sourced from storm water pond.
48.	b) Water source/sources.	Open Well and Storm water pond.
49.	c) Expected water use per day in KLD.	15KLD
50.	d) Details of water requirements met from water harvesting.	It is proposed to construct a storm water collection pond and de-siltation unit in the lowest contour of the plot. The water requirement for sprinkling on sources of dust emission, roads and for landscaping purposes can be met from the stored rain water pond and thereby conserve the fresh water.

51.	e) What are the impact of the proposal on the ground water?	The source of water for the project are :- Stored Rain water (Pond), Wells. The use of ground water (standby arrangement) only based on the permissible yield from the large open wells. Thereby no impact to the ground water.
52.	f) How much of the water requirement can be met from the recycling of treated waste water? (Facilities for liquid waste treatment)	Not applicable as the project is quarry Project
53.	g) What is the incremental pollution load from waste water generated from the proposed activities?	Not applicable as the project is quarry Project
54.	h) How is the storm water from within the site managed?	It is proposed to construct a storm water collection pond and de-siltation unit in the lowest contour of the plot.
Impact on Biodiversity and Eco restoration Programmes		
55.	a) Will the project involve extensive clearing	Yes. The proposed quarry has native trees, climbers, grass, shrubs, herbs etc. which will be clear from the site.

	or modifica tion of vegetatio n (Provide details)	
56.	b) What ate the measures proposed to minimize the likely impact on vegetation (details of proposal for tree plantatio n/ landscapi ng)	It is proposed to develop green belt to 90 % which includes areas like along mine lease boundary (7.5 m width), all along the periphery and reclaimed area. Grass and bushes will be planted in areas prone to erosion especially at the foot of the hill. Other areas will be fertilized and planted with local species. The characteristics of this vegetation will resemble that of the natural environment except for the early growth, which may be a protective cover crop of non-seeding annuals
57.	c) Is there any displace ment of fauna – both terrestria l and aquatic. – If so what are the mitigatio n measures ? d) Presence of any endanger ed species or red listed category (in detail)	No No.
Impact on Air Environment		
58.	a) What are the	Already mentioned in above (Item No. 38)

	mitigation measures on generation of dust, smoke and air quality	
59.	b) Details of internal traffic management of the site.	N.A.
60.	c) Details of noise from traffic, machines and vibrator and mitigation measures	Already mentioned in above (Item No. 38)
61.	d) Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures	Already mentioned in above (Item No. 38)
62.	e) Air quality monitoring in	Yes, air quality monitoring carried out from an approved laboratory at site and report of the same is already submitted.

	detail	
Energy Conservation		
63.	a) Details of power requirement and source of supply.	The total power requirement will be 75 kW for compressors which will be operated by Diesel Engine.
64.	b) Details of renewable energy (non – conventional) used.	The project proponent proposed to have a solar power plant to meet the energy requirements of the site office & labour quarters.
Risk Management		
65.	a) Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	<ul style="list-style-type: none"> • Proper barricading and monitoring of the water stored area would be taken up to prevent accidents. • Well equipped medical / hospital facilities would be available round the clock for attending emergency arising out of accidents. • All working personnel would be medically examined at least once in every year and at the end of his term of employment.
	b) Are proposals for fencing around the quarry satisfactory?	Yes
	c) Storage of explosives/hazardous substance in detail	Proper and safe storage of explosives in approved and Licensed Magazine.
66.	d) Facility for solid waste management	<p>Topsoil Management A total estimated quantity of 15,015 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.</p> <p>Overburden Management About 5,460 cu. m of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation</p>
Socio Economic Impacts		
67.	a) Will the project cause adverse effects on local communities disturbance to	No.

	sacred sites or other cultural values. What are the safe guards proposed?	
68.	b) Will the proposal result in any changes to the demographic structure of local population. If so, provide details.	No. Part of proposed land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc. it should be removed.
69.	c) CSR components suggested	As a part of Corporate Social Responsibility, it is proposed to spend Rs 9 lakhs (non-recurring) and 13 lakhs (recurring) per year for a period of next 5 years for the welfare of the local community
70.	d) What are the projects benefits in terms of employment potential?	26 people are directly and indirectly working this quarry
PART C		
71.	Details of NABET approved EIA Consultant engaged- Their name, address and accreditation details	M/s Environmental Engineers & Consultants Pvt. Ltd. (MoEF&CC list of Accredited Consultant Organization) <i>Head Office :-</i> A1-198, JanakPuri, New Delhi. <i>Branch Office:-</i> C-306, Kanchanjunga Apartments, Palarivattom P.O., Kochi, Kerala.
Summary and Conclusion		
72.	a) Overall justification for implementation of the project.	The proposed project is a New Quarry project with an area of 4.23 hectares. & Production capacity 1,50,000 MTA
73.	b) Explanation of how adverse impact have been mitigated.	No., there will be no adverse impacts envisaged on the aesthetics of the project site.

2. The proposal was considered in the 58th meeting of SEAC held on 28th & 29th June, 2016. The minutes of the said meeting are as follows; Further to the intimation of SEAC, the proponent along with the RQP was present in the meeting and RQP made a power point presentation of the salient features of the project. The committee appraised the proposal based on the mining plan, pre-feasibility report and all other documents submitted along with the Form I application and decided to **defer** the item for site visit.

Field visit to the quarry project site of M/S Thomsun Sands and Metals, Erumely Village, Kanjirappaly Taluk, Kottayam district, Kerala was carried out on 30.08.2016 by Sri. John Mathai, Member, SEAC along with Dr. K. Sreedharan from DoECC. The representatives of the proponent were present at the site at the time of site visit.

The project is located at about 1.5 km south-east of Erumeli centre. This quarry lease area form part of a hillock exposing hard rock falling entirely within the land of Thomsun Estates. The approach road is through the unsurfaced estate road. Boundary pillars of this plot are erected and numbered displaying GPS values. In the area proposed for quarry is an elevated ridge with overall slope to NW. This is an uncultivated land that exposes hard rock with few patches of OB and top soil of variable thickness. Rubber plantation is the dominant landuse all around. The storm water flows as sheet flow reaching Erumelitodu located on the western side. Dwelling units are not seen within 100 m. Other quarries are not seen within 500 m.

The quarry may be recommended for EC after considering the following points:-

- 1) The entire area proposed for quarry should be fenced all around.
- 2) The limited top soil and OB need proper storage area on the lower part and provided with protective walls.
- 3) The approach road needs widening and surfacing even though it is located within the estate.
- 4) The limited patch of natural vegetation seen in the upper part adjacent to the proposed lease area should be preserved as such.
- 5) A small plot should be set apart for the rehabilitation of rare plants seen in the area.
- 6) The entire quarry should be provided with catch water drain all around. The storm water from the upper slopes to be channelized into the drain and clarified before it is let out.
- 7) A RWH structure should be created for the storage of rain water.
- 8) The area planned for crusher is located in the valley. The water draining out through this area should also be clarified before it is let out.
- 9) Details of CSR to be provided as promised in the SEAC meeting.

3. The proposal along with field visit report was again placed in the 62nd SEAC meeting held on 6th & 7th September 2016. The Committee after examining the mining plan, prefeasibility report, field inspection report by Sri. John Mathai and all other documents submitted, decided to Recommend for issuance of EC subject to general conditions along with the following specific conditions.

- 1) Should be fenced all around.
- 2) The approach road needs widening and surfacing even though it is located within the estate.
- 3) The limited patch of natural vegetation seen in the upper part adjacent to the proposed lease area should be preserved as such.
- 4) A small plot should be set apart for the rehabilitation of rare plants seen in the area.
- 5) The entire quarry should be provided with catch water drain. The storm water from the upper slopes to be channelized into the drain and clarified before it is let out.
- 6) A RWH structure should be created for the storage of rain water.

The proponent agreed to set apart Rs 9 lakhs (non-recurring) and 13 lakhs (recurring) per year for a period of next 5 years for the welfare of the local community. The proponent also agreed to spend this amount in consultation with the local Panchayath.

4. The proposal was considered by the Authority in its 60th meeting held on 27.10.2016. The Authority resolved to issue Environmental Clearance on condition that quarrying should be started only after fulfilling the pre mining specific conditions No. 1, 2 and 4. An affidavit should be given for this.

5. The Proponent submitted the affidavits stating that the premining conditions No.1, 2 & 4 have been fulfilled before starting with mining. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed Quarry project of Mr.K.V.Abraham, M/s Thomsun Sands & Metals Pvt. Ltd, Managing Partner, Thomsun Estates, Chempakapara, Erumely P.O, Kottayam District -686 509 in Survey No. 120/1-23 at Erumely South Village, Erumely Panchayath, Kanjirappally Taluk, Kottayam District, Kerala for an area of 4.23 hectares, subject to the specific conditions as recommended by SEAC in para 3 above, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I, EMP, PFR and Mining plan submitted to SEIAA. The assurances and clarifications given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects stipulated for mining, appended hereto will be applicable and have to be strictly adhered to.

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 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 conditions and the undertakings subject to all the mining features, Environmental Management Plans as undertaken in the Mining Plan and EMP submitted to SEIAA will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

7. Validity of the Environmental Clearance will be five years from the date of this clearance, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.

8. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices 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,

Kottayam to take legal action under the Environment (Protection) Act 1986.

- iii. The given address for correspondence with the authorised signatory of the project is Mr.K.V.Abraham, M/s Thomsun Sands & Metals Pvt. Ltd, Managing Partner, Thomsun Estates, Chempakapara, Erumely P.O, Kottayam District -686 509.

Sd/-
V.S.SENTHIL.I.A.S,
Member Secretary (SEIAA)

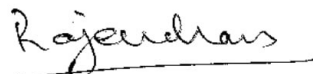
To,

Mr.K.V.Abraham,
M/s Thomsun Sands & Metals Pvt. Ltd,
Managing Partner, Thomsun Estates,
Chempakapara, Erumely P.O,
Kottayam District -686 509

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.
2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala.
3. Director, Mining & Geology, Thiruvananthapuram -4.
4. District Collector, Kottayam
5. Secretary, Erumely Grama Panchayat, Erumely P.O, Kanjirapally, Kottayam - 686 509
6. Chairman, SEIAA.
7. Website.
8. S/f
9. O/c

Forwarded/By Order


Administrator, SEIAA



STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

GENERAL CONDITIONS (for mining projects)

1. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
3. 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.
4. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
5. Sprinklers shall be installed and used in the project site to contain dust emissions.
6. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
7. 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 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 E.C.
8. Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
9. The lease area shall be fenced off with barbed wires to a minimum 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.
10. Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
11. Control measures on noise and vibration prescribed by KSPCB should be implemented.
12. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
13. Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
14. A licensed person should supervise/ control the blasting operations.
15. Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
17. Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention is the mining plan/specific condition.
18. Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
19. Maximum depth of mining from general ground level at site shall not exceed 10m
20. No mining operations should be carried out at places having a slope greater than 45°.
21. 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.
22. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
23. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
24. The transportation of minerals should be done in covered trucks to contain dust emissions.
25. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
26. Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
27. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
28. A minimum buffer distance of 100 m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.
29. 100 m buffer distance should be maintained from forest boundaries.

30. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
31. 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.
32. In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the E.C 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.
33. 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.
34. 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.
35. 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 State Environment Impact Assessment Authority (SEIAA) office 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.
36. 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.
37. 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 State Environment Impact Assessment Authority (SEIAA) office.
38. 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
39. 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.
40. No change in mining technology and scope of working should be made without prior approval of the SEIAA. No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
41. The Project proponent shall ensure that no natural water course and/or 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.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be 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 stacked 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 dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.

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 desilted particularly after monsoon and maintained properly.
45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul Road, loading and unloading points and transfer points – it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
47. Measures should be taken for control of noise levels below 85 dBA in the work environment.
48. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
49. The funds earmarked for environmental protection measures and CSR activities should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
50. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.
51. Any appeal against this Environmental Clearance shall lie with the 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 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 implementation of any of the specific or this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
54. The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license or consent given by any other authority for the same project.
55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
56. The Environmental Clearance will be subject to the final order of the 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 table and it should not intersect ground water table.
58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area.
59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
60. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
61. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.



Rajendran

For Member Secretary, SEIAA Kerala

Copy of Environmental Clearance

Annexure No.3.



GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY
PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION(PESO)
(Formerly Department of Explosives)
Kendriya Bhavan, Block C-2, 3rd Floor
CSEZ PO Kakkanad Dist. Ernakulam Ernakulam 682037
Tele: 2427286 Fax: 2427276
Email: dycceernakulam@explosives.gov.in

No:E/SE/KL/22/167(E109969)

Dated : 20/06/2018

To,
K.V. Abraham Mg. Partner,
M/S. Thomsun Sands and Metals. Kuttiparambil Kalathipadi, Vijayapuram
Town/Village - Vijayapuram
Distt. KOTTAYAM, State. Kerala, Pincode-686509

Subject: Possession for Use of Explosives from magazine at Survey No.:120-1, Village/Town. Erumely South, Kottayam, Distt. KOTTAYAM, State Kerala Licence No.: E/SE/KL/22/167(E109969) granted in Form LE-3 of Explosives Rules, 2008 -Endorsement regarding

Sir(s),

Reference memo No.: E/SE/KL/22/167(E109969) Dated 20/06/2018 from Dy. Chief Controller of Explosives, Ernakulam and inspection of the subject premises by an officer of this organization on 19/05/2018.

The subject licence No. E/SE/KL/22/167(E109969) valid upto **31st March 2023** duly endorsed as required under Rule 107(3) of the Explosives Rules 2008 is forwarded herewith.

For further renewal of licence, please submit following documents so as to reach **this office** on or before **31/03/2023**.

- Application in Form RE-1 duly filled in and signed.
- Licence fees for one to five years in the form of demand draft drawn on any Nationalized Bank in favour of **Jt. Chief Controller of Explosives, Chennai** payable at **Chennai**.
- Original licence with approved plan.
- In this connection, please also refer to Rule 112 of Explosives Rules, 2008.
- Indent for purchase of explosives shall be placed in RE-11 with the supplier and copy of the same shall be sent to this office.(Not applicable for fireworks store house)
- Please submit quarterly returns of explosives in RE-7 at the end of every quarter so as to reach this office by 10th of the succeeding quarter.(Not applicable for fireworks store house)
- All blasting operations shall be carried out by a competent person holding a valid shot firer's permit granted under above rules. However, blasting operations in mines coming under the purview of the Mines Act 1952, the blaster shall have qualifications prescribed in the regulations framed under the said Act.

Yours faithfully,

(S M Kulkarni)

Deputy Chief Controller of Explosives
Ernakulam

Copy Forwarded to:

1. District Magistrate, KOTTAYAM, Kerala with reference to his Noc No: DCKTM/576/2018-H4 Dated: 21/03/2018.

Deputy Chief Controller of Explosives
Ernakulam

[For more information regarding status, fees and other details, please visit our web site <http://explosives.gov.in>]



भारत सरकार | Government of India
वाणिज्य और उद्योग मंत्रालय | Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो) | Petroleum & Explosives Safety Organisation (PESO)
पूर्व नाम- विस्फोटक विभाग | Formerly- Department of Explosives
केन्द्रीय भवन, ब्लॉक सी-2, तीसरी मंजिल | Kendriya Bhavan, Block C-2, 3rd Floor
CSEZ पी.ओ.कक्कनाड कोच्ची | CSEZ PO Kakkanad Dist. Ernakulam Ernakulam 682037
फोन (Phone):- 2427286 | फैक्स (Fax):- 2427276

संख्या (No.): E/SE/KL/22/167(E109969)

दिनांक (Date): 23/05/2018

ज्ञापन | Memorandum

विषय: Survey No.120-1, ग्राम Erumely South, Kottayam, जिला KOTTAYAM, राज्य Kerala में मेसर्स K.V.Abraham Mg. Partner द्वारा विस्फोटक के मैगजीन में उपयोग के लिए कब्जा हेतु विस्फोटक नियम, 2008 के अंतर्गत LE-3 में जारी अनुज्ञप्ति सं E/SE/KL/22/167(E109969) - अनुज्ञप्ति जारी करने के संदर्भ में।

Subject: Possession for Use of Explosives in a magazine situated at Survey No.:120-1, Erumely South, Kottayam, Distt. KOTTAYAM, State, Kerala of K.V.Abraham Mg. Partner Licence No : E/SE/KL/22/167(E109969) granted in Form LE-3 of Explosives Rules, 2008 - Issue of Licence regarding

मेसर्स K.V.Abraham Mg. Partner, M/S. Thomsun Sands and Metals, Kuttiparambil Kalathipadi, Vijayapuram, Vijayapuram, Distt. KOTTAYAM, State, Kerala को दिनांक 31 मार्च 2023 को समाप्त समयावधि के लिए जारी Survey No.:120-1, Erumely South, Kottayam, KOTTAYAM, Kerala स्थित मैगजीन में विस्फोटक के उपयोग हेतु कब्जा के लिए जारी अनुज्ञप्ति संख्या E/SE/KL/22/167(E109969) की दो प्रतियां इस कार्यालय को प्रेषित की जा रही हैं। अनुरोध है कि यदि वे इस बात से संतुष्ट हैं कि अनुज्ञप्ति में दी गई सभी शर्तों का अनुपालन हुआ है जैसा कि विस्फोटक नियम, 2008 के नियम 107(3) के अंतर्गत आवश्यक हैं, तो अनुज्ञप्ति की मूल प्रति पृष्ठांकित करें और जिला राजस्व अधिकारी, District Magistrate, KOTTAYAM, Kerala को सूचित करते हुए अनुज्ञप्ति सीधे अनुज्ञप्तिधारी को अयोधित करें और अनुज्ञप्ति की एक प्रति कार्यालय रिकार्ड हेतु रखें। तथापि, यदि वे अनुज्ञप्ति पृष्ठांकित नहीं करने का निर्णय लेते हैं तो तुरंत कारण बताने हुए अनुज्ञप्ति को तीन महीनों के भीतर इस कार्यालय को लौटा दें।

Two copies of Licence No.: E/SE/KL/22/167(E109969) granted to K.V.Abraham Mg. Partner, M/S. Thomsun Sands and Metals Kuttiparambil Kalathipadi, Vijayapuram, Vijayapuram, Distt. KOTTAYAM, State, Kerala for the period ending 31st March 2023 to Possess for Use Explosives from their magazine situated at Survey No.:120-1, Erumely South, Kottayam, KOTTAYAM, Kerala are forwarded herewith to this office with the request that if he is satisfied that all the conditions prescribed in the licence have been complied with, the original copy of the same may be endorsed as required under rule 107(3) of the Explosives Rules, 2008 and forwarded to the licensee directly with an intimation to the District Magistrate, KOTTAYAM, Kerala and this office, retaining the other copy of the licence in his office record. However, if he decides not to endorse the licence, he should immediately return the same to this office together with a statement of his reasons for not endorsing the licence, not later than three months.

(एस.एम.कुलकर्णी | S M Kulkarni)

उप मुख्य विस्फोटक नियंत्रक | Deputy Chief Controller of Explosives
Deputy Chief Controller of Explosives
एरनाकुलम Ernakulam

सेवा में To,

इस कार्यालय

this office

प्रतिलिपि प्रेषित | Copy Forwarded to:

✓ K.V.Abraham Mg. Partner, M/S. Thomsun Sands and Metals, Kuttiparambil Kalathipadi, Vijayapuram, Vijayapuram - 686509, Distt. KOTTAYAM, State, Kerala
उनके दिनांक 22/05/2018 के आवेदन के संदर्भ में। With reference to their application dated 22/05/2018.

अनुज्ञप्ति प्ररूप एल.ई.-3 | LICENCE FORM LE-3
(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।)
(See article 3(a) to (d) of Part I of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 या वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखने के लिए अनुज्ञप्ति

Licence to possess : (c) for use, explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुज्ञप्ति सं. (Licence No.): E/SE/KL/22/167(E109969)
वार्षिक फीस रुपये (Annual Fee Rs): 2400/-

1. Licence is hereby granted to
K.V. Abraham Mg. Partner (अधिभोगी / Occupier : Shri K.V. Abraham Mg. Partner), M/S. Thomsun Sands and Metals Kuttiparambil Kalathipadi, Vijayapuram, Town/Village - Vijayapuram, District-KOTTAYAM, State-Kerala, Pincode - 686509

को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति Status of licensee : Partnership Firm

3. अनुज्ञप्ति निम्नलिखित प्रयोजनों के लिए विधिमान्य है।
Licence is valid only for the following purpose.
possess for use of Nitrate Mixture, Electric and/or Ordinary Detonators, Safety Fuse, - के उपयोग के लिए

4. अनुज्ञप्ति विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है।
Licence is valid for the following kinds and quantity of explosives: -- (क) (a)

क्र. सं.	नाम और विवरण	वर्ग और प्रभाग	उप-प्रभाग	मात्रा किसी एक समय में
Sr. No.	Name and Description	Class & Division	Sub-division	Quantity at any one time
1.	Nitrate Mixture	2,0	0	300 Kg.
2.	Electric and/or Ordinary Detonators	6,3	0	4000 Nos.
3.	Safety Fuse	6,1	0	2500 Mtrs

(ख) किसी एक कैलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए]
(b) Quantity of explosives to be purchased in a calendar month [applicable for licence under article 3(b) and (c)] : 10 times as above.

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पुष्टि होती रेखाचित्र क्र. (Drawing No.) E/SE/KL/22/167 (E109969) दिनांक (Dated) 23/05/2018
The licensed premises shall conform to the following drawing(s):

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:
Survey No. 120-1, ग्राम (Town/Village) : Erumely South, Kottayam
जिला (District) KOTTAYAM राज्य (State) Kerala पुलिस थाना (Police Station) : Erumely
दूरभाष (Phone) 9946109711 ई.मेल (E-Mail) Thomsonsandsandmetals@gmail.com पिनकोड (Pincode) 686509
फैक्स (Fax)

अनुज्ञप्ति परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।
The licensed premises consist of following facilities.
Portable Magazines B type and D type(02 & 873) fabricated by M/s.Thekkans Engineering & Fabrication Works, Ernakulam

अनुज्ञप्ति समय - समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबंधों के अधीन रहते हुए अनुदत्त की जाती है।
The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Annexures.

- उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए)।
Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
- अनुज्ञप्ति प्राधिकारी द्वारा हस्ताक्षरित इस अनुज्ञप्ति की शर्तें और अतिरिक्त शर्तें।
Conditions and Additional Conditions of this licence signed by the licensing authority.
- दूरी प्ररूप DE-2 Distance Form DE-2.

ह अनुज्ञप्ति तारीख 31 मार्च 2023 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2023.

Copy of Explosive

Annexure No.4

ലൈസൻസ് നം-എ10-1354/ 2020-21- 5		തീയതി.27.04.2020	
<p>എരുമേലി ഗ്രാമപഞ്ചായത്തിൽ നിന്നും 1994 ലെ കേരള പഞ്ചായത്ത് രാജ് ആക്ട് (1994 ലെ 13) 232, 233, 234, 235 എന്നീ വകുപ്പുകളും അതേ തുടർനുള്ള ചട്ടങ്ങളും അനുസരിച്ച് നൽകുന്ന ഫാക്ടറികൾ, വ്യാപാരികൾ, സംരഭങ്ങൾ മറ്റു സേവനങ്ങൾ എന്നിവയ്ക്കായി നൽകുന്ന ലൈസൻസ്</p>			
ലൈസൻസിയുടെ പേരും മേൽവിലാസവും	ശ്രീ. കെ.വി എബ്രഹാം, തോംസൺ സാന്റ്സ് & മെറ്റൽസ്, ചെമ്പകുപ്പാറ, എരുമേലി (കുറ്റിപ്പറമ്പിൽ വീട്, കളത്തിൽപടി, വിജയപുരം, കോട്ടയം)		
സ്ഥാപനത്തിന്റെ പേരും സ്ഥലനാമവും	തോംസൺ സാന്റ്സ് & മെറ്റൽസ്, ചെമ്പകുപ്പാറ, എരുമേലി		
ലൈസൻസ് നൽകിയിട്ടുള്ള പ്രവർത്തനങ്ങൾ	പാറമട നടത്തുന്നതിന്		
കെട്ടിടത്തിന്റെ നമ്പരും വാർഡ് നമ്പരും	വാർഡ് 20, സർവ്വേ നം.120/1-23, ബ്ലോക്ക് നം.24, എരുമേലി തെക്ക് വില്ലേജ്		
ലൈസൻസ് കാലയളവ്	27/04/2020 മുതൽ 31/03/2022 വരെ		
ഇറക്കുമതിയുടെ വില	15000/- രൂപയ്ക്ക് നം - 120020100028 തീയതി 20.04.2020,		
	15000/- രൂപയ്ക്ക് നം - 120020100029 തീയതി 20.04.2020.		
<p>ലൈസൻസ് അനുവദിക്കുന്നതിനായി ഹാജരാക്കിയ നിരാക്ഷേപ പത്രങ്ങളുടെ വിശദാംശങ്ങൾ(നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ അധികാര സ്ഥാനം)</p>	1. Consent deed dated 08.02.2018 between KVT Estate Pvt Ltd and Thomsons Sands & Metals.		
	2. Enviornmetal clearance no. 15/2017 dated 08.02.2017 of State Enviornmental impact Assesment Authority, Kerala (File No. 963/SEIAA/EC4/4473/2015) dated 08.02.2017		
	3. Kerala State Pollution Control Board Consent to operate No. PCB/KTM/ICO/R1 / 4280/2018- VALID UPTO 07.02.2022 OF Enviornmental Engineer, District office, Kottayam.		
	4.Possession for use of Explosive Magazine No. E/SE/KL/22/167(E109969) of Deputy Chief Controller of Explosive, Ernakulam dated 20.06.2018.		
	5 ഫയർ റെസ്ക്വ സർവ്വീസ് കോട്ടയം ഡിവിഷണൽ ഓഫീസറുടെ 28.02.2018 ലെ ബ1. 738/18 നമ്പർ നിരാക്ഷേപ സാക്ഷ്യപത്രം		
	6.License to possess Explosive No. E/SE/KL/22/167(E109969) dated 23.05.2018 of Deputy Chief Controller of Explosive, Ernakulam.		
	7. Foreman License No. Cert No. FR/4188 dated 28.05.2012 issued by Chairman, Board of Mining Examinations.		
	8. പഞ്ചായത്ത് കമ്മറ്റി തീരുമാനം നമ്പർ 20(1) തീയതി 24.04.2020		
	9. ശ്രീ . കെ .വി എബ്രഹാം എന്നയാളുടെ 23.01.2020 തീയതിയിലെ എഗ്രിമെന്റ്		
	10. മറ്റ് വകുപ്പുകളിൽനിന്നും നിയമാനുസരണം വാങ്ങേണ്ട അനുമതികൾ വാങ്ങേണ്ടതാണ്		
	11 ബഹു. പഞ്ചായത്ത് ഡയറക്ടറുടെ 11.11.2019 ലെ PAN/6080/19/C4(DP) നമ്പർ സർക്കുലർ.		
	12 ബഹു. കോടതികളുടെയും കേന്ദ്ര, കേരള സർക്കാരുകളുടെയും കാലാകാലങ്ങളിലുള്ള എല്ലാ ഉത്തരവുകളും നിബന്ധനകളും പാലിച്ചുകൊണ്ട് മാത്രം സ്ഥാപനം പ്രവർത്തിപ്പിക്കേണ്ടതാണ്.		





സെക്രട്ടറി

എരുമേലി ഗ്രാമപഞ്ചായത്ത്

K. T. SHAJI
Secretary
Erumeli Grama Panchayat
P. O.
Phone: 04828 210337

Copy of Panchayath License

Annexure No.5

നോൺ ജുഡീഷ്യൽ		NON JUDICIAL	
<p>On verification the original document I have collected by my self the original document is a stamp duty of Rs. 500/-</p> <p>On the 25th day of October 2018</p> <p>കെ.വ. അബ്രഹാം GOVERNMENT OF KERALA</p>			
e-Stamp Serial No.	: ES00057090963721362E		
Govt. Reference No.(GRN)	: KL007028992201819M		
Department Reference No	: 620T273690901		
Payment Date & Time	: 12/10/2018, 01:04 PM		
Value of Instrument	: Rs 36,02,115/- (Rupees Thirty Six Lakh Two Thousand One Hundred and Fifteen Only)		
Amount of Stamp duty paid	: Rs 500/- (Rupees Five Hundred Only)		
Name of Payee	: K. V. ABRAHAM KUTTIAPPARAMPIL HOUSE,VADAVATHOOR,VADAVATHOOR Kottayam - 686010		
Please write or type below this line.			
<p>FORM H (See Rule 43) QUARRYING LEASE Executant K.V.ABRAHAM</p>			
<p> </p>			
<p>This deed of lease made on this the 20th day of October 2018 between the Governor of Kerala (hereinafter referred to as Sri.K.V.ABRAHAM)</p>			
<p>The authenticity of this e-stamp can be verified at http://keralaregistration.gov.in/ ഈ മുദ്രയുടെ http://keralaregistration.gov.in/ എന്ന വിലാസത്തിൽ പരിശോധിക്കാവുന്നതാണ്.</p>			

2

the "State Government" which expression shall, where the context so admits be deemed to include his successors and assigns) of the one part and **M/s THOMSUN SANDS AND METALS**, Thomsun annex, 4th Floor, Achutha Warriar Lane, M.G.Road, Kochi-682035 (Branch Office at :-Chempakappara, Erumeli P.O., Kottayam District-686509) **Pancard No. AAHFT 6158M** a partnership firm having registration No-2305/2018, Represented by its Managing Partner, **Shri.K.V.ABRAHAM**, Aged 63 years, S/o K.C.Varghese, Business, Residing at Kuttipparampil House, Vadavathoor P.O., Vijayapuram Village, Kottayam Taluk, Kottayam District -686010 (**Aadhar Card No. 2085 8293 6932, Pancard No. ACNPA 8277G**) (hereinafter called the "lessee" which expression shall where the context so admits, include his/heirs, executors, administrators, representatives and permitted assigns) of the other part.

Witnesseth that in consideration of the rents and royalties and lessee's covenants, hereinafter reserved and contained the State Government hereby give on lease to the lessee the land measuring **4.2300 hectares** described in the schedule hereunder and delineated on the plan hereto annexed and therein coloured red (hereinafter called the "said lands") to hold the same for a period of **12 (Twelve)** years commencing from the **20-10-2018** and ending on the **19th** day of **October** 2030 for the purposes of extracting minor mineral and subject to the terms and conditions contained in the Kerala Minor Mineral Concession Rules, 2015 (hereinafter referred to as "the Rules") and to the terms and conditions hereinafter appearing

Sri.K.V.ABRAHAM

Sr. GEOLOGIST
DISTRICT OFFICE
DEPT. OF MINING AND GEOLOGY
COLLECTORATE P.O. KOTTAYAM-686

Copy of Lease

Annexure No.6

**TEST REPORT**

Test Report No: 20211209/R082	Date: 16-12-2021	Page 1 of 1
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CUSTOMER DETAILS	
Customer Name & Address	Mr.K V Abraham M/S Thomsun Sands & Metals Pvt.Ltd, Erumely,Kanjirappally, Kottayam District
Customer Reference	Test Request dt 09-12-2021


SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	20211209/S082
Sample Name	Ambient Air	Sample Received on	10-12-2021
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	11-12-2021
Sampled by	Lab Authorized Sampler	Test Completed on	15-12-2021
DETAILS OF SAMPLING			
Sampling Location	South side	Date of Sampling	09-12-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	74%

SAMPLING SITE DETAILS			
Survey No.	120/1-23		
Village	Erumely South	Taluk	Kanjirappally
District	Kottayam	State	Kerala

TEST RESULTS - CHEMICAL PARAMETERS					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ Standards
1	Particulate Matter, PM ₁₀	IS 5182 (Part 23):2006	µg/m ³	68.4	Max 100
2	Particulate Matter, PM _{2.5}	EPA 40 CFR (Part 50) Appendix - L	µg/m ³	37.5	Max 60
3	Sulphur Dioxide as SO ₂	IS 5182 (Part 2): 2001 RA 2017	µg/m ³	< 2.00	Max 80
4	Oxides of Nitrogen as NO ₂	IS 5182 (Part 6): 2006 RA 2017	µg/m ³	< 2.00	Max 80

Remarks:

End of Report


Shency Joy
Dy.TM-Chemical
 Checked by:




Laiju P.N.
Laboratory Head
 Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

Standard^S Environmental & Analytical Laboratories
 Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board.
 K.J. Tower, Pathalem, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
 Web: www.sealabs.in, E-mail: sealab@gmail.com

Ambient Air

Annexure No.7

**TEST REPORT**

Test Report No: 20211209/R083	Date: 16-12-2021	Page 1 of 1
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CUSTOMER DETAILS	
Customer Name & Address	Mr.K V Abraham M/S Thomsun Sands & Metals Pvt.Ltd, Erumely,Kanjirappally, Kottayam District
Customer Reference	Test Request dt 09-12-2021

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	20211209/S083
Sample Name	Ambient Noise	Monitoring Commenced on	09-12-2021/ 06:00
Monitoring Location	North Side	Monitoring Completed on	10-12-2021/ 06:00
Test Method	IS 9989:1981 RA:2008	Monitored by	Lab Authorized Sampler

MONITORING SITE DETAILS			
Survey No.	120/1-23		
Village	Erumely South	Taluk	Kanjirappally
District	Kottayam	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	38.5	14:00	51.6	22:00	37.3
07:00	41.3	15:00	52.0	23:00	35.0
08:00	45.7	16:00	53.2	24:00	37.5
09:00	49.2	17:00	53.6	01:00	38.3
10:00	51.6	18:00	48.0	02:00	37.9
11:00	54.8	19:00	44.5	03:00	38.6
12:00	52.0	20:00	40.5	04:00	37.5
13:00	51.2	21:00	40.0	05:00	39.3

TEST RESULTS			
Sl. No.	PARAMETERS	UNIT	RESULT
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	50.1
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	37.8

Remarks:

End of Report

Shency Joy
Dy.TM-Chemical
Checked by:



Laiju P.N.
Laboratory Head
Authorized Signatory

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Standard^S Environmental & Analytical Laboratories

Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: sealab@gmail.com

Result of ambient Noise

Annexure No.8

**TEST REPORT**

Test Report No: 20211209/R084	Date: 16-12-2021	Page 1 of 2
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CUSTOMER DETAILS	
Customer Name & Address	Mr.K V Abraham M/S Thomsun Sands & Metals Pvt.Ltd, Erumely,Kanjirappally, Kottayam District
Customer Reference	Test Request dt 09-12-2021

SAMPLE DETAILS			
Product Category	Water	Sample Code	20211209/S084
Sample Name	Ground Water	Sample Received on	10-12-2021
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	5 °C
Sample Quantity& Packing	2L & 100ml Plastic Bottle	Test Commenced on	11-12-2021
Sampled by	Lab Authorized Sampler	Test Completed on	15-12-2021

DETAILS OF SAMPLING			
Sample Source	Open Well	Date of Sampling	09-12-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	29 °C

SAMPLING SITE DETAILS			
Survey No.	120/1-23		
Village	Erumely South	Taluk	Kanjirappally
District	Kottayam	State	Kerala

TEST RESULTS- CHEMICAL PARAMETERS					
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
1	Colour	IS 3025 (Part 4):1983 RA 2017	Hazen	1	Max 5
2	Odour	IS 3025 (Part 5):2018	---	Agreeable	Agreeable
3	Turbidity	IS 3025 (Part 10):1984 RA 2017	NTU	0.2	Max 1
4	pH	IS 3025 (Part 11):1983 RA 2017	---	7.26	6.50 – 8.50
5	Conductivity	IS 3025 (Part 14):1984 RA 2019	µS/cm	355	---
6	Total Dissolved Solids	IS 3025 (Part 16):1984 RA 2017	mg/L	228	Max 500

Shency Joy
Dy.TM-Chemical
Checked by



Salini T.S.
Microbiologist
Authorized Signatory

Laiju P.N.
Laboratory Head
Authorized Signatory

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Standard^S Environmental & Analytical Laboratories

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K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

Web: www.sealabs.in, E-mail: seaalab@gmail.com

**TEST REPORT**

Test Report No: 20211209/R084	Date: 16-12-2021	Page 2 of 2
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TEST RESULTS- CHEMICAL PARAMETERS					
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
7	Total Hardness as CaCO ₃	IS 3025 (Part 21):2009 RA 2019	mg/L	124	Max 200
8	Calcium as Ca	IS 3025 (Part 40):1991 RA 2019	mg/L	28.8	Max 75
9	Magnesium as Mg	IS 3025 (Part 46):1994 RA 2019	mg/L	12.7	Max 30
10	Chloride as Cl	IS 3025 (Part 32):1988 RA 2019	mg/L	15.0	Max 250
11	Total Alkalinity as CaCO ₃	IS 3025 (Part 23):1986 RA 2019	mg/L	87.6	Max 200
12	Iron as Fe	IS 3025 (Part 53):2003 RA 2019	mg/L	0.19	Max 1
13	Sulphate as SO ₄	IS 3025 (Part 24):1986 RA 2019	mg/L	10.6	Max 200

TEST RESULTS- BIOLOGICAL PARAMETERS					
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
1	Total Coliform Bacteria	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml
2	E coli	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml

Remarks:

End of Report

Shency Joy
Dy.TM-Chemical
Checked by



Salini T.S.
Microbiologist
Authorized Signatory

Laiju P.N.
Laboratory Head
Authorized Signatory

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Web: www.sealabs.in, E-mail: seaalab@gmail.com

Result of drinking water