THIRD COMPLIANCE REPORT

ENVIRONMENTAL CLEARANCE ORDER NO:

763/SEIAA/EC1/447/2015

DT. 04-03-16

TO

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA) FOR PROPOSED QUARRY PROJECT AT SY. NO. 163/2,3,4,7,8, 164/1-2, 1-4, KARAVAROM PANCHAYATH, CHIRAYINKIL TALUK, THIRUVANANTHAPURAM DISTRICT, KERALA.

BY

M/S M.S BUILDING PRODUCTS, PALACHIRA P.O., VARKALA, THIRUVANANTHAPURAM, KERALA – 695143 FOR THE PERIOD APRIL 2019 – SEPTEMBER 2019

CONTENTS

INTRODUCTION

The stone quarry situated at Sy. No. 163/2,3,4,7,8, 164/1-2,1-4 , (2.6694 Ha) Karavarom Panchayat, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala. The quarry project was accorded with environmental clearance by State Environment Impact Assessment Authority on 4-3-2016. The project received all statutory permissions and commenced mining activities on 18-04-2018. Thethird compliance report for the period April 2019 to September 2019is here by submitted. The report has two parts i) Specific Conditions ii) General Conditions. The compliance to the conditions is mentioned in the report.

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

SPECIFIC CONDITIONS

1. Based on an overall evaluation of the site, the quarry operations may be recommended only in the northern block. The southern block is not recommended due to presence of a) narrow band of govt. land with a valley like configuration, b) higher OB thickness, c) presence of a row of dwelling units in the vicinity on the southern side and d) as it is yet to be excavated.

   COMPLIANCE: The project site is located in the northern block.

2. Fencing should be provided all around the lease area.

   COMPLIANCE: Fencing with barbed wires are provided around the quarry. The picture is shown in the Annexure1.

3. Over burden should be stored in the designated places (not here and there) and provided with proper supporting walls.

   COMPLIANCE: The overburden is stored at the place with slope less than 45 degree and height around 9m. Annexure2

4. Storm water drainage from the upper part must be channelized properly and let out through well-defined channels after clarification.

   COMPLIANCE: Garland drains are provided to channelize the storm water into the RWH pond. Annexure3

5. The RWH structure present as an abandoned quarry in the adjacent land may not be sufficient in the long run. A proper RWH body must be provided in the lease area with water clarification mechanism and maintained throughout. Periodic desiltation is mandatory.

   COMPLIANCE: Our project site is merged with the present RWH structure to widen the total area of the RWH pond to accommodate more rainwater. A new RWH structure has been built inside the site to harvest more water. A desiltation tank will be constructed soon.

6. The approach road is of very bad state due to frequent travel of trucks. There should be a collective effort by the nearby quarry owners to maintain the road motorable as they are used by general public also.

   COMPLIANCE: The quarry owners association has invested around Rs. 55 lac to tar the roads. Some portions were concreted. The roads were beautifully maintained.

However, the panchayat has recently dug up and destroyed the roads,to lay drinking water pipe line. According to the panchayat, they have approved a tender to re-tar the road , which is still due.

7. To the extent possible local bio diversity management committee shall be involved in the environmental management/restoration activities.

   COMPLIANCE: We have contacted the panchayat and came to know that bio diversity management committee is yet to start functioning. We would accommodate their recommendations once they are functioning.

8. Reclamation and eco-restoration should be done by planting native species.

   COMPLIANCE: We have identified local species as Acacia and Macaranga and would be planted along the buffer zone.Till date a total of 50 Acacia and 300 yellow bamboo saplings, 20 Mango saplings are planted.

GENERAL CONDITIONS

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

   COMPLIANCE: The details of rain water harvesting pond is provided within the site to capture the rain water falling in the project area is provided at Annexure 4.3

2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.

   COMPLIANCE:EMC has been formed and made functional. The cell is targeting to plant 1000 shurbs and trees in the quarry.

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.

   COMPLIANCE: There is natural vegetation alongside access roads. All the trees and shurbs are preserved. Annexure No 5

4. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.

   COMPLIANCE:A 5kw system is already installed and obtained permission for another 2kw. The installation is complete. Annexure No 24.

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

   COMPLIANCE: Sprinklers are installed in the crusher unit to contain dust emission during Crushing & Screening operation. Other areas (tarred road and project area) are watered by sprinkler system installed in Tanker Lorry at regular intervals. The photos are provided in the Annexure 6

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

COMPLIANCE: Assurance in the form of affidavit was submitted to SEIAA Keralastating that eco-restoration including the mine closure plan will be done at our expenses. The copy ofthe same is attached at Annexure No. 7

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 area eco-friendly, if no other specific condition on reclamation of pit is stipulated in the E.C

COMPLIANCE: Would be complied towards closure of the entire mine. Following the closure of the mine, ten percentage of the excavated pit area will be retained as water storage area. In the remaining area, it is planned to develop a green belt with indigenous vegetation after reclaimed with stacked dumping and overburden. Grass and Shrub species with strong root system will be planted in the areas prone to erosion especially at the foot of the hill. However, the natural vegetation in the upper lease area is preserved.

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

COMPLIANCE: Funds are been saved and are dispersed in sectors like education, housing, health and disaster fund of Chief Minister. As per the condition Rs. 1,00,000/- has to be dispersed every year. However, we have dispersed an amount of Rs. 5,86, 420/- within 3 years of operation. The expenditure report is given in Annexure 8

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, marking, etc) shall be protected at all times and shall be conspicuous.

COMPLIANCE: The area is fenced with barbed wires to a height of 4ft and safety boards are hanged. The photographs are given in the Annexure 1

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

COMPLIANCE: Warning boards indicating blasting time are fixed and siren is installed. Annexure9

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

COMPLIANCE: Proper Acoustic enclosures are provided to crusher.

12. Quarrying activities should be limited to day times as per KSPCB guidelines /specific conditions.

    COMPLIANCE: Quarry working time is from 7.00am to 5.00pm and is strictly limited to day time.

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

    COMPLIANCE: Controlled Blasting is done using blasting mat. It is ensured that the holes are not over charged and stemming is done properly. The holes are spaced 1 to 1.5m and delay detonators are used for blasting. The blasting operation is carried out by an experienced blaster man.

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

    COMPLIANCE: Blaster man with certificate of competency and good experience is carrying out blasting operation.

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

    COMPLIANCE: The access roads are tarred and water is sprinkled to contain the dust becoming airborne. Annexure 10

16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan Specific conditions.

    COMPLIANCE: The overburden is maintained at a slope less than 45degree and height about 7m. Annexure 2

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.

    COMPLIANCE: Would comply

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

COMPLIANCE: Mats are provided and spread on the surface before blasting. Annexure 11

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

COMPLIANCE: Would be complied.

20. No mining operations should be carried out at places having a slope greater than 45 degree.

COMPLIANCE: Would be complied.

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.

COMPLIANCE: Proper Acoustic enclosures with blocks are provided to reduce sound amplification.

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

COMPLIANCE: Safety gears including helmet, shoes, ear muffs and safety belts are provided at the site.

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

COMPLIANCE: Garland drains are dug out and water is channelized to water harvesting pond.

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

COMPLIANCE: The materials are covered with tarpaulin while transporting to avoid dust becoming air borne.The photos are provided in the annexure 12

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

COMPLIANCE: The top of the lease was exposed rocks. Most of the natural vegetationis preserved. However, the buffer zone area will be vegetated with local varieties of trees and shurbs.

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

COMPLIANCE: Used oil is collected in large containers and sold for recycling.

27. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.

COMPLIANCE: Explosive storage magazine room is constructed as per the direction of the department at an isolated place. Annexure 13

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

COMPLIANCE: A minimum buffer distance of 100m is maintained from dwelling units.

29. 100m buffer distance should be maintained from forest boundary.

COMPLIANCE: There are no forest boundaries nearby. The nearest reserve forest is 43km away.

30. Consent from Kerala State Pollution Control Board under water and Air Acts should be obtained before initiating mining activity.

COMPLIANCE: The necessary consents are obtained from PCB. The copy is given in the Annexure 14

31. All other statutory clearances should be obtained, as applicable , by project proponents from the respective competent authority including that for blasting and storage of explosives.

COMPLIANCE: All the statutory clearances are obtained and copies are given in the Annexure 14,15, &22.

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.

COMPLIANCE: Would comply.

33. The Authority reserves the right to add additional safeguardmeasures 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.

COMPLIANCE: Would comply if anything specified.

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) Act1986, the Public Liability (Insurance) Act 1991 and EIA Notification 2006.

COMPLIANCE: Would comply.

35. The project proponent should advertise in at least two local newspapers widely circulatedin 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.orgThe 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.

    COMPLIANCE: An advertisement in two local newspapers regarding the according of environmental clearance to the quarrying activity was carried out and the copy of the same was submitted at SEIAA Kerala. The copy of the advertisement is provided in the Annexure 16

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 theproposal. The Environmental Clearance shall also be put on the website of the company by the proponent.

    COMPLIANCE: A copy of the environmental clearance was submitted to Karavarom panchayat office.No suggestions / Representation received so far from anybody.The environmental clearance is uploaded in the website www.msbuildingproducts.com

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.

COMPLIANCE: The second compliance report is being submitted to Department of Environment and Climate Change, Govt. of Kerala and to the regional office of

Ministry of Environment and Forests, Govt. of India both in hard copy and by mail and also by the CD soft copy.

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.

COMPLIANCE: The board of prescribed specification with details is erected at the site. The photos of the same is enclosed in the Annexure 17.

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.

COMPLIANCE: Affidavit is submitted during application for Environmental Clearance at SEIAA. Annexure 7

40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, as applicable.

COMPLIANCE: Would comply.

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.

    COMPLIANCE: No natural course or springs originating in the mine. Natural flow of rain water is unobstructed.

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.

COMPLIANCE: Ambient air quality is tested and found to be satisfactory. Water sprinkling is done using truck affixed with a sprinkler system at loading and unloading points. Annexure18

43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoilshall 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 45º The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface

run of. 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.

COMPLIANCE: Would comply.

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.

COMPLIANCE: Would comply.

45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levelsof $PM_{10}$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.

COMPLIANCE: Water sprinkler system is installed on the roof and also in a truck. They are operated regularly to reduce air pollution.

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.

COMPLIANCE: Water sprinkler system is installed on the roof and also in a truck. They are operated regularly to reduce air pollution. Two Industrial Dust Extractors are also fixed at crushing unit to suck the airborne dust and store them in bags. Annexure 19.

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

COMPLIANCE: Acoustic enclosures using blocks are provided to keep noise level low.

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.

COMPLIANCE: An environmental monitoring cell is formed and made functional. The details are provided below;

a. Head of the monitoring cell, Managing partner of the company Mr. S.S Sreekumar
b. Name of the Environmental officer in charge Mr. Naveen Sreekumar
c. Name of the Asst. Officer of Environment, Health and Safety Mr. Samkutty T K
e. Name of Environment Consultant M/s Globetek
f. Address of Environmental laboratory M/s Poluchem Laboratory Pvt.Ltd

49. The funds earmarked for environmental protection measures and CSR activate 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.

COMPLIANCE: As per EC conditions, an amount of Rs. 1,00,000/- has to be spent on CSR measures per year for 5 years. We have dispersed a total of Rs. 5,86,420 within 3 years of operation. The details are in the Annexure 8

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.

COMPLIANCE: Would comply.

51. Any appeal against this Environment 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.

COMPLIANCE: Would comply.

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.

COMPLIANCE: Would comply.

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.

COMPLIANCE: Would comply.

54. The above conditions shall prevail not withstanding 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.

COMPLIANCE: Would comply.

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.

COMPLIANCE: Would comply.

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.

COMPLIANCE: Would comply.

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

COMPLIANCE: Would comply.

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'

COMPLIANCE: All vehicles have fitness certificate, insurance and PUC certificate.

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.

COMPLIANCE: The daily water requirement is met by using water from RWH pond.

60. Regular monitoring of flow rates and water quality up stream and down stream 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.

COMPLIANCE: There are no spring or perennial nallahs in and around the mine.

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.

COMPLIANCE: Medical Examination (blood, sugar, cholesterol, chest x rays) of the workers are done at Gokulam Medical College, Venjaramoodu on November 2017. No dust related allergies or diseases are diagnosed.

ANNEXURE

1. BARBED WIRE FENCE

2. OVERBURDEN

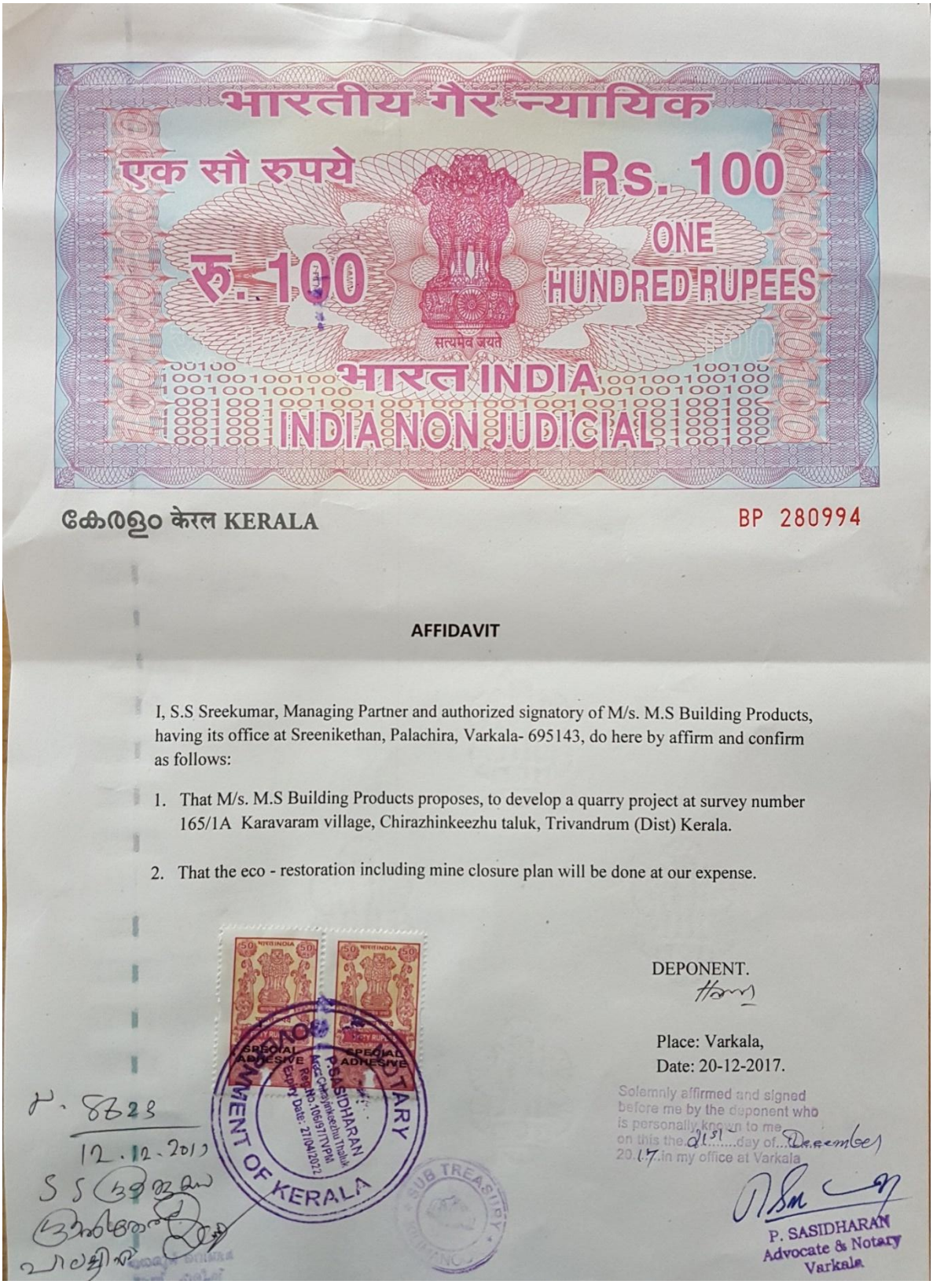
3. GARLAND DRAINS

4. RAINWATER HARVESTING POND

5. AVENUE TREES

6. SPRINKLERS

7. AFFIDAVIT



भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

കേരളം केरल KERALA BP 280994

AFFIDAVIT

I, S.S Sreekumar, Managing Partner and authorized signatory of M/s. M.S Building Products, having its office at Sreenikethan, Palachira, Varkala- 695143, do here by affirm and confirm as follows:

1. That M/s. M.S Building Products proposes, to develop a quarry project at survey number 165/1A Karavaram village, Chirazhinkeezhu taluk, Trivandrum (Dist) Kerala.

2. That the eco - restoration including mine closure plan will be done at our expense.

DEPONENT.

Place: Varkala,
Date: 20-12-2017.

Solemnly affirmed and signed before me by the deponent who is personally known to me on this the 21st day of December 20 17 in my office at Varkala

P. SASIDHARAN
Advocate & Notary
Varkala

P. SASIDHARAN NOTARY GOVERNMENT OF KERALA

11. C.S.R REPORT

SI. NO	SECTOR	BENEFICIARY	CHANNEL	AMOUNT
1	EDUCATION	GOVT. UP SCHOOL Development Fund	DIRECT	Rs. 3,000
2	DISASTER MANAGEMENT	FLOOD VICTIMS (C.M.D.R.F)	CM/DISTRICT COLLECTOR/TAHASILDAR	Rs. 2,00,000
		(TRANSPORTATION AND RELIEF MATERIALS)	DIRECT	Rs. 90,000
3	EDUCATION	GOVT, HSS NEDUMPARAMBU (Computerization)	DIRECT	Rs. 32,000
4	MEDICAL	PALLIATIVE CARE SCHEME (Bed Ridden Patients)	NAGAROOR PANCHAYAT	Rs. 18, 219
5	EDUCATION	GOVT U.P SCHOOL, VADASSERI (STEEL WATER BOTTLES FOR 70 KIDS)	NAGAROOR PANCHAYAT	Rs. 11,760
6	SOCIAL	MARRIAGE OF AN ORPHAN GIRL, ,Ms. ANJANA, PULIKUZHI, TEVALAKADU	CRUSHEROWNERS ASSOCIATION, NELLIKKUNU UNIT	Rs. 1,00,000/-
7	HOUSING	COMPLETE RENOVATION OF HOUSE OF MENTALLY RETARTED PATIENT, Mr. MOHANAN K, KATTIL VEEDU, 56Yrs.	DIRECT	Rs. 88,537
8	HOUSING	MATERIALS SUPPLIED FOR CONSTRUCTION OF HOUSE FOR A HOMLESS KIDNEY PATIENT	MADAVOOR ANIL, CPM AREA SECRETARY	Rs. 42,904
TOTAL				Rs. 5,86,420/-

12.WARNING SIREN& SIGN BOARD

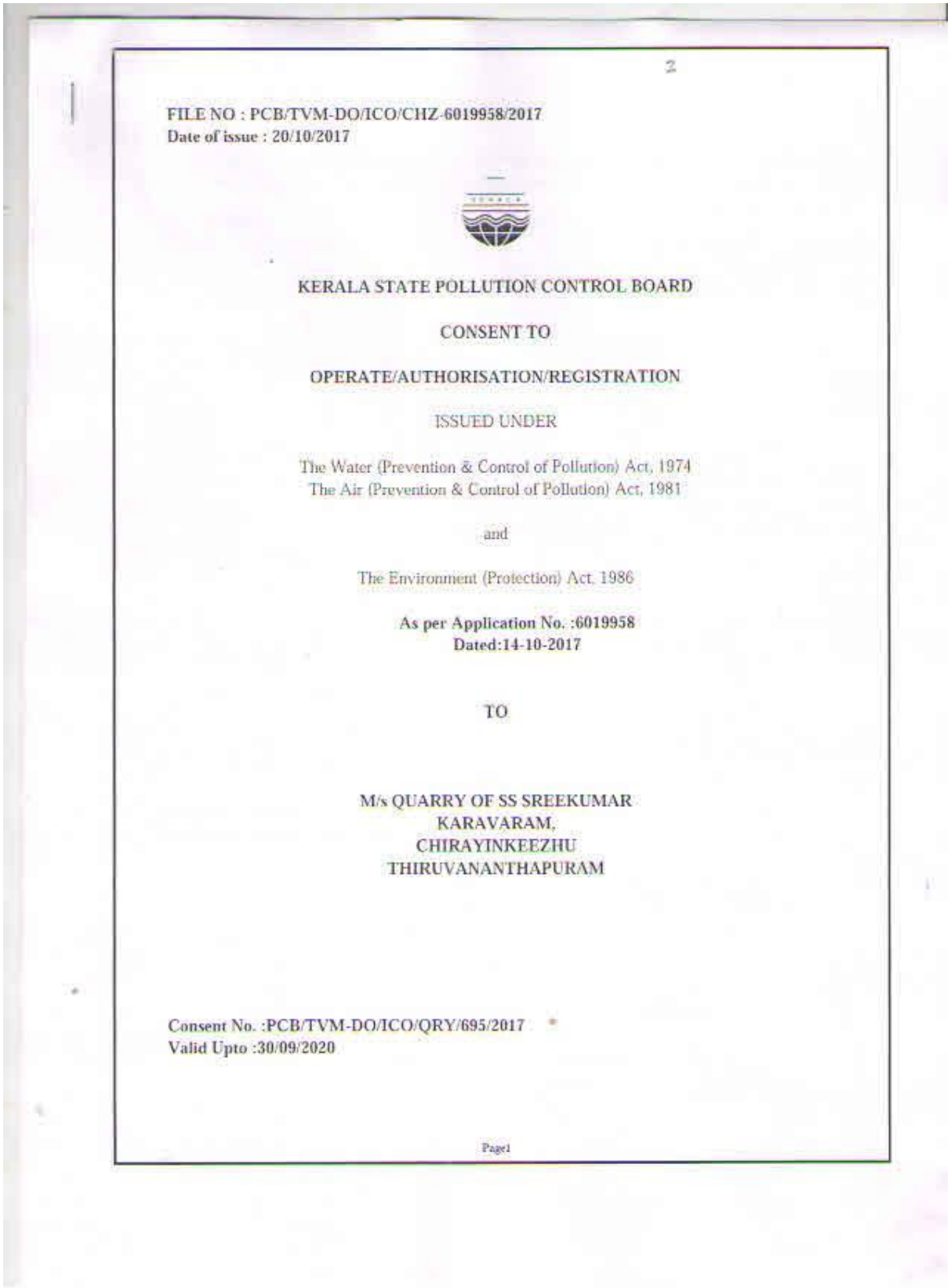
13. ACCESS ROADS

14. BLASTING MATS

15. TRANSPORTATION IN VEHICLE

16. MAGAZINE ROOM

17. POLLUTION CONTROL BOARD LICENSE



2

FILE NO : PCB/TVM-DO/ICO/CHZ-6019958/2017
Date of issue : 20/10/2017

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. :6019958
Dated:14-10-2017

TO

M/s QUARRY OF SS SREEKUMAR
KARAVARAM,
CHIRAYINKEEZHU
THIRUVANANTHAPURAM

Consent No. :PCB/TVM-DO/ICO/QRY/695/2017
Valid Upto :30/09/2020

Page1

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	30/09/2020
2	Name and Address of the establishment	QUARRY OF SS SREEKUMAR KARAVARAM. CHIRAYINKEEZHU THIRUVANANTHAPURAM 695605
3	Communication	Telephone :0-9526584891 Fax : E-mail:buildingproducts11@gmail.com
4	Occupier Details	S S SREEKUMAR OWNER SREENIKETHAN, PALACHIRA P.O VARKALA TRIVANDRUM
5	Local Body	Karavaram
6	Survey Number	163/2, 163/3, 163/4, 163/7, 163/8, 164/1-4, 164/1-2
7	Village	KARAVARAM
8	Taluk	CHIRAYINKEEZHU
9	District	THIRUVANANTHAPURAM
10	Capital Investment(Rs in Lakhs)	68 Lakhs
11	Scale	Small
12	Category	RED
13	Annual fee(Rs) Total Fee remitted(Rs)	12000/- 42000/
14	RAW MATERIAL	PRODUCTS
	Rock Quarrying @ 100 Metric Tonnes	Rock Quarrying @ 100 Metric Tonnes
15	Total Power Required (HP)	NA

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: 500 L/D

2.3 Effluent generation:

2.4 The characteristics of effluent after treatment shall confirm to the following tolerance limits:

SI.NO.	Characteristics	Unit	Tolerance Limit	
			Sewage	Trade Effluent

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2.5 Mode of disposal of treated effluent: NA

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)

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

Mode of	
Storage	**Disposal**

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

5. SPECIFIC CONDITIONS

Page3

5.1 The location of the quarry shall be as per the approved drawing form village office attached along with this consent. Quarrying area is restricted to the land having valid lease and EC in resurvey nos 163/2, 163/3, 163/4, 163/7, 163/8, 164/1-4, 164/1-2 for an area of 2.6694 hectares in Karavarom Village, Varkala Taluk, Thiruvananthapuram District, Kerala. The consent is granted based on Environmental clearance No 763/SEIAA/EC1/447/2015 dated 04/03/2016.

5.2 This consent unless withdrawn earlier shall be valid up to 30/09/2020. If the operation of the quarry is to be continued after 30/09/2020 fresh application has to be submitted through online site kmcmms.nic.in along with valid lease/permit from Department of Mining & Geology, 3 months in advance to the date of expiry of validity.

5.3 After excavation at the site is completed, the land may be reclaimed or used for rain water harvesting with protective barriers/any other suitable purpose like aquaculture approved by the authority.

5.4 The consent issued is subject to the conditions specified in the clearances issued by the Mining and Geology Department and Explosive Department as per the provisions of the relevant statutes.

5.5 It is the responsibility of occupier to ensure that quarrying activities are restricted to only area shown in the attached drawing and at a distance more than 100 m from the nearby residences and public roads having vehicular traffic .

5.6 All the necessary control measures provided should be maintained properly to ensure that the system is adequate to control the air and water pollution caused by the functioning of the unit within the limit.

5.7 It is the responsibility of occupier to maintain minimum distance of 100m shall be maintained from the boundary of quarry operation area to existing residential buildings, places of worship, public buildings, public road having vehicular traffic, river or lake, railway line and bridges.

5.8 Boundary of quarrying area shall be fenced and demarcated.

5.9 Fugitive emission from the quarry premises and road leading to quarry shall be suppressed using water sprinkling.

5.10 The suspended particulate matter (SPM) at boundary of the premises of the quarry shall not exceed the following limit applicable to that area as per the National Ambient Air Quality Standards.

a) The PM10 in ambient air at the boundary shall not exceed 100 µg/m3

b) The PM2.5 in ambient air at the1m outside the boundary shall not exceed 60 µg/m3.

5.11 Regular wetting of the roads in the premises of the quarry and approach roads near the quarry shall be done for avoiding excessive dust emission within and outside the boundary of the unit.

5.12 Any change in the particulars furnished in the references and/or in the identity of the occupier / authorized agent shall be intimated to the Board within a week.

5.13 The sound level measured at 1.0 m outside the boundary shall not exceed the limit as per the Ambient Air Quality Standards in respect of Noise.

5.14 The validity of this consent may change subjected to the order of the Honorable Supreme Court/High Court / NGT in related cases, or the new orders issued by the government or other competent authority.

5.15 The consent issued from the Board will be valid only during the period when statutory or necessary clearances from other concerned authorities are valid. The consent issued from the Board is only with respect to the powers vested under the Water Act, 1974, Air Act, 1981 and Rules there under. The operation of the unit shall be commenced only after obtaining clearances from all concerned authorities.

5.16 Quarrying operations shall be started only after obtaining the D & O license under the Kerala Panchayath Raj Act from the concerned Local Self Government Institution and submitting a copy of the same to the District Office of the Board.

5.17 The quarry should not be operated between 6.00 p.m. and 6.00 a.m. Products shall be transported with proper cover and after wetting to prevent spreading of dust.

Page4

5.18 Quarrying area shall be restricted in the area shown in the drawing attached.
5.19 Arrangements of rain water harvesting including open well / Bore well/ Ground water recharging shall be provided within one month.
5.20 Suitable species of trees shall be planted and maintained within and along the periphery of the premises, forming a green belt to improve the environment.
5.21 This consent is granted on the basis of the affidavit and other documents furnished by the applicant. If the statement furnished in the affidavit /document is found false, the consent issued will be withdrawn/cancelled.
5.22 If any statement in the affidavit furnished along with the application is found false, the Consent issued will be revoked.

Biju .B
Digitally signed by Biju .B
Date: 2017.10.21 14:12:32 +05'30'

DATE :20/10/2017

Environmental Engineer
SIGNATURE & SEAL OF ISSUING AUTHORITY
District office, Thiruvananthapuram

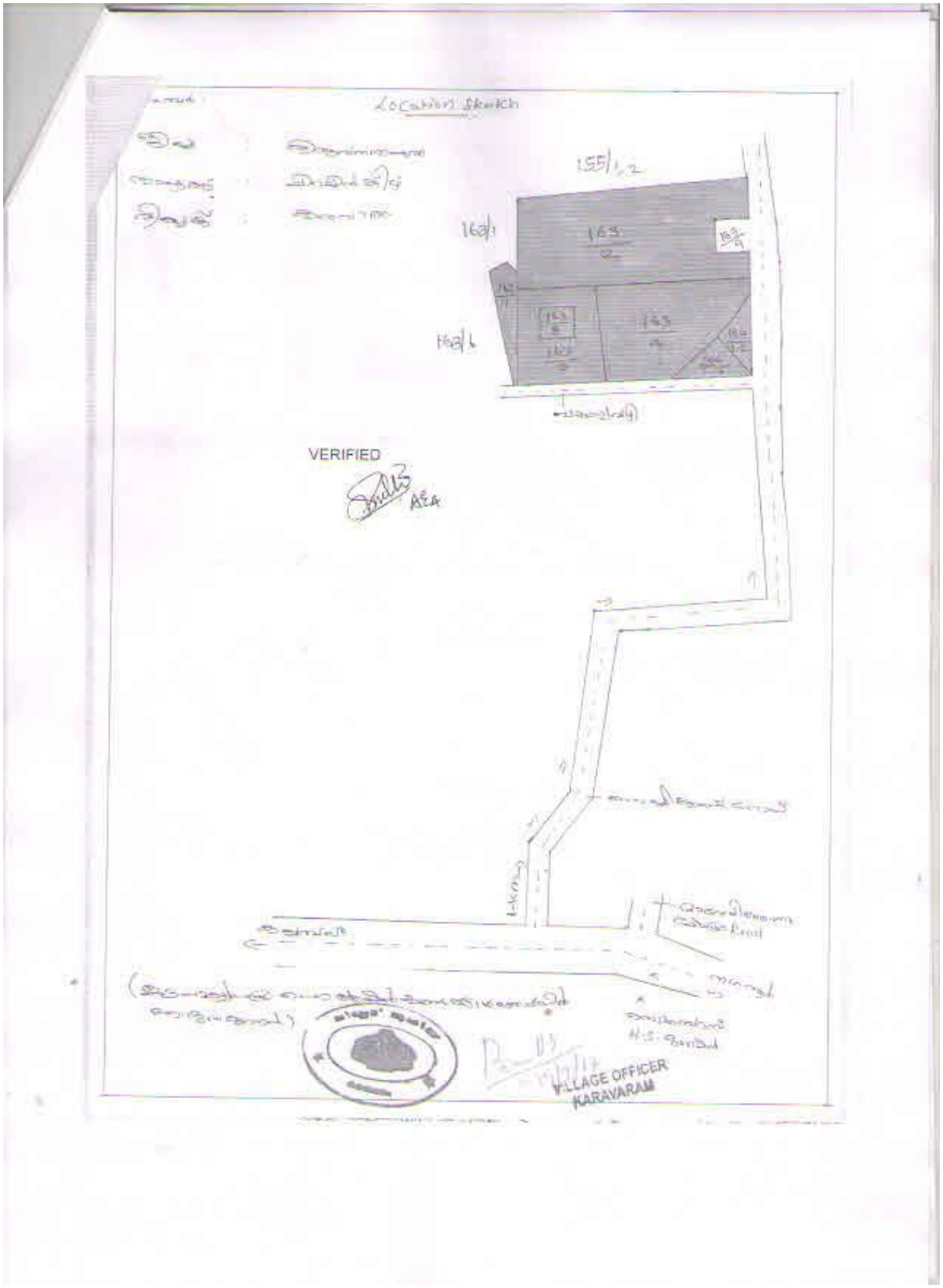
OFFICE SEAL

To

QUARRY OF SS SREEKUMAR
KARAVARAM
CHIRAYINKEEZHU
THIRUVANANTHAPURAM

Note:-
1. This digitally signed document is legally valid as per the Information Technology (IT) Act,2000.
2. The authenticity of this document can be verified from the web site of Kerala State pollution Control Board at http://krocmms.nic.in.In the said site click on "Consent Granted" (marked in red letters). A new window will appear. Type the From Date and To Date as the date in digital signature, Select dealing groups as DO TVM and click on 'Search'. A list of consents will be displayed. Select the desired consent with name/application no. 6019958

Page5


Location Sketch
155/1,2
163/1
163/2
VERIFIED
VILLAGE OFFICER
KARAVARAM

18.PANCHAYAT LICENSE

നമ്പർ: 2/2019-2020/A3/A3/1048/19 തീയതി: 11/04/2019

കരവാരം ഗ്രാമപഞ്ചായത്ത്

(ഐഎസ്ഒ 9001-2015 ഓഫീസ്)കരവാരം പി.ഒ., തിരുവനന്തപുരം (ജില്ല)

പിന്: 695605, ഫോണ്: 4702690260, ഇ-മെയില്: karavarampanchayat@gmail.com

വ്യവസായം, വാണിജ്യം, സംരഭകത്വം, മറ്റ് സേവനങ്ങൾക്കുള്ള ലൈസൻസ്

(കെ.പി.ആർ ആക്ട് സെക്ഷൻ 232, FACTEOS ലൈസൻസ് ചട്ടങ്ങൾ 1996)

ലൈസൻസിയുടെപേര്	S.S Sreekumar		
ലൈസൻസിയുടെ മേൽവിലാസം	Managing Partner,M.S Building Products,Sreenikethan,Palachira(p.o),Varkkala		
സ്ഥാപനത്തിന്റെ പേരും, സ്ഥലനാമവും	M.S Building Products Kunchakkavila		
ലൈസൻസ് നൽകിയിട്ടുള്ള പ്രവർത്തനങ്ങൾ	ROCK QUARRYING		
വാർഡ് നമ്പർ/കെട്ടിട നമ്പർ	VI/sy no.163/2,3,4,7,8,164/1-4,1-2,165/3,4-2,4-1-2,165/4-1-1,165/4-1		
ലൈസൻസ് കാലാവധി	01/04/2019 മുതൽ 31/03/2020 വരെ		
	തുക	രസീത് നമ്പർ	തീയതി
ലൈസൻസ് ഫീസ്	5000 /- രൂപ	119010100216	11/04/2019
മോട്ടോർ ഫീസ്		119010100216	11/04/2019
തൊഴിൽ നികുതി	2500 /- രൂപ	119010100217	11/04/2019
ലൈസൻസ് അനുവദിക്കുന്നതിന് ഹാജരാക്കിയ നിരാക്ഷേപ പത്രങ്ങളുടെ വിശദാംശങ്ങൾ (നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ അധികാര സ്ഥാപനം)	1. EC NO.39/2016 0f SEIAA Valid upto 3/3/2021(no.763/SEIAA/ECI/447/2015Dtd.4/3/2016).(2).PCB consent to operate no.PCB/TVMDO/ICO/QRY/695/2017Valid upto 30/9/2020&QRY/416/18Valid upto 04/03/2021. 2. Renewal Explosives licence No.E/SC/KL/22/785/(E36437)Dtd22/2/2019 of Petrolium&Explosives safety orgn.valid upto 31/3/2024. (2) Quarrying lease valid upto 17/4/2028 3. proceedings ofthe Director of Mining &Geolagy Dept.no.20/2018-19/6475/M3/2017/DMG related to Quarrying lease, valid upto 8/4/2028 and Letter of intent no.1420/DOT/ML/2018 Dtd.27/7/2018. (2)Possession Certificate & Location Certificate from village		

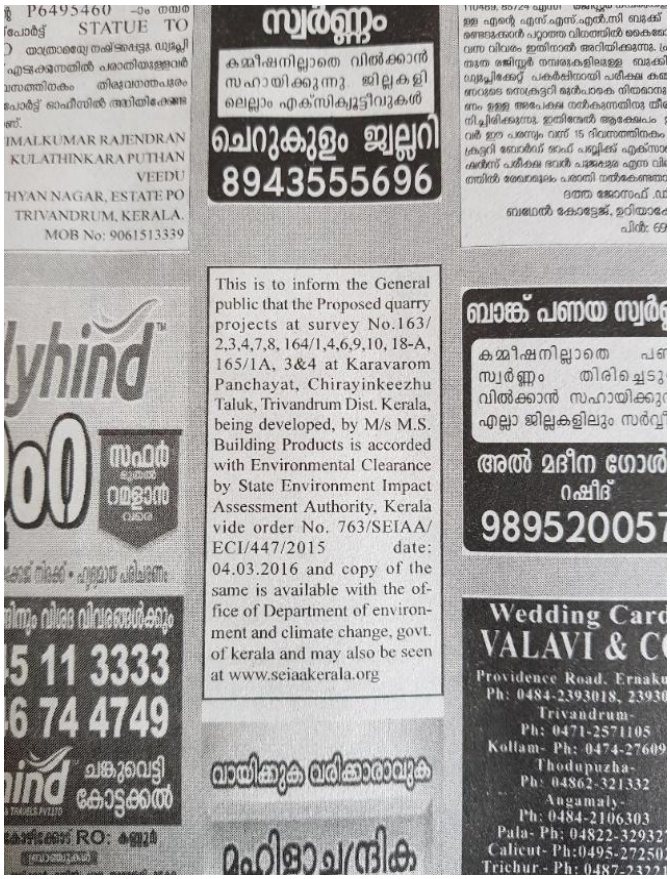
ഓഫീസ് മുദ്ര

സെക്രട്ടറി

കരവാരം ഗ്രാമപഞ്ചായത്ത്

SECRETARY
Karavaram Grama Panchayat
Karavaram P.O. Thiruvananthapuram (Dist.)

19.NEWSPAPER ADVERTISEMENT



20. EC BOARD


MINING AREA
KEEP OUT
TRESSPASSERS WILL BE
PROSECUTED
M.S.BUILDING PRODUCTS
QUARRY OF - S.S.SREEKUMAR
KARAVARAM VILLAGE , KARAVARAM PANCHAYAT
CHIRAYINKEEZHU.TALUK , THIRUVANATHAPURAM.DIST
SURVEY NO: 165/1A
EC NO : 763/SE1AA/EC1447/2015
VALIDITY : 2021

21. AIR, WATER AND SOIL TEST REPORT

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104
Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com
ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Client Name & Address	Certificate No:	PL/RT/SO/6852/2019
M/s. M.S.Building Products, Nedumparambu, Nayaroor, Kilimanoor, Thiruvananthapuram	Date of issue:	20/07/2019
	Date of monitoring	16/07/2019
	Monitoring Location	M/s. M.S.Building Products Sy.No: 163/2, 163/3, 163/4, 163/7,163/8,164/1-2,164/1-4 Village : Karavaram Panchayath: Karavaram Taluk : Varkala District : Thiruvananthapuram,Kerala.
	Sample Description	Soil – South Side

Parameter	Results
pH	6.07
Electrical Conductivity	123 µS/cm
Potassium	48 mg/kg
Phosphorous	32.4 mg/kg
Nitrogen	126 mg/kg
Organic Carbon	0.98 %
Calcium	63.2 mg/kg
Magnesium	41.1 mg/kg
Fluoride	<0.1 mg/kg
Sulphate	123 mg/kg
Copper	<0.1 mg/kg
Zinc	<0.1 mg/kg
Mercury	<0.1 mg/kg
Chromium	<0.1 mg/kg
Lead	<0.1 mg/kg
Arsenic	<0.1 mg/kg

For Poluchem Laboratories (P) Ltd.

Authorized Signatory.

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.

ANALYSIS OF AMBIENT AIR, STACK EMISSION, SOUND, LIGHT, WATER, EFFLUENT, SOIL, SPICES, FOOD

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104
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TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No	PL/AMB/RT/6850/2019
M/s. M.S.Building Products, Nedumparambu, Nayaroor, Kilimanoor, Thiruvananthapuram	Date of issue	20/07/2019
	Date of monitoring	15/07/2019 10.00 Hrs to 16/07/2019 10.00 Hrs
	Date of sample received	17/07/2019
	Date of analysis started	17/07/2019
	Monitoring location	M/s. M.S.Building Products Sy.No: 163/2, 163/3, 163/4, 163/7,163/8, 164/1-2,164/1-4 Village : Karavaram Panchayath: Karavaram Taluk : Varkala District : Thiruvananthapuram,Kerala.
	Sample description	Ambient air – Near South side boundary
	Sample code given by the client	Nil

PARAMETERS	TEST METHOD	RESULT	Limit as per NAAQS
Particulate Matter (PM_{10})	I S 5182 Part 23 2006RA 2012	49.6 µg/m^3	100 µg/m^3
Particulate Matter ($PM_{2.5}$)	CPCB	26.3 µg/m^3	60 µg/m^3
Sulphur dioxide	I S 5182 Part 2 2001RA 2017	10.3 µg/m^3	80 µg/m^3
Nitrogen dioxide	IS 5182 Part 06 2006 RA 2017	6.4 µg/m^3	80 µg/m^3

Note: NAAQS-National Ambient Air Quality Standards

End of the Report

The results are related only to the sample collected for analysis. This certificate shall not be reproduced except in full and without the written permission with authorized signatory.	For and on behalf of POLUCHEM LABORATORIES (P) LTD. AUTHORIZED SIGNATORY

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
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TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/6851/2019
M/s. M.S.Building Products, Nedumparambu, Nayaroor, Kilimanoor, Thiruvananthapuram	Date of issue:	20/07/2019
	Date of monitoring	15/07/2019 10.00 Hrs to 16/07/2019 10.00 Hrs
	Monitoring Location	M/s. M.S.Building Products Sy.No: 163/2, 163/3, 163/4, 163/7,163/8,164/1-2,164/1-4 Village : Karavaram Panchayath: Karavaram Taluk : Varkala District : Thiruvananthapuram,Kerala.
	Sample Description	Ambient Sound Level (Leq)

Monitoring Location	Monitoring Time	Results
Near South side boundary	10.00 Hrs	50.2 dB (A)
	11.00 Hrs	49.8 dB (A)
	12.00 Hrs	47.6 dB (A)
	13.00 Hrs	49.6 dB (A)
	14.00 Hrs	48.5 dB (A)
	15.00 Hrs	46.5 dB (A)
	16.00 Hrs	45.2 dB (A)
	17.00 Hrs	44.3 dB (A)
	18.00 Hrs	46.3 dB (A)
	19.00 Hrs	40.2 dB (A)
	20.00 Hrs	39.6 dB (A)
	21.00 Hrs	38.5 dB (A)
	22.00 Hrs	37.4 dB (A)
	23.00 Hrs	36.3 dB (A)
	00.00 Hrs	35.4 dB (A)
	01.00 Hrs	36.3 dB (A)
	02.00 Hrs	37.6 dB (A)
	03.00 Hrs	38.4 dB (A)
	04.00 Hrs	39.6 dB (A)
	05.00 Hrs	42.3 dB (A)
	06.00 Hrs	43.6 dB (A)
	07.00 Hrs	46.2 dB (A)
	08.00 Hrs	47.4 dB (A)
	09.00 Hrs	49.6 dB (A)
	10.00 Hrs	48.5 dB (A)
Leq (Day time)		49.6 dB (A)
Leq (Night time)		35.1 dB (A)

*End of the Report *

For Poluchem Laboratories (P) Ltd.

Authorized Signatory

SREEJA RAJESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
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Continuation of Test Certificate No: 6853/2019

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37– 1988 RA2014	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42– 1992 RA2014	BDL	0.05 mg/l
Manganese as Mn	IS 3025(P) 59– 2006 RA2017	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41– 1992 RA2014	BDL	0.003 mg/l
Chromium as Cr	IS 3025 (P)52 – 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 – 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 – 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47– 1994 RA2014	BDL	0.01 mg/l
Aluminum as Al	IS 3025(P) 55– 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57– 2005 RA2017	BDL	0.5 mg/l

Note : BDL – Below Detection Level

MICROBIOLOGY ANALYSIS

Parameters tested	Unit	Test method	Results	Acceptable Limit As per IS – 10500-2012
Coliforms	MPN/100ml	IS 1622: 1981 RA 2009	70	Absent
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Absent

For Poluchem Laboratories (P) Ltd.

Authorized signatory

SREEJA RAMESH
QUALITY MANAGER

* End of the report*

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104
Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com
ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Ref.No. PL/RT/OW/6853/2019 Date of Issue: 20/07/2019

Name & address of customer : M/s. M.S.Building Products, Nedumparambu, Nayaroor,Kilimanoor,Thiruvananthapuram

Project Site : M/s. M.S.Building Products
Sy.No: 163/2, 163/3, 163/4, 163/7,163/8,164/1-2,164/1-4
Village : Karavaram
Panchayath: Karavaram
Taluk : Varkala
District : Thiruvananthapuram,Kerala.

Sample drawn by : Poluchem Laboratory Sample Collector
Sample description : Drinking Water
Location of sampling : Open Well Water - (Outside) - South East Side
Date of sample collected : 16/07/2019
\Date of analysis started : 17/07/2019
Date of completion of analysis : 20/07/2019

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983 RA2017	5 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	1 NTU	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	6.68	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	73mg/l	500 mg/l
Total Hardness as $CaCO_3$	IS 3025 (P) 21 – 1983 RA2014	24.3 mg/l	200 mg/l
Total Alkalinity as $CaCO_3$	IS 3025 (P) 23 – 1986 RA2014	16.4 mg/l	200 mg/l
Residual Chlorine	IS 3025 (P) 26 – 1986 RA2014	BDL	0.2 mg/l
Chloride as Cl^-	IS 3025 (P) 32 – 1988 RA2014	22.6 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	7.16 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	2.56 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.27 mg/l	0.3 mg/l
Sulphate as SO_4	IS 3025 (P) 24 – 1986 RA2009	6.42 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA 2013	BDL	1.0 mg/l

Note : BDL – Below Detection Level

For Poluchem Laboratories (P) Ltd.

Authorized signatory

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
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ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

Continuation of Test Certificate No: 6853/2019

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37– 1988 RA2014	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42– 1992 RA2014	BDL	0.05 mg/l
Manganese as Mn	IS 3025(P) 59– 2006 RA2017	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41– 1992 RA2014	BDL	0.003 mg/l
Chromium as Cr	IS 3025 (P)52 – 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 – 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 – 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47– 1994 RA2014	BDL	0.01 mg/l
Aluminum as Al	IS 3025(P) 55– 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57– 2005 RA2017	BDL	0.5 mg/l

Note : BDL – Below Detection Level

MICROBIOLOGY ANALYSIS

Parameters tested	Unit	Test method	Results	Acceptable Limit As per IS – 10500-2012
Coliforms	MPN/100ml	IS 1622: 1981 RA 2009	70	Absent
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Absent

For Poluchem Laboratories (P) Ltd.

Authorized signatory

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.

* End of the report*

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104
Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com
ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Ref.No. PL/RT/OW/6854/2019 Date of Issue: 20/07/2019

Name & address of customer : M/s. M.S.Building Products, Nedumparambu, Nayaroor, Kilimanoor, Thiruvananthapuram

Project Site : M/s. M.S.Building Products
Sy.No: 163/2, 163/3, 163/4, 163/7,163/8,164/1-2,164/1-4
Village : Karavaram
Panchayath: Karavaram
Taluk : Varkala
District : Thiruvananthapuram,Kerala

Sample drawn by : Poluchem Laboratory Sample Collector
Sample description : Water Sample
Location of sampling : Surface Water
Date of sample collected : 16/07/2019
\Date of analysis started : 17/07/2019
Date of completion of analysis : 20/07/2019

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983 RA2017	5 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	1 NTU	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	6.74	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	75 mg/l	500 mg/l
Total Hardness as $CaCO_3$	IS 3025 (P) 21 – 1983 RA2014	26.5 mg/l	200 mg/l
Total Alkalinity as $CaCO_3$	IS 3025 (P) 23 – 1986 RA2014	20.4 mg/l	200 mg/l
Residual Chlorine	IS 3025 (P) 26 – 1986 RA2014	BDL	0.2 mg/l
Chloride as Cl^-	IS 3025 (P) 32 – 1988 RA2014	13.8 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	7.42 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	2.65 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.14 mg/l	0.3 mg/l
Sulphate as SO_4	IS 3025 (P) 24 – 1986 RA2009	5.46 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA 2013	BDL	1.0 mg/l

Note : BDL – Below Detection Level

For Poluchem Laboratories (P) Ltd.

Authorized signatory

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD

POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104
Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com
ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

Continuation of Test Certificate No: 6854/2019

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37– 1988 RA2014	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42– 1992 RA2014	BDL	0.05 mg/l
Manganese as Mn	IS 3025(P) 59– 2006 RA2017	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41– 1992 RA2014	BDL	0.003 mg/l
Chromium as Cr	IS 3025 (P)52 – 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 – 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 – 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47– 1994 RA2014	BDL	0.01 mg/l
Aluminum as Al	IS 3025(P) 55– 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57– 2005 RA2017	BDL	0.5 mg/l

Note : BDL – Below Detection Level

MICROBIOLOGY ANALYSIS

Parameters tested	Unit	Test method	Results	Acceptable Limit As per IS – 10500-2012
Coliforms	MPN/100ml	IS 1622: 1981 RA 2009	110	Absent
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Absent

For Poluchem Laboratories (P) Ltd.

Authorized signatory

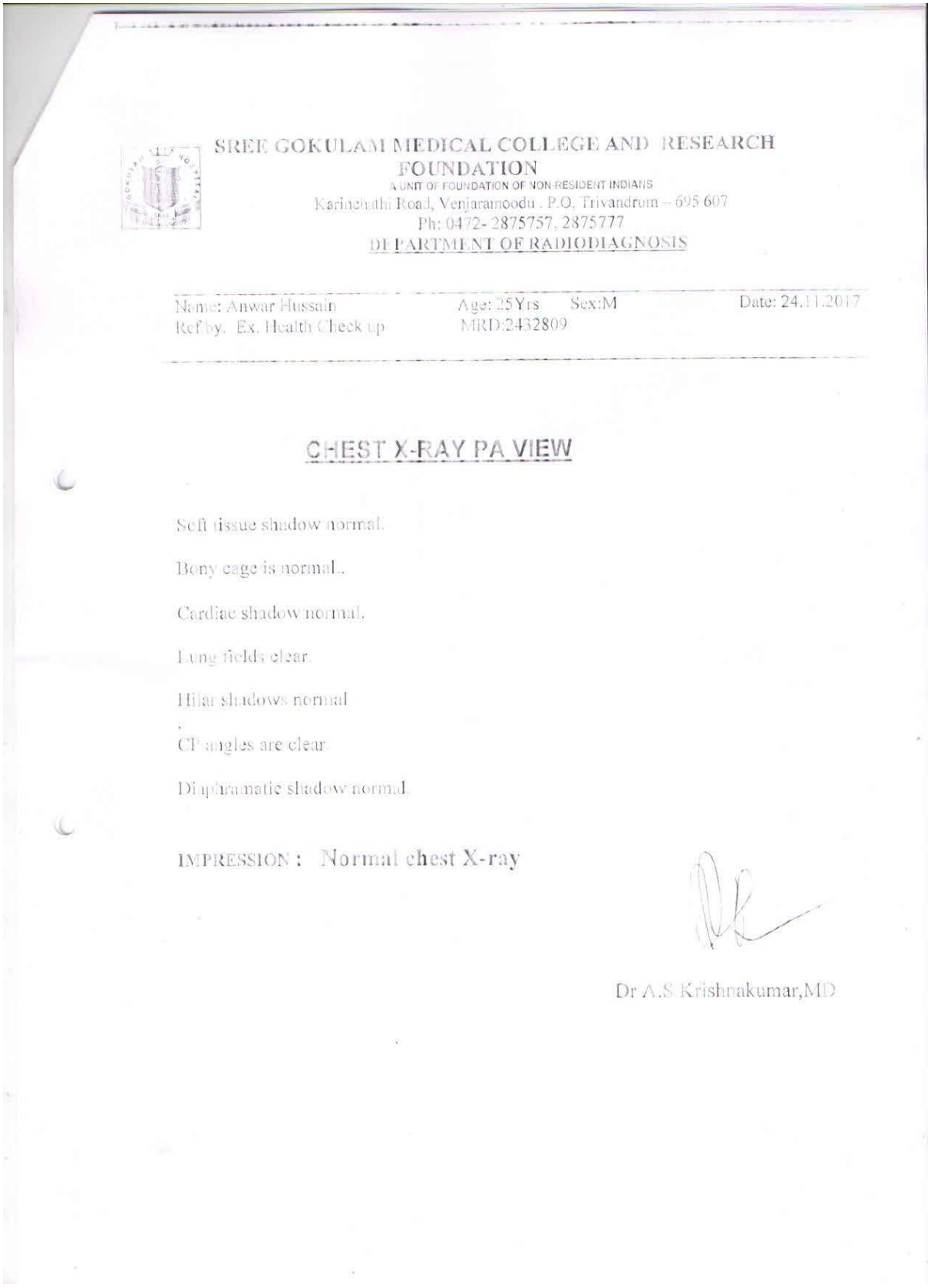
SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.

* End of the report*

22. INDUSTRIAL DUST EXTRACTOR

23. BOUNDARIES OF QUARRY WITH NATURAL VEGETATION

21 . MEDICAL CHECK-UP REPORTS



SREE GOKULAM MEDICAL COLLEGE AND RESEARCH FOUNDATION
A UNIT OF FOUNDATION OF NON-RESIDENT INDIANS
Karinchathi Road, Venjaramoodu . P.O. Trivandrum – 695 607
Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Anwar Hussain Age: 25Yrs Sex:M Date: 24.11.2017
Ref by. Ex. Health Check up MRD:2432809

CHEST X-RAY PA VIEW

Soft tissue shadow normal.

Bony cage is normal..

Cardiac shadow normal.

Lung fields clear.

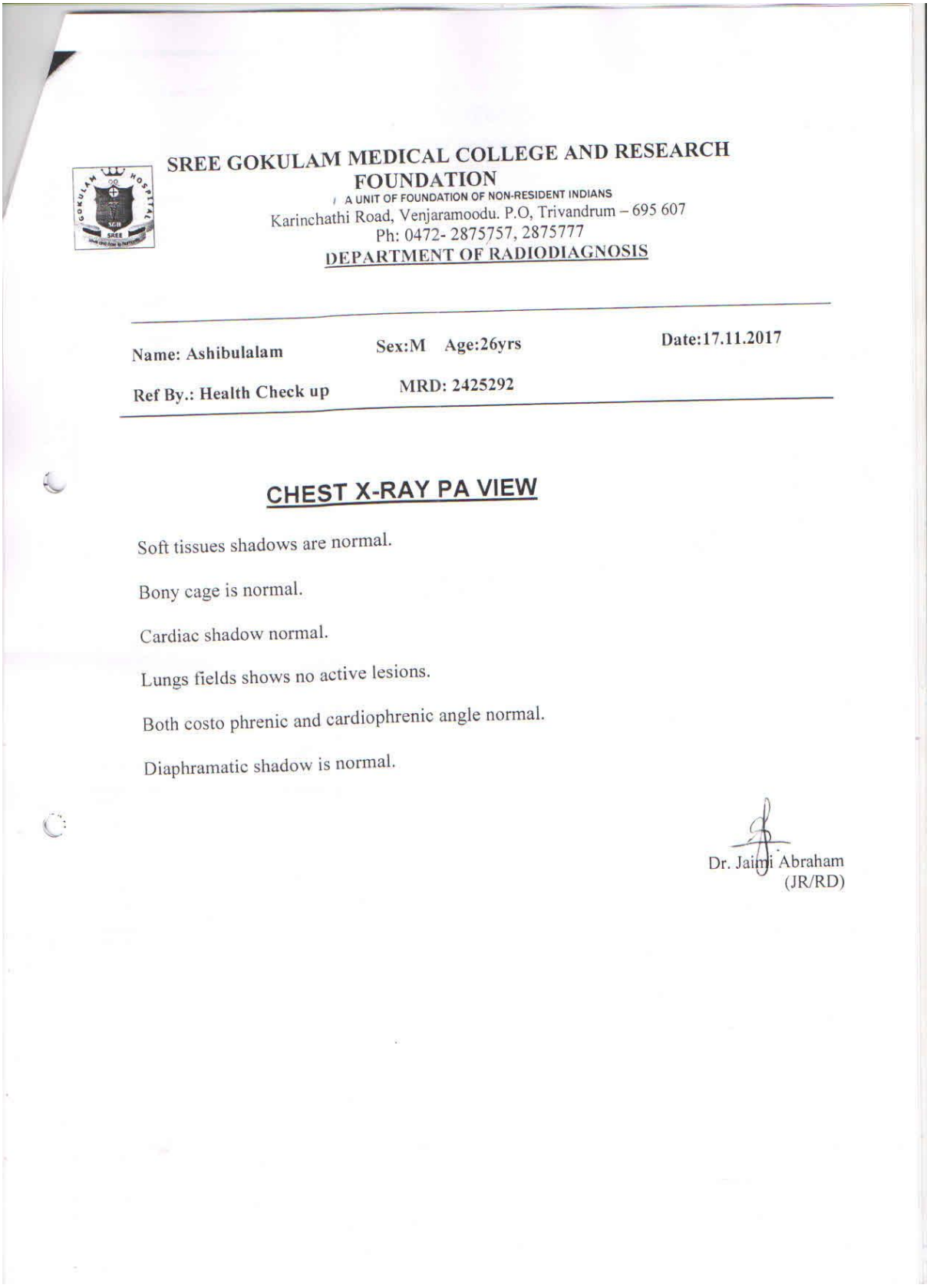
Hilar shadows normal

CP angles are clear.

Diaphramatic shadow normal.

IMPRESSION : Normal chest X-ray

Dr A.S Krishnakumar,MD



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Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Ashibulalam Sex:M Age:26yrs Date:17.11.2017

Ref By.: Health Check up MRD: 2425292

CHEST X-RAY PA VIEW

Soft tissues shadows are normal.

Bony cage is normal.

Cardiac shadow normal.

Lungs fields shows no active lesions.

Both costo phrenic and cardiophrenic angle normal.

Diaphramatic shadow is normal.

Dr. Jaimi Abraham
(JR/RD)

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Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Enamul Haque Age: 27Yrs Sex:M Date: 16.11.2017
Ref by. Medical check up MRD:2422946

CHEST X-RAY PA VIEW

Soft tissue shadow normal.

Bony cage is normal..

Cardiac shadow normal.

Lung fields clear.

Hilar shadows normal

CP angles are clear.

Diaphramatic shadow normal.

IMPRESSION : Normal chest X-ray

Prof. Dr.Vinoo Jacob,MD

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Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Enamul Haque Age: 27Yrs Sex:M Date: 16.11.2017
Ref by. Medical check up MRD:2422946

CHEST X-RAY PA VIEW

Soft tissue shadow normal.

Bony cage is normal..

Cardiac shadow normal.

Lung fields clear.

Hilar shadows normal

CP angles are clear.

Diaphramatic shadow normal.

IMPRESSION : Normal chest X-ray

Prof. Dr.Vinoo Jacob,MD

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DEPARTMENT OF RADIODIAGNOSIS

Name: Humankabeer **Sex:M Age:32yrs** **Date:17.11.2017**

Ref By.: Health Check up **MRD: 2425294**

CHEST X-RAY PA VIEW

Soft tissues shadows are normal.

Bony cage is normal.

Cardiac shadow normal.

Lungs fields shows no active lesions.

Both costo phrenic and cardiophrenic angle normal.

Diaphramatic shadow is normal.

Dr. Jaimi Abraham
(JR/RD)

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Ph: 0472- 2875757, 2875777

DEPARTMENT OF RADIODIAGNOSIS

Name: Maksedul Haque Age: 27Yrs Sex:M Date: 16.11.2017

Ref by. Medical check up MRD:2422947

CHEST X-RAY PA VIEW

Soft tissue shadow normal.

Bony cage is normal..

Cardiac shadow normal.

Lung fields clear.

Hilar shadows normal

CP angles are clear.

Diaphramatic shadow normal.

IMPRESSION : Normal chest X-ray

Prof. Dr.Vinoo Jacob,MD

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DEPARTMENT OF RADIODIAGNOSIS

Name: Maminur Haque Age: 29Yrs Sex:M Date: 16.11.2017
Ref by. Medical check up MRD:2422934

CHEST X-RAY PA VIEW

Soft tissue shadow normal.

Bony cage is normal..

Cardiac shadow normal.

Lung fields clear.

Hilar shadows normal

CP angles are clear.

Diaphramatic shadow normal.

IMPRESSION : **Normal chest X-ray**

Prof. Dr. Vinoo Jacob,MD

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Ph: 0472- 2875757, 2875777

DEPARTMENT OF RADIODIAGNOSIS

Name: Nithin Murali Age:22yrs Sex:M Date:23.11.2017

Ref by. Medical Check up MRD: 2429880

CHEST X-RAY PA VIEW

Soft tissue shadows are normal.

Bony cage is normal.

Cardiac shadow normal.

Hilar shadows normal.

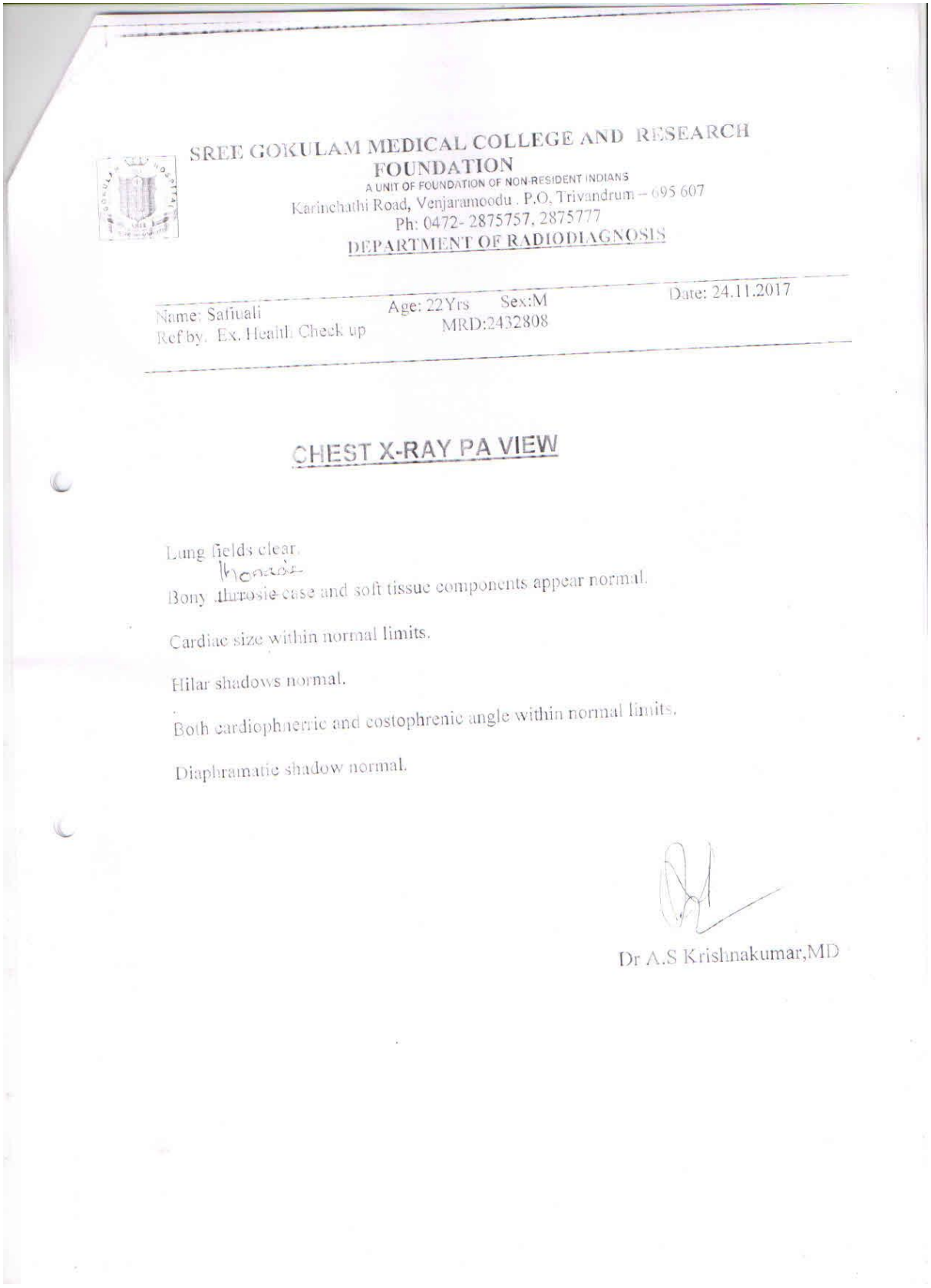
Lung fields clear.

CP angles are clear.

Diaphragmatic shadow normal.

IMPRESSION : Normal Chest X-ray

Prof Dr. Vinoo Jacob,MD



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Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Safiuali Age: 22Yrs Sex:M Date: 24.11.2017
Ref by. Ex. Health. Check up MRD:2432808

CHEST X-RAY PA VIEW

Lung fields clear.
Thorax
Bony thorasic case and soft tissue components appear normal.

Cardiac size within normal limits.

Hilar shadows normal.

Both cardiophnerric and costophrenic angle within normal limits.

Diaphramatic shadow normal.

Dr A.S Krishnakumar,MD

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Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Saifulalam **Sex:M** **Age:22yrs** **Date:17.11.2017**

Ref By.: Health Check up **MRD: 2425296**

CHEST X-RAY PA VIEW

Soft tissues shadows are normal.

Bony cage is normal.

Cardiac shadow normal.

Lungs fields shows no active lesions.

Both costo phrenic and cardiophrenic angle normal.

Diaphramatic shadow is normal.

Dr. Jaimi Abraham
(JR/RD)

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Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Saprajmiya Age:23yrs Sex:M Date:23.11.2017
Ref by. Medical Check up MRD: 2429872

CHEST X-RAY PA VIEW

Soft tissue shadows are normal.

Bony cage is normal.

Cardiac shadow normal.

Hilar shadows normal.

Lung fields clear.

CP angles are clear.

Diaphragmatic shadow normal.

IMPRESSION : Normal Chest X-ray

Prof Dr.Vinoo Jacob,MD

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Karinchathi Road, Venjaramoodu. P.O, Trivandrum – 695 607
Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Sathya Das Sex:M Age:55yrs Date:17.11.2017

Ref By.: Health Check up MRD: 2425291

CHEST X-RAY PA VIEW

Opacity noted in bilateral lower zones of lung – probably due to breast shadows.

Soft tissues shadows are normal.

Bony cage is normal.

Cardiac shadow normal.

Lungs fields shows no active lesions.

Both costo phrenic and cardiophrenic angle normal.

Diaphramatic shadow is normal.

Dr. Jaimi Abraham
(JR/RD)

SREE GOKULAM MEDICAL COLLEGE AND RESEARCH FOUNDATION
A UNIT OF FOUNDATION OF NON-RESIDENT INDIANS
Karinchathi Road, Venjaramoodu. P.O, Trivandrum – 695 607
Ph: 0472- 2875757, 2875777
DEPARTMENT OF RADIODIAGNOSIS

Name: Suresh Suralikal Sex:M Age:50yrs Date:17.11.2017

Ref By.: Health Check up MRD: 2425290

CHEST X-RAY PA VIEW

Unfolding of aorta noted.

Soft tissues shadows are normal.

Bony cage is normal.

Cardiac shadow normal.

Lungs fields shows no active lesions.

Both costo phrenic and cardiophrenic angle normal.

Diaphramatic shadow is normal.

Dr. Jaimi Abraham
(JR/RD)

22. LEASE DEED

भारतीय गैर न्यायिक

भारत INDIA

रु. 500 FIVE HUNDRED RUPEES

पाँच सौ रुपये Rs. 500

INDIA NON JUDICIAL

കേരളം केरल KERALA F 986310

FORMH

(See Rule 43)

QUARRYING LEASE

This deed of lease made on this the Eighteenth day of April 2018 between the Governor of Kerala (hereinafter referred to as 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. M. S. Building Products, Palachira.P.O, Varkala, Thiruvananthapuram—695 143 (Represented by its Managing Partner Shri. Sreekumar. S.S(Pan Card No.AKGPSP9314P),aged 61 years, S/o of Sreedhaaran, residing at Thiruvathira, Palachira.P.O, Cherunniyoor village, VarkalaTaluk, Thiruvananthapuram District—695 143)**(hereinafter called the

Lessor

Lessee

"lessee/lessees" which expression shall where the context so admits, include his/their heirs, executors, administrators, representatives and permitted assigns) of the other part.

Witnesseth that in consideration of the rents and royalties and lessee's/Lessees' covenants, hereinafter reserved and contained the State Government hereby give on lease to the lessee/lessees the land measuring **2.6694 Hectares** described in the schedule hereunder and delineated on the plan here to annexed and therein coloured red (hereinafter called the "said lands") to hold the same for a period of **10 (Ten only)** years commencing from the (18.4.2018) Eighteenth April 2018 and ending on the (17.4.2028) Seventeenth April 2028 for the purposes of extracting minor mineral/minerals 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

1. The lessee/lessees shall have the right in and upon the said lands to extract Granite Building Stone (hereinafter called the said mineral/minerals) and to do all acts necessary for the extraction of the said mineral/minerals including the erection on the said lands, buildings and plant required for the purposes and also to take lead and carry away over the said lands and to dispose of the said minerals extracted as aforesaid.

2. The lessee/lessees shall during the subsistence of this lease have the liberty to work the said mineral/minerals and remove the same from the lease hold on permits issued by the State Government/competent authority or any other officer authorized by him in this regard. The permits shall be issued only on the basis of pre-paid royalty at the rates specified in Schedule I to these Rules. The royalty rates shall be subject to revision from time to time as the State Government may order.

3. The lessee/lessees shall pay to the State Government a yearly surface rent equal to the land revenue if any, assessable under the rules for the time being in force, or if the land be the property of Government or in reserve forest then equal to the land revenue plus cess, if any, per hectare of the land the surface whereof shall be occupied or used by the lessee/lessees for

Lessor

Lessee

any of the purposes of this deed and so in proportion for any area less than one hectare. The said surface rent shall be paid by yearly payments; the first of such payments to be made on or before the last day of the first year of occupation provided always that no such rent shall be paid or demanded in respect of any roads or ways now in existence.

4. The lessee/lessees shall at all times during the currency of this lease keep correct and intelligible books of account showing accurately the quantity of the said minerals extracted and the weight and value of the said mineral sold or exported together with the names of the purchasers or consignees. The lessee shall also maintain a register of employees showing therein separately men ,women employed daily and shall at reasonable times allow the competent authority appointed under the rules (hereinafter referred to as "competent authority") or the officer authorised by him to examine the said books of account and the register of employees and to take copies and extracts there from. The lessee/lessees shall submit reports in Forms F and G on the specified dates.

5. All sums found due under or by virtue of this deed from the lessee/lessees may be recovered from him jointly and severally from them and his/their properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue or in any other manner as the State Government may deem fit.

6. The lessee/lessees shall at the lessee's/lessees' own expense erect and at all times maintain and keep in repair boundary marks and pillars along the boundaries of the said lands according to the demarcation shown in the plan hereto annexed.

7. The lessee shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 metres from any railway line except with the previous written permission of the railway administration concerned and any bridge on National Highway or 50 metres from any reservoir, tanks, canals, rivers, bridges, public roads, other public works, residential buildings, the boundary walls of places of worship, burial grounds, burning ghats or one kilometer from the boundaries of National

Lessor

Lessee

Total 9 sheets 3

DISTRICT REGISTRAR (REVENUE RECOVERY)

Park or Wildlife Sanctuaries except with the previous permission of the authorities concerned or the Government or competent authority.

8. The sides of open workings shall be sloped, stepped or secured by the lessee in such a manner as to prevent slope failure, when an open working is worked in steps, steps shall be of sufficient breadth in relation to their height to secure safety. In open workings trees liable to fall and all loose ground and material shall be removed by the lessee sufficiently far from the edge or otherwise made source in order to prevent danger to persons employed in the quarry.

9. If a working place is found to be unsafe all persons shall be withdrawn by the lessee/lessees immediately from the dangerous area and all access to such working place except for the purpose of removing the danger of saving life shall be prevented by securely fencing the full width of all entrances to the place.

10. The lessee/lessees shall at all reasonable times allow any officer authorised by the Central Government or by the State Government in that behalf to inspect the said lands and the buildings and plants erected thereon and the lessee/lessees shall assist such persons in conducting the inspection and afford them all information they may reasonably require, and shall conform to and observe all orders which the Central and State Governments as the result of such inspection or otherwise, may from time to time pass.

11. The lessee shall be responsible for implementing the provisions of the Various labour laws applicable, from time to time, to the quarry.

12. The lessee/lessees shall not assign or underlet the said lands or any part there of or the rights or privileges, therein hereby granted or any of them without the previous permission in writing of the State Government/ competent authority.

13. Where the lease or any right, title or interest therein has been assigned, sublet or transferred as provided in rule 45 read with condition 12, then the person in whose favour such assignment, sublease or transfer has been

Lessor

Lessee

Total 9 sheets 4 sheet

made shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.

14. The lease may be surrendered by the lessee/lessees at any time after 3 months notice in writing to the State Government/competent authority provided the lessee/lessees has/have paid all sums due on account of the lease: Provided that if the lessee/lessees elects/elect to determine this lease before the expiry of the term of the lease, shall pay in addition to other dues a sum equal to the dead rent payable for the remaining part of the term of the lease deed.

15. If the lessee/lessees shall be desirous of taking a further lease of the said lands he/they shall give three months' previous notice in writing of such desire to the State Government/competent authority and if the lessee/lessees has/have duly observed all the conditions of this lease, the State Government/competent authority may agree to renew the lease for such further term and on such terms and conditions as the State Government/competent authority may determine which shall be in accordance with the provisions of these rules.

16. If the lessee/lessees shall at any time during the said term use the said lands or any part thereof in any manner other than as authorised by this lease or fail to carry on quarrying operations continuously without sufficient cause of which the State Government/competent authority shall be the judge or shall commit a breach of any of the conditions of this lease it shall be lawful for the State Government/competent authority to cancel this lease and take possession of the said lands or the alternative to receive from the lessee/lessees such penalty not exceeding Rs.25,000/- (Rupees twenty five thousand only) for the breach as the State Government/competent authority may fix.

17. If at the expiration of three calendar months after the expiry of the lease or its sooner determination, there shall remain in or the said lands, any engines, machinery, plant buildings, structures and other works erections and conveniences the said minerals or other property which the lessee is/lessees are entitled to remove from the said lands, the same shall, if not

Lessor 28/11/2018 A.K. Manoj

Lessee

Total 9 sheets 5 sheet

DISTRICT REGISTRAR (GENERAL) COLLECTOR

removed by the lessee/lessees within one calendar month after notice in writing requiring their removal be given to the lessee/lessees by the State Government/competent authority be deemed to become the property of the State Government in such manner as they may deem fit without liability to pay any compensation or to account to the lessee/lessees in respect thereof.

18. This lease subject to all rules and regulations which may from time to time be issued by the State Government regulating the working of the quarries and other matters affecting safety, health and convenience of the lessee's/lessees' employees or of the public, whether under the Indian Mines Act or otherwise.

19. The lessee/lessees shall without delay send to the District Collector and the competent authority or the officer authorised by him in this regard report of any accident causing loss of life or serious bodily injuries or seriously affecting or endangering life or property which may at any time occur at or in the said lands in the course of operations under this lease.

20. The lessee/lessees shall furnish such reports and returns relating to output, labourers employed and other matters as the State Government may prescribe.

21. The lessee/lessees shall make and pay such reasonable compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him/them in exercise of the powers granted by this lease and shall indemnify and shall keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage, injury or disturbance and all costs and expenses in connection therewith.

22. Any condition prescribed in the Kerala Minor Mineral Concession Rules, 2015 but left out in this lease which may be found applicable to the lessee / lessees shall be treated as binding on the lessee/lessees.

Lessor

Lessee

Total 9 sheets 6 sheets

23. In this case anticipated royalty for the mineral at rate of Rs. 24/- (Rupees twenty four only) per ton for a period of one year is **Rs. 24,00,000/- (Rupees Twenty four lakhs only)**

24. Dead rent realized at the rate of I[st] year–NIL II[nd] year-Rs. 300/-(Rupees three hundred only) and III[rd] year onwards-Rs.1,200/- (Rupees one thousand and two hundred only) per hectare subject to revision from time to time. Surface rent at the rate of Rs.200/- (Rupees two hundred only) per hectare for **one year** is **Rs.534/-(Rupees Five hundred and thirty four only)** and security deposit is **Rs.26,694/- (Rupees Twenty six thousand six hundred and ninety four only)**

SCHEDULE OF DESCRIPTION OF LAND

District	:Thiruvananthapuram
Taluk	:Chirayinkeezhu
Village/Amsom	:Karavaram
Re-Survey Nos.of theArea	: 163/2, 163/3, 163/4, 163/7, 163/8, 164/1-2 &164/1-4
Area in Hectares	:2.6694 Hectares

Bounded by Survey Nos:

On the North by	:Survey Nos.155
On the East by	:Survey Nos.27/1, 27/3
On the South by	:Survey No.164/1, 165/1 (Puramboke), 165/2 (Puramboke)
On the West b	:Survey No.163/6, 163/1

Lessor

Lessee

Total 9 sheets 7 sheet

In witness whereof the parties hereto have set their hands hereunto on the day and year first above written.

Signed by.....

for and on behalf of the Governor of Kerala

GEOLOGIST
DISTRICT OFFICE
DEPT. OF MINING & GEOLOGY

In the presence of

(1) J. V. Jacob, Mineral Revenue Inspector, District office, Dept. of Mining and Geology Thiruvananthapuram.

(2) Jayachandran K.S
Sr Clerk

Signed by.....

for and on behalf of the lessee/lessees

In the presence of

(1) G. SULU, MELE VEEDU
ELAMPA. P.O AVANAVANCHERY
ATTINGAL
AADHAR CARD NO 4044 9865 6901

(2) GEORGE ROOSENELT
ADITH BHAVAN, THENMALA
AADHAR NO. 3682 6080 7882

Lessor

Lessee

DISTRICT COLLECTOR

Total 9 sheets 8 sides

23. PLANTING TREES ALONGSIDE BUFFER ZONE

24. SOLAR POWER GENERATION