## **COMPLIANCE REPORT**

October 2021 - March 2022

## M/s Travancore Blue Metal Industries (P) Ltd

### THIRUVANTHAPURAM DISTRICT KERALA



Kadambanad, Cheriyakonni.P.O. Thiruvananthapuram-695 013 Phone: 0472 2888 080, 2888 050, 2888 030 E-mail: travancorebluemetal@gmail.com

Dt.20-07-2022

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

Ref :- File No. 152/SEIAA/KL/3072/2013

Sub :- Environment Clearance - Quarry project at Village & Panchayat - Aruvikara, Taluk - Nedumangad, District - Thiruvananthapuram, Kerala-Compliance Report - Second half - Reg.

#### Respected Sir,

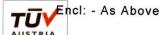
The Quarry (Building stone) project was accorded Environmental Clearance for 12.0836 Ha. by order No. 152/SEIAA/KL/3072/2013 dated 31-03-2017 by State Environmental Impact Assessment Authority, Kerala. The compliance report of Second half (October 2021 to March 2022) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully,

For M/s Travancore Blue Metals Pvt. Ltd

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



Customer care number - 8592 800 300 / 8592 900 300

#### COMPLIANCE REPORT

TO

THE CONDITIONS

**OF** 

#### **ENVIRONMENTAL CLEARANCE ORDER**

NO: 152/SEIAA/KL/3072/2013

Dated: 31-03-2017

BY

# STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)

**FOR** 

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

SURVEY NOS. 229/1, 229/13, 229/9, AND OTHERS IN VILLAGE & PANCHAYAT - ARUVIKARA, TALUK - NEDUMANGAD, DISTRICT - THIRUVANANTHAPURAM, KERALA

BY

# M/s TRAVANCORE BLUE METAL INDUSTRIES (P) LTD THIRUVANATHAPURAM DISTRICT KERALA

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#### **INTRODUCTION**

The quarry project of **M/s Travancore Blue Metal Industries (P) Ltd.** is situated at survey No. 229/1, 229/13, 229/9, and others in Village & Panchayat - Aruvikara, Taluk - Nedumangad, District - Thiruvananthapuram, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by State Environmental Impact Assessment Authority on 31-03-2017. 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.

**COMPLIANCE REPORT** 

(SPECIFIC CONDITIONS)

**PART A** 

#### **PART - A - SPECIFIC CONDITIONS**

01	Steep cliff like feature may be demarcated and fenced as danger	complied
	zones with sign boards.	

#### Compliance:

The project proponent has demarcated by fencing on the top of steep cliff like feature in the mining area. Sign board is also installed to know it is a danger zone. The photograph of the danger board is attached as **Plate No. 5.** This is being maintained in the project area.

02	Storm water drainage from the upper part must be channelized	complied
	properly and let out through well defined channels. Catch water	
	drain should be provided and water must be clarified to avoid	
	silt to reach the river. Avoid letting out water beside of the	
	approach road.	

#### Compliance:

As part of storm water management, the project proponent has constructed well defined drainages to channelize all surface runoff in to the rain water harvesting pond in the project site. The de-siltation chamber has been provided to remove sediments from the storm water. The approach road is maintained well.

03	The rain water structure should be provided.	Complied	
03	The rain water structure should be provided.	Complied	ı

#### Compliance:

The proponent has developed two rain water harvesting pond in the project site to collect rain water from the entire project land. The storm water flow is leading to the pond through constructed and natural drainages. The photograph is showing the rain water collection pond in the project area in **Plate No. 1.** 

## **COMPLIANCE REPORT**

(GENERAL CONDITIONS)

**PART B** 

#### **PART - B - GENERAL CONDITIONS**

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

#### Compliance:

As part of water conservation, the project proponent has developed rain water harvesting ponds in the quarry site as Rain Water Harvesting structure. The ponds are situated at the lowest level of project site. The surface runoff is channelized to the pond through garland drains. The rain water is used for irrigation purposes, watering of plants, wetting of roads and for dust suppression system (mainly sprinklers system). The photograph showing the rain water collection pond in the project area is attached in **Plate No. 1.** 

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

#### Compliance:

The Environmental Monitoring Cell (EMC) was formed with Mr. Biju varghese as head of the monitoring cell. The EMC meetings of the cell convene periodically and evaluate the activities towards the stipulations of Environmental Clearance order. The details of the monitoring cell are given below in **Table No. 1**.

SI. No. **Post** Name Head of monitoring cell (proprietor) Biju varghese 1. Member Saifudheen P Y 2. Vijayakumar K 3. Member 4. Name of accredited environmental **Environmental Engineers and** consultants Pvt. Ltd. consultant

<u>Table 1 - Environmental Monitoring Cell (EMC)</u>

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

As part of enhancing bio diversity, the project proponent has planted various saplings and native species in the project site to enhance the eco – diversity in the industry. Green belt is an important component in the mining sector. There is also natural vegetation including trees, shrubs and climbers are presents in the sides of road and parking area. This will help to reduce air and sound pollution. The photographs of avenue trees planted in the road side are given in **Plate No. 2.** The bill purchased against plants is provided as **Annexure No.1**.

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

#### Compliance:

The project proponent has installed five solar street lights in the project site to use maximum renewable energy to reduce electrical consumption from KSEB. The project proponent has installed 2 solar street lights; and can feed 1 CFL and fan at security cabin to use maximum renewable energy. The purchasing bill of solar is given in **Annexure No. 15.** Photograph of Solar street light is attached as **Plate No. 11.** 

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

#### Compliance:

To prevent dust emission, sprinklers are installed in the project site. This help to suppress dust during the time summer season. Purchase bill of sprinkler is attached as **Annexure No. 14.** 

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

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

07	At least 10 percent out of the total excavated pit area should be	Will be
	retained as water storage areas and the remaining area should be	complied
	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.	

#### Compliance:

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

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

#### Compliance:

The project proponent has carried out various activities under Corporate Social Responsibility (CSR). The main activities carried out in the vicinity of the project site is road construction, support in construction of houses and medical help. The project proponent has spent an amount of Rs. 39,78,442 in the period of October 2021 to March 2022. The project proponent has supported 4 families to construct houses. The project proponent has spent amount Rs. 16,79,500 for the construction of Kadamaband to Kovil kadavu road

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

To demarcate the lease area, the project proponent has installed fencing around the area where lease obtained. The complete installation of barbed metal wire fencing around the mining area is with height of 4 ft. All the boundary indicators are protected at all times and clearly visible at any time in a noticeable way. The photograph of barbed metal wire fencing is provided in **Plate No.4.** Signboard is attached as **Plate No. 10.** 

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

#### Compliance:

As per the stipulation of Explosive department and State Environment Impact Assessment Authority the project proponent has installed warning alarms (Siren) in the quarry site. Siren is blown before and after blasting regularly. The blasting timings are displayed in the prominent area by way of caution board.

11	Control	measures	on	noise	and	vibration	prescribed	by	KSPCB	Complied
	should b	oe implemei	nted	l.						

#### Compliance:

To reduce noise level in the project site, the project proponent has implemented mitigate masseurs. The major noise generating sources from the mining activity is working machineries, drilling, blasting and plying of vehicles. The following control measures are undertaken to bringing down the noise levels:-

- Proper maintenance of machinery and equipments
- ➤ The machineries like breaker and excavator has well sound proof cabin so that the machine operators can work without stress due to the sound.

- > Personal protective devices i.e., earmuffs, ear plugs etc. are provided to workers working in high noise areas.
- The mining activity held in day time only.

#### **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.
- The project proponent has appointed qualified persons to monitor the mining operations

12	Quarrying	activities	should	be	limited	to	day	time	as	per	KSPCB	complied
	guidelines	/specific c	ondition	S.								

#### Compliance:

Quarrying activities are limited to day time only as per KSPCB guidelines. This helps to limit the sound pollution. The quarry working time is 8.00am to 5.00 pm.

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

#### Compliance:

The blasting is done in controlled manner by using NONEL Technology. All blasting activities are carrying out with the specified regulations of explosive department. All blasting are under careful supervision of qualified persons.

14 A licensed person should supervise/control the blasting operations. Com	plied
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#### Compliance:

The project proponent has appointed mines manager and mining mate in the site to supervise/control exploitation of minor minerals including blasting at the project site. **Annexure No. 2** is showing the certificate of qualified persons.

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

#### Compliance:

To contain dust emissions and for the trouble free transportation of materials, the project proponent has concreted the access road of 600 meter from the entrance of project site to quarry is maintaining in good manner. The project splashes water on the road to arrest the dust production during summer season. The photograph of concreted road is provided in **Plate No. 3.** 

16	Overburden materials should be managed within the site and used	Complied
	for reclamation of mine pits as per mine closure plan/ specific	
	conditions.	

#### Compliance:

In a building stone quarry project, the overburden and topsoil need to extract during the time of mining, these natural resources are staked in the project site. This will be used for plantation, haulage roads and land filling in the mining area. No overburden will let out from the project site. To prevent soil erosion grass is planted on the overburden and topsoil.

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

#### Compliance:

To enhance safety and conserve environment, the project proponent is extracting the minerals by creating benches. The benches will not exceed 5 meters of height. The project maintains the width of benches minimum of 5 meters. **Plate No. 6** shows the mining area.

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

The project proponent is using blasting mats in the mining field during blasting time. The project proponent is using NONEL Technology for blasting therefore there is no incident of fly rock is happened in the community. The project proponent is also assuring the maximum PPV is under 10 during the time of blasting. The photograph of the blasting mate is attached as **Plate No.7.** 

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

#### Compliance:

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

20	No mining	operations should be carried out at places having a slope	Noted
	greater	than 45 <sup>0</sup> .	

#### Compliance:

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

21	Acoustic enclos	ures should	be	provided	to	reduce	sound	complied
	amplifications in	addition to the	prov	isions of g	reen	belt and	hollow	
	brick envelop for	crushers so	that	the noise	leve	el is kept	within	
	prescribed standa	rds given by C	PCB/	KSPCB.				

#### Compliance:

To reduce the impact of sound to the labours in the mine, the project proponent has provided ear plugs. All machines are new. Vegetation around the mining area

helps to reduce noise and air pollution. This helps the noise level kept within prescribed standards.

22	The	workers	on	the	site	should	be	provided	with	the	required	complied
	prote	ective equ	ipm	ents	such	as ear n	nuffs	s, helmet,	etc.			

#### Compliance:

As part of safety, the project proponent has provided adequate Personnel Protective Equipments (PPE) such as helmets, ear plugs, safety belts, safety shoes, glows, etc. to the labours in working site. Photograph of workers with PPE is attached as **Plate No. 12** 

23	Garland	drains	with	clarifiers	to	be	provided	in	the	lower	slopes	Complied
	around tl	he core	area	to channe	elize	e sto	orm water.					

#### 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 constructed drains with clarifiers in the lower slopes of the project area for storm water management. The clarifiers prevent the quarry wastes entering in to the public stream. The photograph of drain is provided in **Plate No.8**. The project proponent is intending to increase the efficiency of garland drain in the site. Photograph of de-siltation trap is provided in **Plate No.9** 

2	4	The transportation of minerals should be done in covered trucks to	complied
		contain dust emissions.	

#### Compliance:

To avoid dust emission while transportation of materials, the project proponent is being the trucks are covered before it leaving the project site.

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

As part of concurrent eco restoration, the project proponent has planted various saplings in the project area as a compensation of loss of trees while clearing the land for mining. The bill against the purchase of plants is provided at **Annexure No.1.** 

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

#### Compliance:

The volume of used oil is low in the industry; a major portion of used oil is used as lubricant in the project site. The excess have been sold to agencies approved by Pollution Control board.

2	7	Explosives should be stored in magazines in isolated place specified	complied
		and approved by the explosives department.	

#### Compliance:

Explosives are stored in magazine. The magazine situated in an isolated place specified and approved by the explosives department. The area surrounded to the magazine is fenced with barbed metal wire. Same is attached as Plate No. 13

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

#### Compliance:

To reduce the adverse impact on community life, the norms of Kerala State Pollution Control Board regarding the distance criteria of residences, roads, rivers and worship places is adhered by the project. The project has left 115 meter distance to the nearest house from the boundary of mining area, the KSPCB condition is 50 meter.

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

There is no forest in the 100 meter vicinity to the project site.

3	30	Consent from Kerala Pollution Control Board under Water and Air	Complied
		Act(s) should have been obtained before initiating activity.	

#### 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.3.** 

31	1 All other statutory clearances should have been ob	tained, as	Complied
	applicable, by project proponents from the respective	competent	
	authorities including that for blasting and storage of explos	ives.	

#### Compliance:

The certificates obtained from concerned statutory authorities are enclosed in Annexure No.3, 4, 5, 6 & 7

#### TABLE NO.2- DETAILS OF APPROVALS OBTAINED

Name of the Statutory	Name of the Statutory	Approval Number & Date
approval	authority	
Environmental Clearance	State Environmental Impact	152/SEIAA/KL/3072/2013
order	Assessment Authority, Kerala	Dt. 31-03-2017
"Consent to Operate"	Kerala State Pollution Control	PCB/TVM-DO/ICO/NDD-
(Renewal)	Board	243/2017
		Dt. 16/11/2017
Explosive License	Ministry of Commerce & Industry	E/SC/KL/22/1215(E58077)
	- Petroleum & Explosives Safety	Dt. 16-03-2016
	Organization (PESO)	
License for quarry	Gram Panchayath	A3-2068/10/2020-21
operations		Dt. 28-04-2020
Permit order	Directorate of Mining and	
	Geology	

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 environeme3ntal 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.

Will be complied

#### Compliance:

The project is running as per plan submitted in Environmental Impact Assessment Authority, Kerala. At present there is no change in the scope of the project. The project proponent will seek for a new Environmental clearance in the case of any change(s) in the scope of the project.

The Authority reserves the right to add additional safe guard | Noted 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.

#### Compliance:

If the Authority insists to add additional safeguards and measures in the mining industry for safety and environmental sustainability, the project proponent will be complied with.

The stipulations by Statutory Authorities under different Acts and Complied Notifications should be complied with, including the provisions of Wate (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, The Environment (Protection) Act, 1986 the public liability (Insurance) Act, 1991 and EIA notification, 2006.

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

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

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

#### Compliance:

An advertisement in two local newspapers regarding Environmental Clearance accorded to the quarry project was given within the stipulated period and the copy of the same was submitted at SEIAA Kerala. The copy of the advertisement given in two local newspapers is provided at **Annexure No.8**.

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

#### Compliance:

As per the condition stipulated in the Environmental Clearance order, a copy of the environmental clearance letter was submitted to Grama Panchayat office. There were no suggestions/representations received while processing the proposal. The acknowledgement from the Panchayath is provided in **Annexure No.9**.

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

#### Compliance:

The compliance report is being submitted along with the results of monitored data to the State Environmental Impact assessment Authority and the Regional Office of MoEF&CC, Bangalore as Email. The monitored data of Air, Water and Noise is attached as **Annexure No. 11, 12 & 13.** 

(	38	The details of Environmental Clearance should be prominently	complied
		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.	

The detail of the Environmental Clearance has display on metallic board in the project site. The metallic board installed as specified in the conditions of Environmental Clearance order.

39	The proponent should provide notarized affidavit (indicating the	Complied
	number and date of Environmental Clearance proceedings) that all	
	the conditions stipulated in the EC shall be scrupulously followed.	

#### Compliance:

An assurance in the form of affidavit was already submitted to SEIAA Kerala. The copy of the same is attached as **Annexure No.10**.

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

#### Compliance:

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

41	The project proponent shall ensure that no natural water course	Complied
	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:

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.

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 un loading points & transfer point to reduce fugitive emissions.

Complied

#### Compliance:

The project proponent has monitored the ambient air quality as per National Ambient Air quality Standard (NAAQS). The project proponent is sprinkling water at loading point after each blast, on the roads and at unloading points. The crushing plant is equipped with water sprinklers at appropriate points. This activity reduces the fugitive emission of dust.

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

complied

#### Compliance:

To prevent the soil erosion, the top soil and overburden are stacked in designated place within the project site. Only topsoil are being used for plantation. Overburden used for landfill and to construct haulage roads in the mining area. The excess are being stored in a designated place as per the direction of State Environment Impact Assessment Authority (SEIAA). The Environment Monitoring Cell will monitor the execution of eco restoration.

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

#### Complied

#### Compliance:

The project proponent has constructed effective garland drains to catch all the storm water during the time of monsoon season. These channels directed the water to the rain water collection pond. All sediments and silts are settling at the bottom of the pond and only cleared water is letting out. The water from the pond can be used for splashing of water on roads to arrest the dust. The project proponent indenting to create de siltation chambers along with catch drains.

be carries out in critical areas prone to air pollution and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub>, such as haul road, loading an un loading points and transfer points – it shall be ensured that the Ambient Air Quality Parameters confirm to the norm prescribed by the Central Pollution Control Board in this regard.

#### complied

#### 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 unloading points, haul roads and transfer points.

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

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

4	7	Measures should be taken for control of noise levels below 85 dBA in	complied
		the work environment.	

#### Compliance:

The noise level from all these activities will not go beyond 85dBA. The main sound generating activities are the playing of jack hammer, breaker, vehicles and blasting operations. The project proponent will take appropriate action to reduce the sound by employing possible measures. These are mentioned under the condition number 11.

48	8	A separate Environmental Management Cell with suitable qualified	Complied
		personal should be set up under the control of a senior executive,	
		who will report directly to the Head of the Organization.	

#### Compliance:

To monitor all conditions stipulated in the Environment Clearance and environment Management Plan, the project proponent has constituted an Environment Monitoring Cell with Mr. Biju Varghese as the head of the Cell.

49	The funds earmarked for environmental protection and CSR activities	complied
	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:

The project proponent executes many activities under Corporate Social Responsibility (CSR) for community development. To implement these activities in a good manner, the project proponent 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	Noted
	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.	

The project proponent can 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.

5	1	Any appeal against this environmental clearance shall lie with the	Noted
		National Green Tribunal, if preferred within a period of 30 days as	
		prescribed under section 16 of the National Green tribunal Act, 2010.	

There was no appeal within 30 days after issuing the EC order to the project.

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

The project proponent did not conceal any factual data during the time of appraisal for obtaining Environmental Clearance.

53	The SEIAA may revoke or suspend the order, for non implementation	Noted
	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.	

#### Compliance:

The project proponent has been implementing conditions stipulated in this 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 not withstanding anything to the	complied
	contrary, in consistent, or simplified, contained in any other permit,	
	license on consent given by any other authority for the same project.	

#### Compliance:

The project proponent gives 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	Noted
	lease period issued by the Govt. of Kerala, whichever is earlier.	

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

There is no pending litigation in connection with the land in any court of Law.

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

#### 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	Complied
	"PUC" certificate from authorized pollution taking center. Washing of	
	all vehicles shall be inside the lease area.	

As part of reduce air pollution, the project proponent has monitoring the pollution level of all vehicles playing in the project site. This monitoring has conducted only in authorized pollution checking center. Copy PUC certificate is attached as **Annexure No. 16.** 

59	Project proponent should obtain necessary prior permission of the	Noted
	competent authorities for drawl of requisite quantity of surface water	
	and ground water for the project.	

#### Compliance:

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

60	Regular monitoring of flow rates and water quality upstream and	Noted
	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.	

#### Compliance:

There is no stream or springs flowing in and around to the mine lease area. The project proponent 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 programe of the workers should be	Complied
	under taken periodically to observe any contractions due to exposure	
	to dust and take corrective measures, if needed.	

#### Compliance:

The project proponent has conducted an occupational health surveillance programme in association with Taluk hosptal for the labours working in mining area.

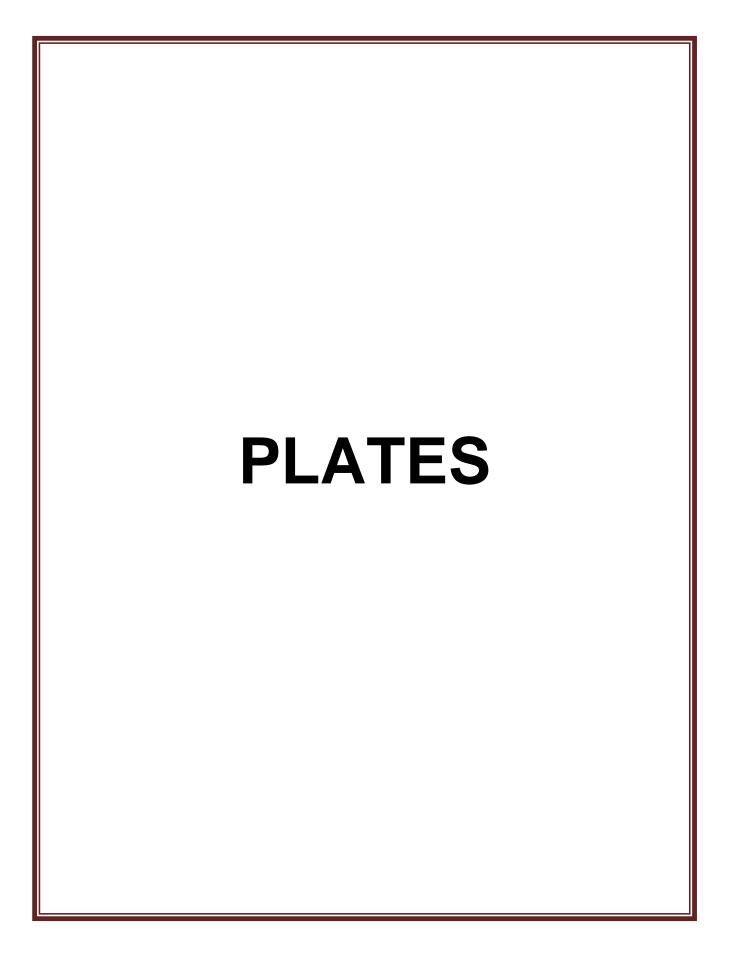


Plate No.1



Rain water Harvesting Pond in the project site

Plate No.2



**Avenue Trees** 

Plate No.3



Approach road

Plate No.4



Fencing

Plate No.5



Danger board
Plate No.6



**Mining Area** 

Plate No.7



**Blasting mat** 





Drainage

#### Plate No.9



**De Siltation Trap** 





Sign Board

Plate No.11



**Solar Street light** 

Plate No.12



Workers with personal protective equipments

Plate No.13



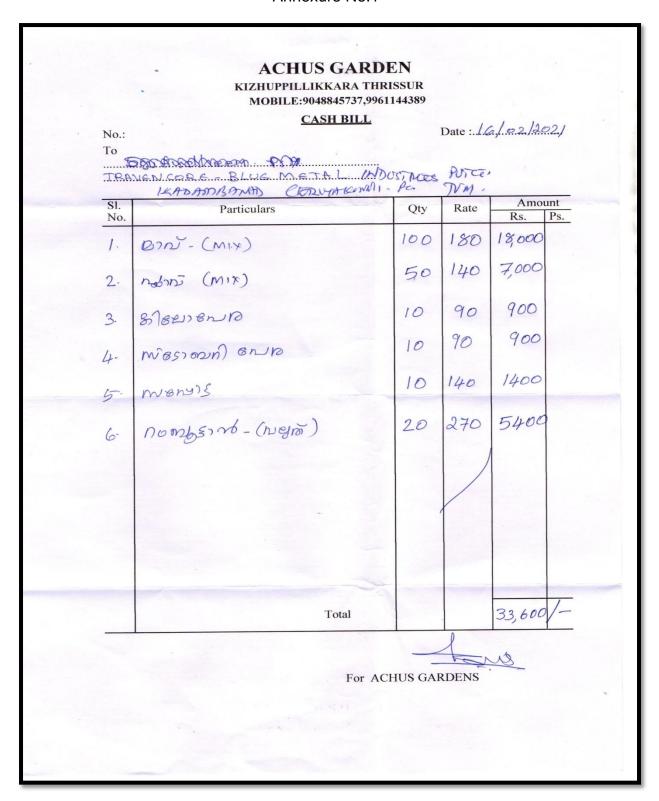
Magazine

Plate No.13



EC Board

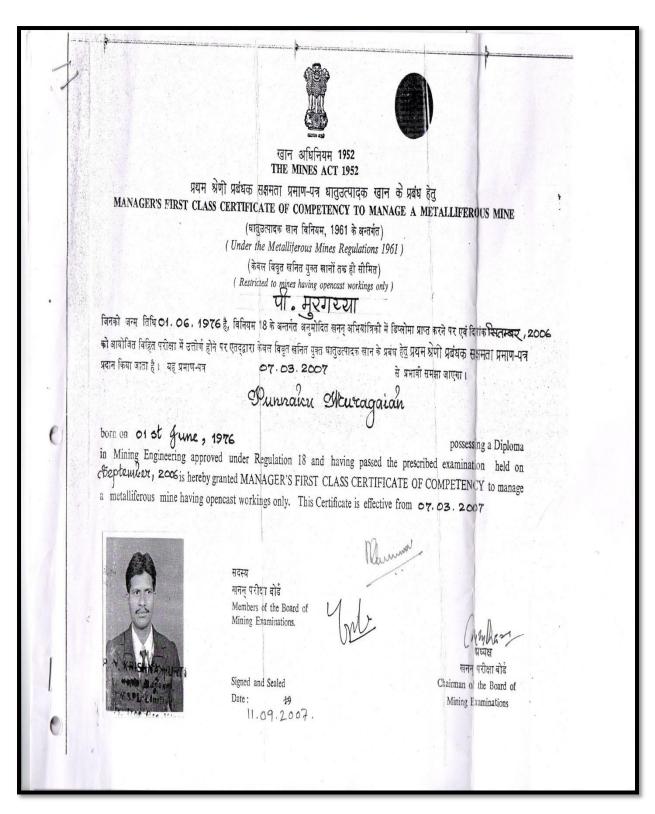




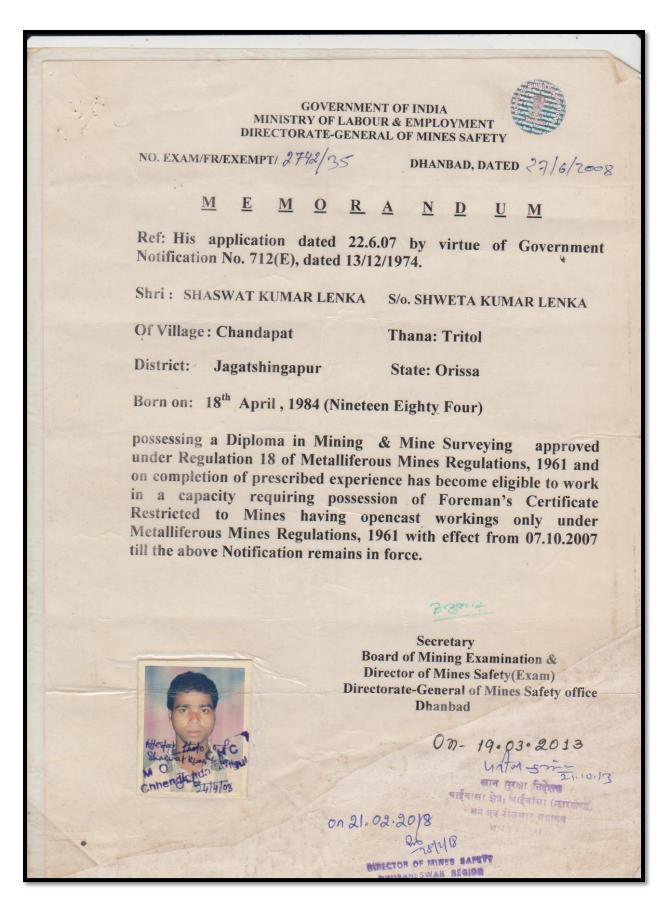
Bill of plants purchased

14	
(घालीय) खनन परीक्षा बोर्ड	
Board of (Metalliferous) Mining Examinations	मृ०वा०नि० 1229 R C.LM, 1229 R
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खनन मेर MINING MATE'S CE	द समर्थता प्रमाण-पत RTIFICATE OF COMPETENCY
(धात्वीय खान	विनिगम १६६० के अपनित्र)
(Under Metallifer	ous Mines Regulations, 1961)
(भवल खुल कार्यस्थल (Restricted to metalliferou	ों बाली घात्वीय खानों तक सीमित) 15 mines having open-cast workings only)
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जिला	7
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19, is hereby granted a MINI	NG MATE'S CERTIFICATE under the Metalliferous Mines
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Secretary, Board of Mining Examinations.	खनन परीक्षा बोर्ड Chairman,
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Date	
2	
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Certified that he was examined and found free from	deafness, defective vision or one attack of
physical, likely to interfere with the efficient discharge of	his duties.
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3. Onता०को	4. On
5. Onतान सुरका निदेशकः	ता॰ का  Grector of Mines Safety  Ghubarteswar Region
भूबनेश्वर क्षेत्र	6. Bhubartegwar Region ता० को
प्रजासपायुम्म/MGITBP Bbsr—16/1 MSD/90-91—10,000 Sheets.	

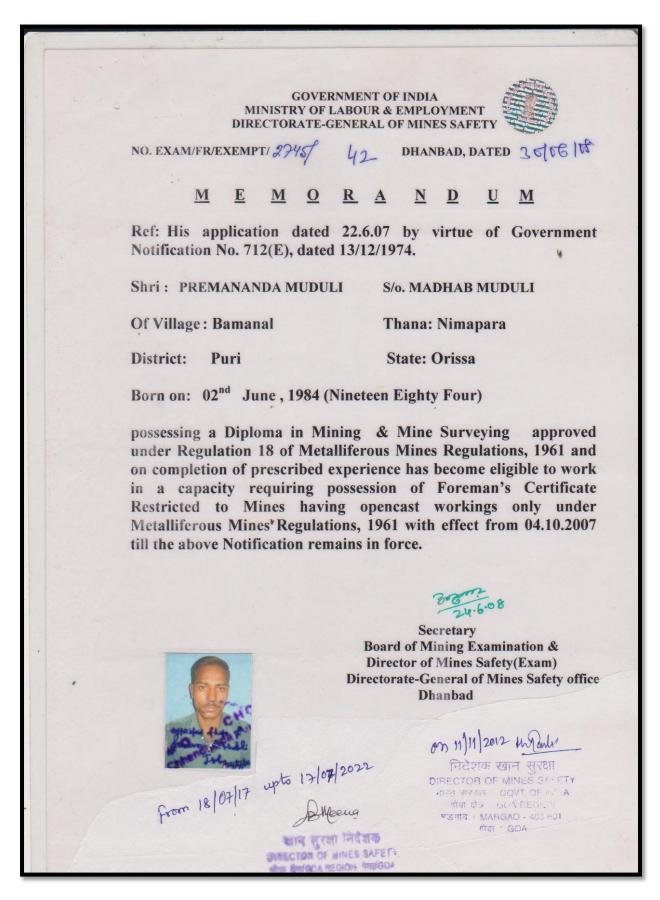
Certificate of Mining mate



Certificate of Mines manager



Certificate of Foreman



Certificate of Foreman



### KERALA STATE POLLUTION CONTROL BOARD

FILE NO.:PCB/TVM-DO/ICO/NDD-243/2017

Date of issue :04/09/2020

## INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No: PCB/TVM-DO/ICO(R)/NDD/QRY/120/2020

Ref : 1) Consent No:PCB/TVM-DO/ICO/QRY-596/2017 Dated 16/11/2017 2) This Application No:13575532 Dated 18/07/2020

The 'Integrated Consent to Operate' issued as per reference above to M/s Travancore Blue Metal Idustries Private Ltd, Cheriyakonni, Cheriyakonni P.O, Aruvikkara, Nedumangad, Thiruvananthapuram is hereby renewed up to 30/03/2022 and issued to M/s Travancore Blue Metal Idustries Private Ltd, Cheriyakonni, Cheriyakonni P.O, Aruvikkara, Nedumangad, Thiruvananthapuram The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

### I. GENERAL

S.No.	Items	Description		
1	VALIDITY	30/03/2022		
2	CATEGORY	RED		
3	CAPITAL INVESTMENT	Rs 228 Lakhs		
4	ANNUAL FEE	Rs 31400/-		
5	FEE REMITTED	Rs 96050/-		
6	PRODUCT DETAILS	Rocks Quarrying :1000 Metric Tonnes		

## **II. Stack Details**

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

## III. CONDITIONS

Page1

- 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. 229/1,9,9-1,13,234/4,3,5,6,8-2, 9-1, 10,11, 238/12,13-2,16-2,17-2,240-7,7-1, 7-2,8,9,10,11, 241/1-1,1-2,2,4,5,6,7,8,8-1,9-1,10,12-16,12-17,242/2,4-2,4-3,5,6,241/12-2,13-1,18,242/1,7,8,245/4,5,6,6-1,6-2,6-3,6-4 for 9.2152 hectares in Aruvikkara Village Nedumangad Taluk, Thiruvananthapuram
- 5.2 This consent is granted subject to the power of the Board to review and make variations in all or any of the conditions as per section 21 of the Air (Prevention and Control of Pollution) Act 1981 and section 25 of the Water (Prevention and Control of pollution) Act 1974.
- 5.3 The validity of this consent is subjected to the final judgement of Hon'ble High Court in W.P.(C) No: 15858/2020(F) and the final order of Hon'ble National Green Tribunal on the matter.
- 5.4 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.
- 5.5 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 50 m from the nearby residential buildings, places of worship, public buildings, public road having vehicular traffic, river or lake, railway line and bridges.
- 5.6 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.
- 5.7 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.
- 5.8 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.
- 5.9 Boundary of quarrying area shall be fenced and demarcated.
- 5.10 Fugitive emission from the quarry premises and road leading to quarry shall be suppressed using water sprinkling.
- 5.11 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 PM 10 in ambient air at the boundary shall not exceed 100 microg/m3 b) The PM 2.5 in ambient air at 1m outside the boundary shall not exceed 60 microg/m3.
- 5.12 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.
- 5.13 The operation of the unit shall be commenced/done only after obtaining clearances from all concerned authorities.
- 5.14 The quarry shall be operated only from 6am to 6pm.
- 5.15 For renewal of the consent in case of continuance of operation of the industry, application in the prescribed form shall be submitted through the web portal of the Board http://krocmms.nic.infor renewing the Consent on or before two month in advance to expiry date. Late application will be accepted with 10% (for application before expiry date) & 50% of yearly fee as late fee for application after due date.
- 5.16 This Consent is granted on the basis of ENVIRONMENTAL CLEARANCE DATED: 31/03/2017 and other documents furnished by the applicant. If any document is found false, the consent issued will be cancelled/revoked.
- 5.17 This consent is granted subject to the Environmental Clearance No: 29/2017 dated 31/03/2017 having validity up to 30/03/2022 issued by State Environmental Impact Assessment Authority Kerala, SEIAA (Proceedings No.52/SEIAA/KL/3072/2013).

Page2

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

BINCY B S Date: 2020.09.05 21:48:28 +05'30'

DATE:04/09/2020 SIGNATURE & SEAL OF ISSUING AUTHORITY

ASSISTANT ENVIRONMENTAL ENGINEER, ENVIRONMENTAL ENGINEER (I/C) DISTRICT OFFICE, THIRUVANANTHAPURAM



#### To

Travancore Blue Metal Idustries Private Ltd,

Cheriyakonni,

Cheriyakonni P.O,

Aruvikkara,

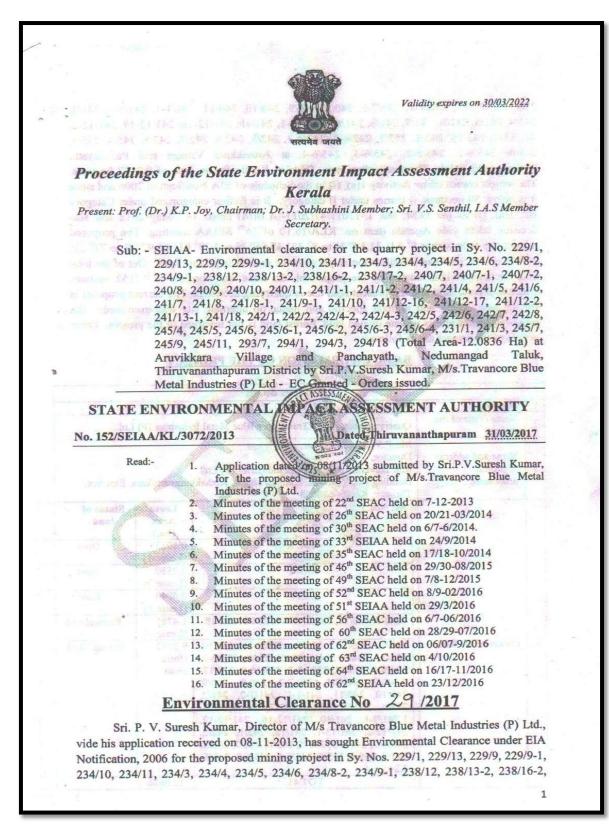
Nedumangad,

Thiruvananthapuram

- 1. This digitally signed document is legally valid as per the Information Technology Act 2000
- 2. For verifying this document please go to krocmms.nic.in and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Online Consent Management and Monitoring System.

Page3

Copy of Consent form PCB



Copy of Environmental Clearance



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/SC/KL/22/1215(E58077)

Dated:02/02/2018
6 FEB 2018

Shri.M/S Suresh Kumar.P.V.,

Director, Travancore Blue Metal Industries Pvt Ltd Thekkemala-Mylom, Cheriyakonni Post, Thiruvannathapuram District-695013, Kerala., Town/Village - Cheriyakonni District-THIRUVANANTHAPURAM, State-Kerala, Pincode - 695013

Subject:

Possession for Use of of Explosives from magazine situated at Survey No.:245/6-2, Block 41., Aruvikkara village, Nedumangad Taluk, Thiruvananth, Dist. THIRUVANANTHAPURAM, Kerala -Licence No.: E/SC/KL/22/1215(E58077) granted in Form LE-3 of Explosives Rules, 2008 - Amendment in Drawings/Facilities/Premises.

Sir(s),

Please refer to your letter No. e58077 dated 02/02/2018 on the subject cited above.

The Licence No.: E/SC/KL/22/1215(E58077) is forwarded herewith duly amended in respect of followings;

I. INTIMATION REGARDING QUARRY ING OPERATIONS AT SY.NO. 1. INTIMATION REGARDING QUARRY ING OPERATIONS AT SY.NO. 229/1,229/13,229/9-1,234/10,234/11,234/3,234/4, 234/5, 234/6-2,234/9-1,234/12, 234/5-2,238/13-2, 238/13-2, 238/13-2, 238/13-2, 238/13-2, 240/7, 7-1, 7-2, 8, 9, 10, 11, 241/1-1, 1-2,24,5,6,7,8,8-1, 9-1,10,12-16,12-17,12-2, 13-1, 18,242/1, 2,4-2, 4-3,5,6,7,8, 245/4, 5,6,6-1, 6-2, 6-3,245/6-4 \* OF ARUVIKKARA VILLAGE, NEDUMANGAD TALUK, THIRUVANANTHAPURAM DIST. VIDE INDENT LETTER FROM DEPT OF MINING & GEOLOGY NO. 8300/M3/2017 DATED 4/10/2107 IS ACKNOWLEDGED. NO USE OF EXPLOSIVES IS PERMITTED UNLESS VALID QUARRY PERMIT IS OBTAINED AND COPY SUBMITTED TO THIS OFFICE. LOCAL STATE GOVERNMENT AUTHORITIES APPROVAL/ENVIRONMENTAL CLEARANCE AS APPLICABLE AND RENEWED FROM TIME TO TIME SHALL BE IN POSSESSION.2. LICENSED EXPLOSIVES VAN SHALL BE USED FOR TRANSPORTATION OF EXPLOSIVES FROM MAGAZINE TO BLASTING SITE3. IF ANY CHANGE OF QUARRY OR ADDITIONAL QUARRY IS INVOLVED, NECESSARY PRIOR APPROVAL/ENDORSEMENT SHALL BE OBTAINED FROM THE LICENSING AUTHORITY. 4. OPENING OF QUARRY SHALL BE INFORMED TO THE DGMS AND BLASTING OPERATIONS SHALL BE CONDUCTED AS PER MINES ACT.5. APPROVED BLASTER SHALL BE APPOINTED IN THE QUARRY FOR BLASTING. 6. ALL RECORDS OF USE OF EXPLOSIVES IN RE-3, RE-5, RE-7 RE-13 SHALL BE MAINTAINED.6.DAILY PASS FOR USE OF EXPLOSIVES (RE-13) SHALL BE GENERATED ONLINE. OF VILLAGE, TALUK, DIST. VIDE INDENT LETTER FROM DEPT OF MINING & GEOLOGY NO. DATED IS ACKNOWLEDGED. NO USE OF EXPLOSIVES IS PERMITTED UNLESS VALID QUARRY PERMIT IS OBTAINED AND COPY SUBMITTED TO THIS OFFICE. LOCAL STATE GOVERNMENT AUTHORITIES APPROVAL/ENVIRONMENTAL CLEARANCE AS APPLICABLE AND RENEWED FROM TIME TO TIME SHALL BE IN POSSESSION.2. LICENSED EXPLOSIVES VAN SHALL BE USED FOR TRANSPORTATION OF EXPLOSIVES FROM MAGAZINE TO BLASTING SITE.3. IF ANY CHANGE OF QUARRY OR ADDITIONAL QUARRY IS INVOLVED, NECESSARY PRIOR APPROVAL/ENDORSEMENT SHA

The licence capacity at any one time shall not exceed the kinds and quantities mentioned below;

No	Explosive(s)	Class	Div	Sub Div	Capacity	Unit
1	Nitrate Mixture	2	0	0	150	Kg.
2	Electric and/or Ordinary Detonators	6	3	0	5000	Nos.
3	Safety Fuse	6	1	0	2000	Mtrs

Deantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)]: 20 times as above. This Licence shall remain valid till 31st day of March 2021. For further renewal of licence, please follow the procedure under Rule 112 of Explosives Rules, 2008. Receipt of this letter may please be acknowledged. **Enclosures**: Yours faithfully, Deputy Chief Controller of Explosives
Emakulam
D. C. C. E., Ernakulam Copy Forwarded to: 1. District Magistrate, THIRUVANANTHAPURAM, Kerala with reference to his Noc No: A17-26996/10 Dated: 17/09/2010. 2. Superintendent of Police, THIRUVANANTHAPURAM, Kerala Deputy Chief Controller of Explosives Ernakulam [For more information regarding status, fees and other details, please visit our web site http://peso.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, ब्लाक सी-2, तीसरी मंजिल | Kendriya Bhavan, Block C-2, 3rd Floor
CSEZ पी.ओ.कक्कानाड कोच्ची | CSEZ PO Kakkanad Dist. Ernakulam Ernakulam 682037
फोन (Phone):- 2427286 | फेक्स (Fax):- 2427276

ई-मेल Email: dycceernakulam@explosives.gov.in

2 9 JAN 2021

दिनांक (Date): 25/01/2021

संख्या (No.): E/SC/KL/22/1215(E58077)

सेवा में | To,

Shri.M/S Suresh Kumar.P.V.,

Director, Travancore Blue Metal Industries Pvt Ltd Thekkemala-Mylom, Cheriyakonni Post, Thiruvannathapuram District-695013, Kerala., Town/Village - Cheriyakonni District-THIRUVANANTHAPURAM, State-Kerala, Pincode - 695013

विषय:

Survey No.245/6-2, Block 41 ., ग्राम Aruvikkara village, Nedumangad Taluk, Thiruvananth, जिला THIRUVANANTHAPURAM, राज्य Kerala में विस्फोटक के मैगजीन में उपयोग के लिए कब्जा हेतु विस्फोटक नियम, 2008 के अंतर्गत LE-3 में जारी अनुज्ञप्ति सं E/SC/KL/22/1215(E58077) के नवीनीकरण

Subject:

Possession for Use of of Explosives from magazine situated at Survey No.:245/6-2, Block 41. Aruvikkara village, Nedumangad Taluk, Thiruvananth, Dist. THIRUVANANTHAPURAM, Kerala Licence No.: E/SC/KL/22/1215(E58077) granted in Form LE-3 of Explosives Rules, 2008 - Renewal regarding

महोदय। Sir,

आपका उपर्युक्त विषय पर पत्र संख्या Nil दिनांक 11/01/2021 का संदर्भ ग्रहण करें। विस्फोटक नियम, 2008 के अंतर्गत प्ररूप LE-3 में जारी अनुज्ञप्ति दिनांक 31/3/2026 तक नवीनीकृत कर इस पत्र के साथ भेजी जा रही है। Reference to your letter No.: Nil dated: 11/01/2021, the subject licence duly renewed upto 31/3/2026 and issued in Form LE-3 of Explosives Rules, 2008 is forwarded herewith.

### Conditions:

1) QUARRYING SHALL BE STARTED USING EXPLOSIVES ONLY AFTER GRANT OF QUARRYING LEASE FROM THE DIRECTOR OF MINING & GEOLOGY . PLEASE NOTE THAT THE USE OF EXPLOSIVES IN THE QUARRIES SHALL BE AS PER THE DIRECTION OF DGMS, BANGALORE AS REQUIRED UNDER MINES ACT 1952 AND METALIFEROUS MINES REGULATIONS 1961

अनुज्ञप्ति के आगामी नवीकरण हेतु कृपया निम्नलिखित दस्तावेज दिनांक 31/03/ 2026 से पहले **इस कार्यालय** को भेजे जाएं. For further renewal of licence, please submit the following documents so as to reach this office on or before

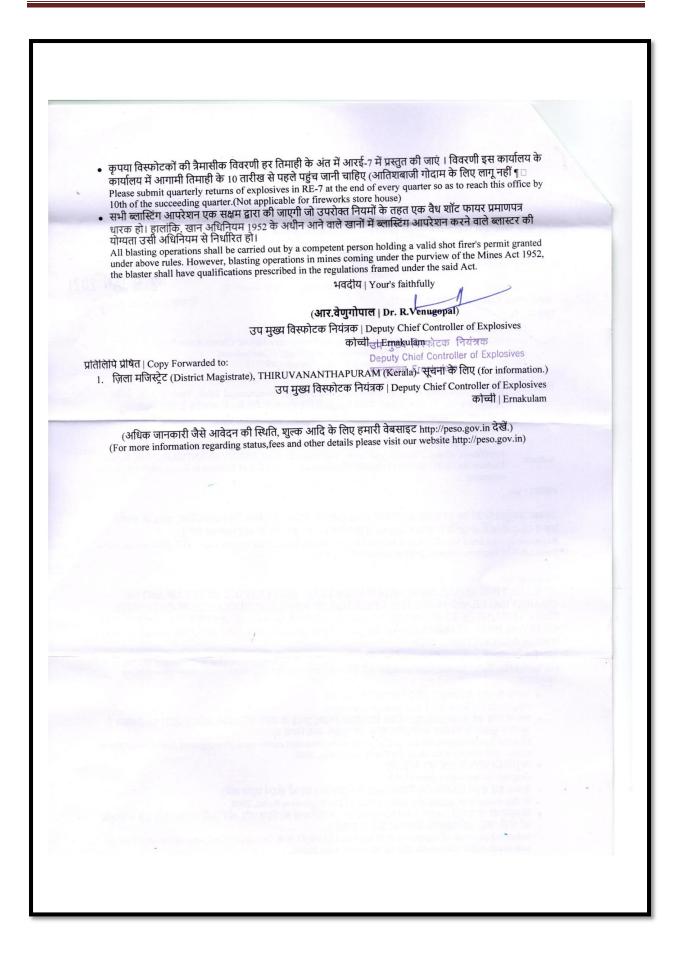
 प्ररूप आरई-। में विधिवत पूर्ण एवं हस्ताक्षरित आवेदन। Application in Form RE-1 duly filled in and signed.

एक से पाँच वर्ष के अनुज्ञप्ति शुल्को का, विस्फोटक नियम, 2008 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से लाइसेंस शुल्क ऑनलाइन जमा किया जाना है। Licence fees renewable for one to five years, to be submitted online through e-payment facility available on online application portal under the Explosives Rules, 2008. अनुमोदित प्लान के साथ मूल अनुज्ञाति।

Original licence with approved plan.

कृपया इस संबंध में विस्फोटक नियम, 2008 के नियम 112 का भी संदर्भ ग्रहण करें।

In this connection, please also refer to Rule 112 of Explosives Rules, 2008. विस्फोटकों के क्रय हेतु आरई-11 में मांगपत्र (इंडेंट) आपूर्तिकर्ता को दिया जाए और उसी की एक प्रति इस कार्यालय को भेजी जाएं (आतिशबाजी गोदाम के लिए लागू नहीं ¶ 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)



# अनुज्ञाप्ते प्ररुप 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 1 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/SC/KL/22/1215(E58077) वार्षिक फीस रुपए (Annual Fee Rs): 2400/-

1. Licence is hereby granted to

Shri.M/S Suresh Kumar.P.V. (প্রতিমানি / Occupier : Shri Suresh Kumar.P.V.), Director,Travancore Blue Metal Industries Pvt Ltd Thekkemala-Mylom, Cheriyakonni Post, Thiruvannathapuram District-695013, Kerala., Town/Village - Cheriyakonni, District-THIRUVANANTHAPURAM, State-Kerala, Pincode - 695013

को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : Individual

3. अनुज्ञप्ति निम्नलिखित प्रयोजनों के लिए विधिमान्य है। Licence is valid only for the following purpose. Ordinary Detonators, Safety Fuse, के अपयोग 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	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	150 Kg.
2.	Electric and/or Ordinary Detonators	6,3	0	5000 Nos.
3.	Safety Fuse	6,1	0	2000 Mtrs

(ख) किसी एक कलैंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए।

26 times as above.

(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)]:

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पृष्टि होती है। The licensed premises shall conform to the following drawing(s): . (E58077) दिनांक (Dated) 29/0

रेखाचित्र क्र. (Drawing No.) E/SC/KL/22/1215 : (E58077) दिनांक (Dated) 29/04/2011

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address: Survey No. 245/6-2, Block 41., ग्राम (Town/Village): Aruvikkara village, Nedumangad Taluk,

Thiruvananth জিলা (District) THIRUVANANTHAPURAM पुलिस थाना (Police Station) : Nedumangad राज्य (State) Kerala पिनकोड (Pincode) 695013 ई. मेल (E-Mail) फैक्स (Fax)

7. अनुज्ञप्ति परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं। The licensed premises consist of following

दूरभाष (Phone) 09447178279

D(110) and E(172) and E(854) type portable magazine (Mfd by Thekkans Engg and Fabrication Works, Ernakulam)total three portable magazine after this amendment

- 8. अनुज्ञप्ति समय समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधो, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबध्दों 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, सित्रमीण संबंधी और अन्य विवरण दर्शित करते हुए¶□ Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
  - अनुज्ञप्ति प्राधिकारी व्दाररा हस्ता.क्षरित इस अनुज्ञप्ति की शर्ते और अतिरिक्ति शर्ते।
     Conditions and Additional Conditions of this licence signed by the licensing authority.
  - 3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञप्ति तारीख **31 मार्च 2016** तक विधिमान्य रहेगी। This licence shall remain valid till **31st day of March** 

यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन तथा उपवर्णित इस अनुज्ञप्ति की शर्तों का अधिक्रमण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहत की जा सकती है, जहां वह लागू हो।

This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto.

Sd/-

तारीख | The Date - 29/04/2011

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives South Circle, Chennai

#### Amendments:

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 13/01/2012
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 12/06/2013
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 02/01/2014
- Amendment in Drawings/Facilities/Premises dated: 02/02/2018
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 30/01/2019

नवीनीकरण के पृष्ठांकन के लिए स्थान

Space for Endorsement of Renewal

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकार <del>ी के</del> हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
25/01/2021	31/03/2026	Dy. Chief Controller of Explosives, Ernakulam
	-	उप मुख्य विस्फोटक नियंत्रक Deputy Chief Controller of Explosives
		मानाकलम Frnakulam

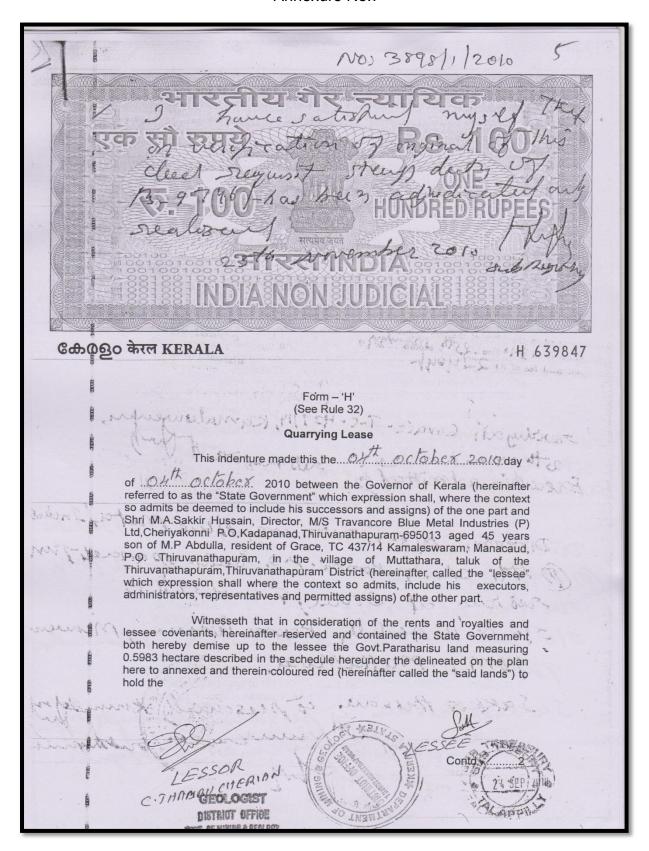
कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा।

Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

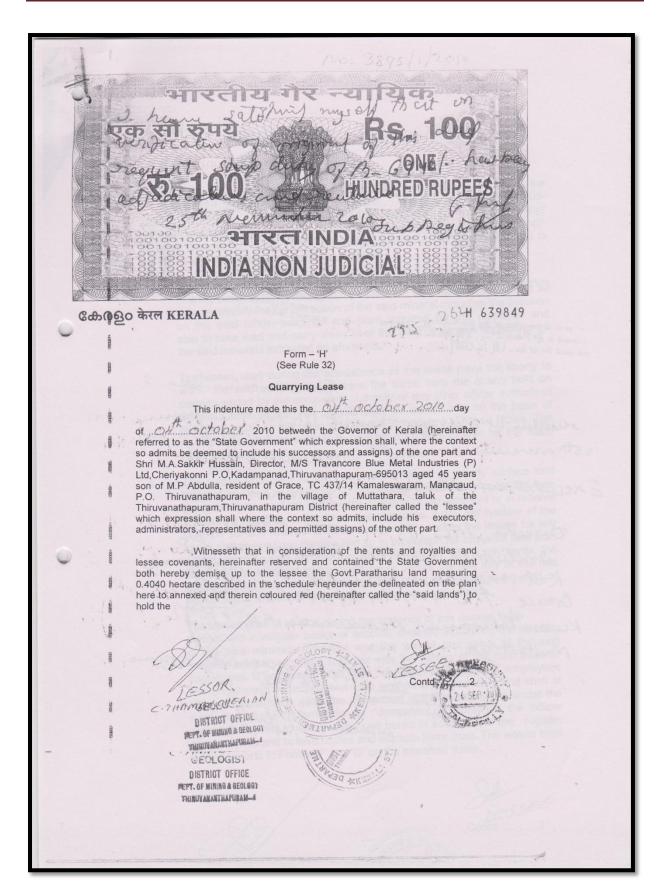
Copy of Explosive

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വ വെ കേരള പത്തിവനത്ത് മാജ് ഗ	ישוניט) טוושטום אטושוטי	പഞ്ചായത്ത്	തീയതി : 01\04\2\
34 നല തേരള വരുമായത്ത് താക്ക	ആക്റ്റ് 232, 233, 234 എന്നീ വം	കുപ്പുകളും തൽറ	സംബന്ധമായ ചട്ടങ്ങളും അതോടൊ <u>ം</u>
കേരള ഇൻവെസ്റ്റ്മെന്റ് ഒ	പ്രൊമോഷൻ ആൻഡ് ഫെസി	ലിറ്റേഷൻ ഓർഡ്	ധിനൻസ് (2017) അനുസരിച്ച്
	ഥകടവകശ/വ്വാപാരം എന്നിവയ്ക്ക് നൽകു	The state of the s	ത്വം/മറ്റു സേവനങ്ങൾ ർസ്
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സ്ഥാപനത്തിന്റെ പേരും	to such a home	and south	യ്ത്രീസ് ചൈവറ്റ് ലിമിക്ക
മേൽവിലാസവും	കടമ്പനാട്, ചെറി	The Divini	OCO INCT TO CITY
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കെട്ടിടത്തിന്റെ നമ്പരും വാർഡു നമ്പരും	Medy monto 229/1 234/4,3,5,6,8-2,9 240/7,7-1,7-2,8,9	9-1.10 11	29/9-1, 229/13; 238/12,13-2,16-2,17-2, 1-1,1-2,2,4,5,6,7,8,8-1,9 -2,4-3,5,6,1,7,8;
ലൈസൻസ് കാലയളവ്	245/4,5,6,6-1,6-2,6	2442,4- 3,6-4 221 23000	31-03-2022 and
ഈടാക്കിയ ലൈസൻസ് ഫീസ്	15000	രൂപ	120150157
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ം ലൈസൻസ് അനുവദിക്കു ന്നതിനായി ഹാജരാക്കിയ നിരാക്ഷേപ പത്രങ്ങളുടെ വിശദാംശങ്ങൾ (നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ അധികാര സ്ഥാപനം)	State Polhotion (a Do/Ico/NDD-243/ Explosive Licence Quanying Lease	ondsol Board 2017 (Rene No: E/SC/k	2. No: 29/2017 (Valid up) 31/3/20 d Consent No: PCB/TUN ewed up to 20/03/2022) KL/22/1215 (Renewed up to to 27/2/2027 from Minin Department, Kerala.
പ്രദേശ് ചിവ് AV A വെ വലല ഓഫീസ്മുള് വൈ പ്രദേശം	301ma 0	ചുള്ള ക്യാന്ത്രാവ അത്രാവന്ത്ര അത്രാവന്ത്ര	SHIBU PRANAB, R. S  Secretary  GRANAB PAnchayat  Wikkara P.O., Trivandrum (Plonificand Grana)  Wikkara P.O., Trivandrum (Plonificand Grana)  Maria P.O., Trivandrum (Plonificand Grana)

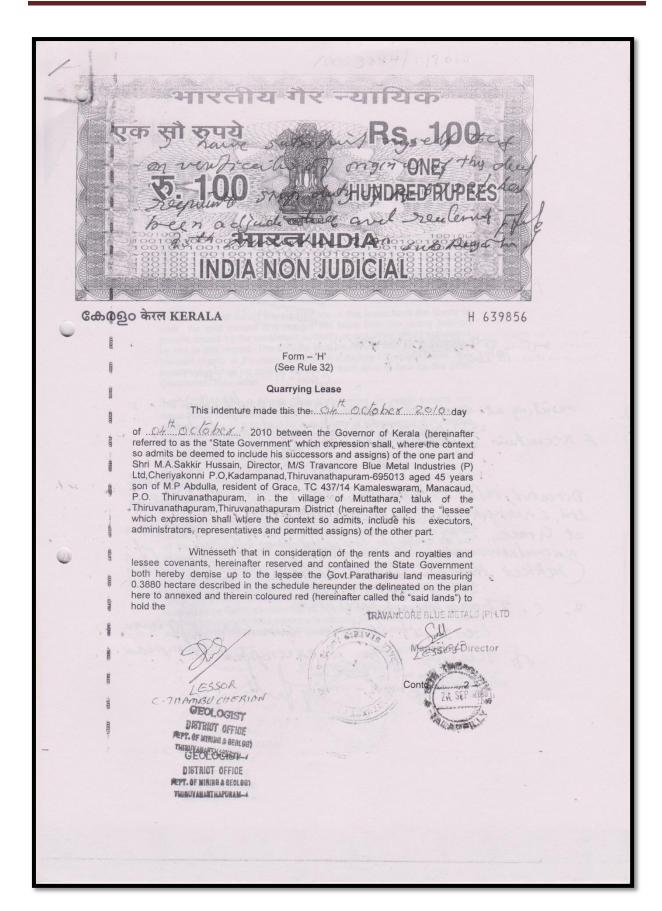
Copy of license from Gram Panchayat



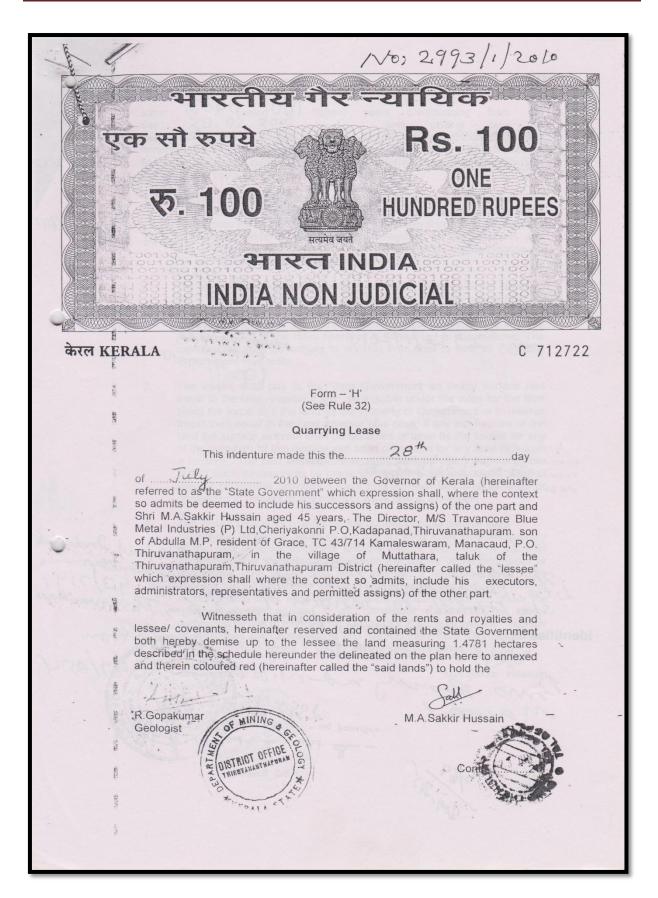
Copy of lease



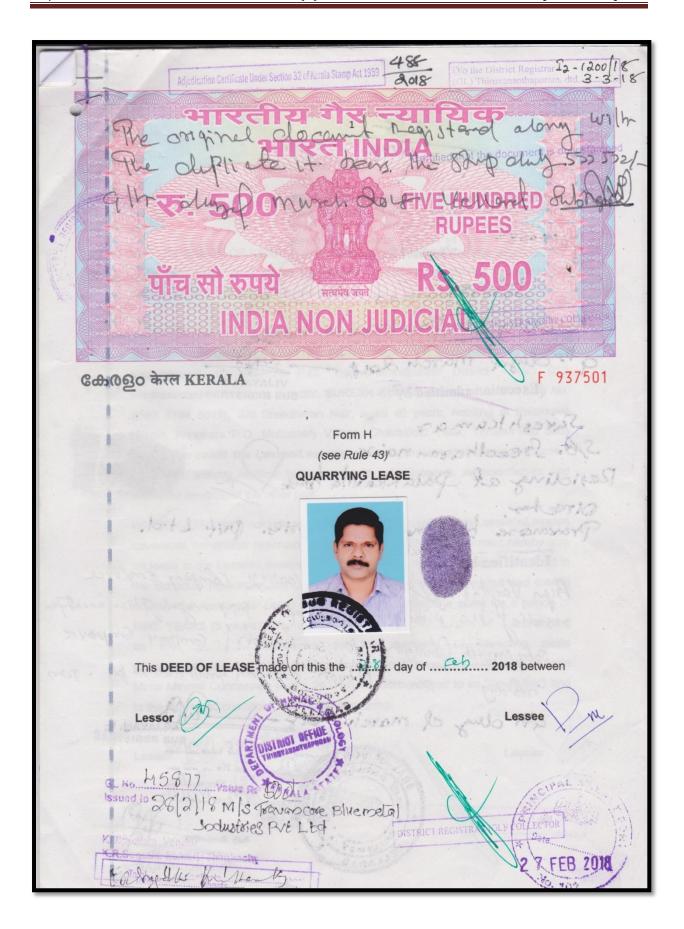
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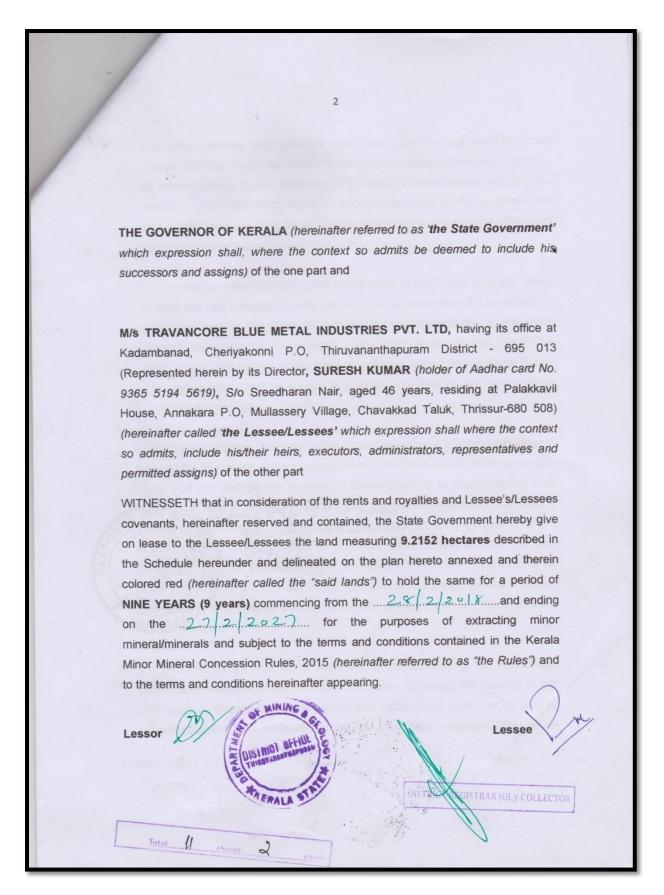


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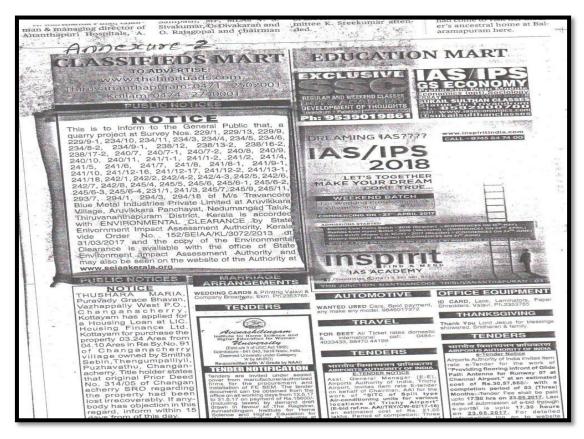


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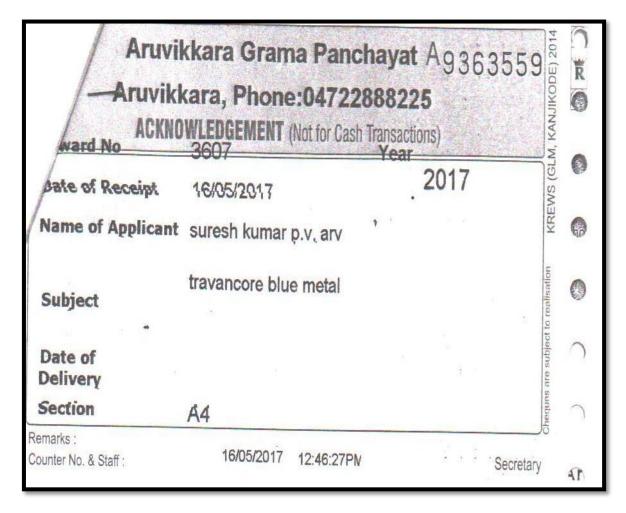


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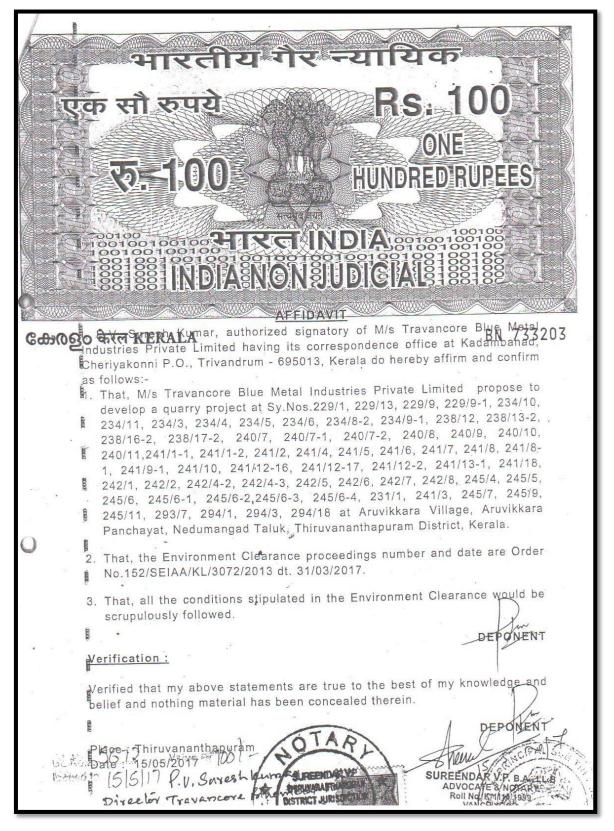




Advertisement in News papers



Acknowledgment from Gram Panchayat



Copy of Affidavit



## TEST REPORT

Test Report No: 20211220/R025 Date: 24-12-2021 Page 1 of 2

CUSTOMER DETAILS		
Customer Name & Address	M/s Travancore Bluemetal Industries Pvt Ltd, Aruvikkara, Nedumangad, Thiruvananthapuram District.	
Customer Reference	Test Request dt: 20-12-2021	

Captonior Hororeneo	Test Request at 20 12 2021	5			
	SAMPLE DE	TAILS			
Product Category Atmospheric Pollution Sample Code 20211220/S025					
Sample Name	Name Ambient Air Sample Received on 21-12-2021				
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	21-12-2021		
Sampled by	Lab Authorized Sampler	Test Completed on	23-12-2021		
	DETAILS OF S	AMPLING			
Sampling Location	Near East Side Boundary	Date of Sampling	20-12-2021		
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	65%		
	SAMPLING SITE	EDETAILS			
Survey No.	229/1, 229/13, 229/9, 229/9- 234/8-2, 234/9-1, 238/12, 23 2, 240/8, 240/9, 240/10, 240/ 241/7, 241/8, 241/8-1, 241/9 241/13-1, 241/18, 242/1, 242 245/4, 245/5, 245/6, 245/6-1 245/9, 245/11, 293/7, 294/1,	8/13-2, 238/16-2, 238/17 /11, 241/1-1, 241/1-2, 24: -1, 241/10, 241/12-16, 24: /2, 242/4-2, 242/4-3, 242; , 245/6-2, 245/6-3, 245/6	-2, 240/7, 240/7-1, 240/7- 1/2, 241/4, 241/5, 241/6, 1/12-17, 241/12-2, 2/5, 242/6, 242/7, 242/8,		
Village	Aruvikkara	Taluk	Nedumangad		
District	Thiruvananthapuram	State	Kerala		

TEST RESULTS- CHEMICAL PARAMETERS						
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ Standards	
1	Particulate Matter, PM <sub>10</sub>	IS 5182 (Part 23):2006	μg/m³	47.9	Max 100	
2	Particulate Matter, PM <sub>2.5</sub>	EPA 40 CFR (Part 50) Appendix – L	μg/m³	21.5	Max 60	

Technical Manager Checked by:



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<sup>5</sup> 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: seaalab@gmail.com



### TEST REPORT

Test Report No: 20211220/R025	Date: 24-12-2021	Page 2 of 2
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	TEST RESULTS- CHEMICAL PARAMETERS						
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ Standards		
3	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part 2): 2001 RA 2017	μg/m³	<2.00	Max 80		
4	Oxides of Nitrogen as NO <sub>2</sub>	IS 5182 (Part 6): 2006 RA 2017	μg/m³	<2.00	Max 80		

Remarks:

\*\*\*End of Report\*\*\*

Technical Manager Checked by:

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<sup>S</sup> 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: seaalab@gmail.com

Result of Air



# TEST REPORT

Test Report No: 20211220/R026	Date: 24-12-2021	Page 1 of 1
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CUSTOMER DETAILS				
Customer Name & Address	M/s Travancore Bluemetal Industries Pvt Ltd, Aruvikkara, Nedumangad, Thiruvananthapuram District.			
Customer Reference	Test Request dt: 20-12-2021			

DETAILS OF MONITORING						
Product Category	y Atmospheric Pollution Sample Code 20211220/S026					
Sample Name	Ambient Noise	Monitoring Commenced on	20-12-2021 / 06:00			
Monitoring Location	Near East side Boundary	Monitoring Completed on	21-12-2021 / 06:00			
Test Method IS 9989:1981 RA:2008		Monitored by	Lab Authorized Sampler			
MONITORING SITE DETAILS						
229/1, 229/13, 229/9, 229/9-1, 234/10, 234/11, 234/3, 234/4, 234/5, 234/6, 234/8-2, 234/9-1, 238/12, 238/13-2, 238/16-2, 238/17-2, 240/7, 240/7-1, 240/10, 240/8, 240/9, 240/10, 240/11, 241/1-1, 241/1-2, 241/2, 241/4, 241/5, 241/6 241/7, 241/8, 241/8-1, 241/9-1, 241/10, 241/12-16, 241/12-17, 241/12-2, 24 1, 241/18, 242/1, 242/2, 242/4-2, 242/4-3, 242/5, 242/6, 242/7, 242/8, 245/245/5, 245/6, 245/6-1, 245/6-2, 245/6-3, 245/6-4, 231/1, 241/3, 245/7, 245/245/11, 293/7, 294/1, 294/3, 294/18						
Village	Aruvikkara	Taluk	Nedumangad			
District Thiruvananthapuram State Kerala			Kerala			

MONITORING RESULTS - Leq						
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	
06:00	37.8	14:00	50.7	22:00	36.7	
07:00	40.6	15:00	51.1	23:00	35.4	
08:00	44.9	16:00	52.3	24:00	38.0	
09:00	48.4	17:00	52.7	01:00	38.7	
10:00	50.7	18:00	47.2	02:00	38.3	
11:00	53.8	19:00	43.7	03:00	39.1	
12:00	51.1	20:00	39.8	04:00	38.0	
13:00	50.3	21:00	39.3	05:00	39.8	

	TEST RESULTS						
Sl. No.	PADAMETERS INIT DESILT						
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	49.2				
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	38.2				

Remarks:

\*\*\*End of Report\*\*\*

Rija Joseph Technical Manager 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.

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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: seaalab@gmail.com

## Result of Noise



## TEST REPORT

Test Report No: 20211220/R027 Dat			e: 24-12-2021		Page 1 of 2	
CUSTOMER DETAILS						
Customer Name &	Customer Name & M/s Travancore Bluemetal Industries Pvt Ltd,					
Address	Aruvikkara, Nedumanga	d,				
	Thiruvananthapuram Dis	strict	•			
Customer Reference	Test Request dt: 20-12-20	)21				
	SAMPLE DI	ETAI	LS			
Product Category	Water Sample Code 20211220/S027					
Sample Name	Open Well		Sample Received on	1	21-12-2021	
Sample Conditions at Receipt	Fit for Analysis	Fit for Analysis Temper			27 °C	
Sample Quantity& Packing	1L & 100ml Plastic Bottle		Test Commenced on		21-12-2021	
Sampled by	Not Drawn by Laboratory		Test Completed on		23-12-2021	
,	SAMPLING SIT	E DE	TAILS			
229/1, 229/13, 229/9, 229/9-1, 234/10, 234/11, 234/3, 234/4, 234/5, 234/6, 234/8-2, 234/9-1, 238/12, 238/13-2, 238/16-2, 238/17-2, 240/7, 240/7-1, 240/7-2, 240/8, 240/9, 240/10, 240/11, 241/1-1, 241/1-2, 241/2, 241/4, Survey No.  241/5, 241/6, 241/7, 241/8, 241/8-1, 241/9-1, 241/10, 241/12-16, 241/12-17, 241/12-2, 241/13-1, 241/18, 242/1, 242/2, 242/4-2, 242/4-3, 242/5, 242/6, 242/7, 242/8, 245/4, 245/5, 245/6, 245/6-1, 245/6-2, 245/6-3, 245/6-4, 231/1, 241/3, 245/7, 245/9, 245/11, 293/7, 294/1, 294/3, 294/18						
Village	Aruvikkara		Taluk	, , ,	Nedumangad	
District	Thiruvananthapuram		State		Kerala	

TEST RESULTS- CHEMICAL PARAMETERS						
S1.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	0.20	Max 1	
4	pН	IS 3025 (Part 11):1983 RA 2017	Need 1	7.13	6.50 - 8.50	
5	Conductivity	IS 3025 (Part 14):1984 RA 2019	μS/cm	77.0		
6	Total Dissolved Solids	IS 3025 (Part 16):1984 RA 2017	mg/L	50.0	Max 500	
7	Total Hardness as CaCO <sub>3</sub>	IS 3025 (Part 21):2009 RA 2019	mg/L	18.1	Max 200	

Shency Joy Dy.TM-Chemical Checked by

Microbiologist Authorized Signatory Laiju P.N.

Laboratory Head Authorized Signatory

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



## TEST REPORT

Test Report No: 20211220/R027 Date: 24-12-2021 Page 2 of 2

	TEST RESULTS- CHEMICAL PARAMETERS						
S1.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500:2012		
8	Calcium as Ca	IS 3025 (Part 40):1991 RA 2019	mg/L	4.00	Max 75		
9	Magnesium as Mg	IS 3025 (Part 46):1994 RA 2019	mg/L	1.94	Max 30		
10	Chloride as Cl	IS 3025 (Part 32):1988 RA 2019	mg/L	7.99	Max 250		
11	Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23):1986 RA 2019	mg/L	13.9	Max 200		
12	Iron as Fe	IS 3025 (Part 53):2003 RA 2019	mg/L	0.23	Max 1		
13	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24):1986 RA 2019	mg/L	2.71	Max 200		

Ţ	TEST RESULTS - BIOLOGICAL PARAMETERS						
S1.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

Microbiologist Authorized Signatory

Laiju P.N. Laboratory Head

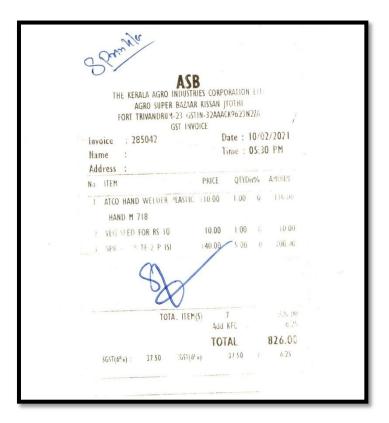
Authorized Signatory

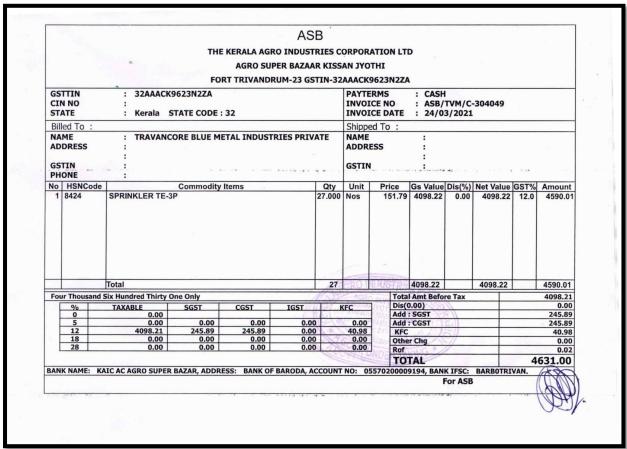
The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

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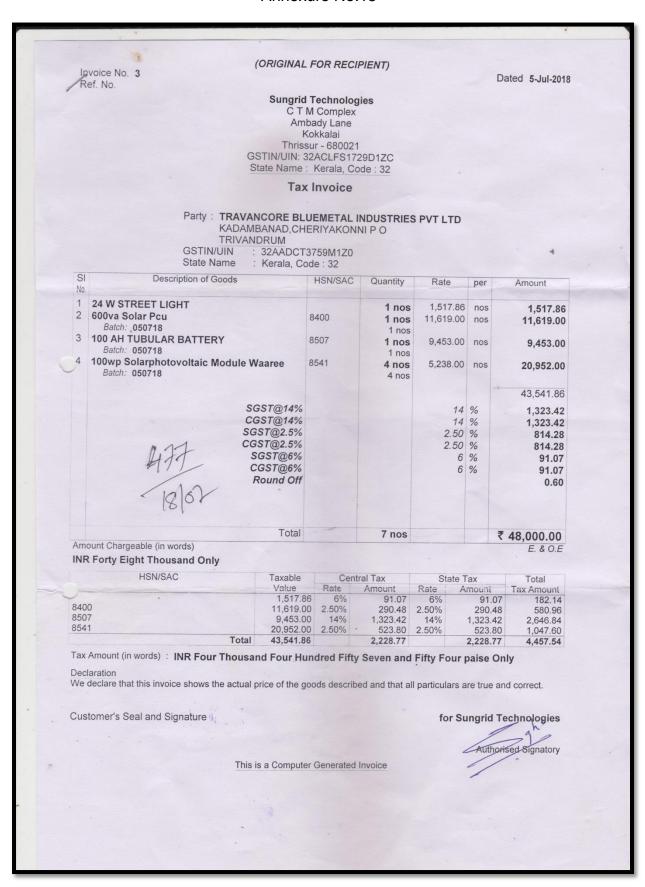
Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board. K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43 Web: www.sealabs.in, E-mail: seaalab@gmail.com

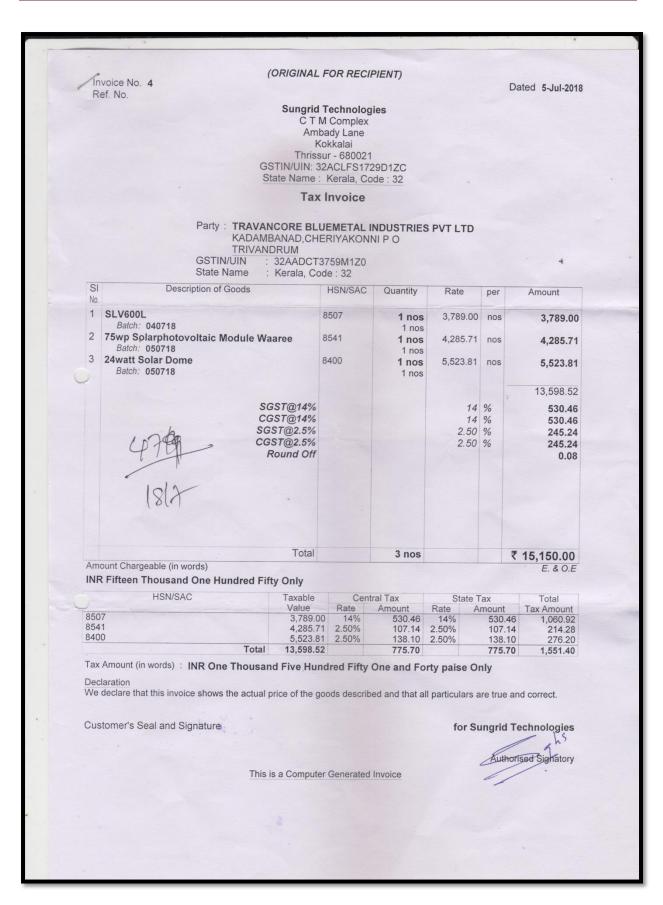
Result of Water





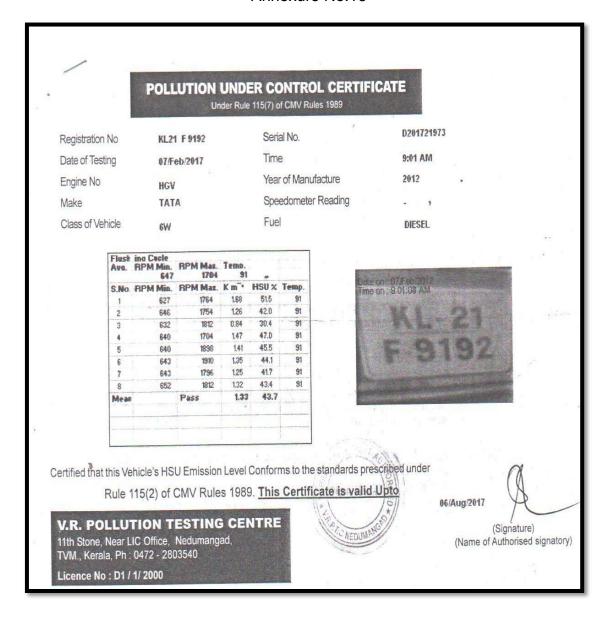
Sprinkler Bill





Copy of Solar Bills

Annexure No.16



Copy of PUC Certificate