ENVIRONMENT CLEARANCE COMPLIANCE REPORT

April 2023- September 2023

for

GRANITE BUILDING STONE QUARRY (Minor Mineral)

Extent: 12.2987 Ha. (30.3907 Acres)

Sy No.	354/4,354/5,355/1pt,
	351/1pt,350,352/1pt
Village	Manakkad
Taluk	Thodupuzha
District	Idukki
State	Kerala

'Granite building Stone Quarry of of Shri. George Kochuparambil'

EC No : 1137/EC/SEIAA/KL/2017, Dated : 17/03/2018 EC Revalidated on 02/03/2023



United Granites & Metals Vashthala P.O. Thodupuzha, Kerata, India anal seriedgravites and weats @gesil.com

Bailieus Relations 04862 274694, 0201885880 Kochuparambil



Date:31-10-2023

To,

The Deputy Director General of Forests (C) MoEF, Regional office, Koramangala, Bangalore. Kendriya Sadan, 4th Floor, E&F. Wings, 17th Main Road, Koramangala,2ND Block, Bangalore - 560034

Sub:Environmental ClearanceCompliance Report for the period April2023-September2023pertaining to Granite Building StoneQuarry of Shri. George Kochuparambil

Ref: Environmental Clearance No:1137/EC/SEIAA/KL/2017, Dated:17/03/2018, EC

Revalidated on. 02/03/2023

Respected Sir,

EC No. 1137/EC/SEIAA/KL/2017 dated 17.03.2018 was valid till 15.03.2023. This EC is renewed with san, a File No. on 02.03.2023 with some additional specific conditions. This is complied and reports are attached.

As per conditions of the above referred Environmental Clearance(EC),please find enclosed compliance report for period from April2023to September2023 of the EC Granted to 'Granite Building Stone Quarry of Shri. George Kochuparambil by Ministry of Environmental& Forest under EPA(1986). Also enclosed relevant Annexures in Support of the compliance report for your perusal and record please.

We hope you will find the attached Status Report in Order.

Thanking you,

Yours truly,

For'Granite Building Stone Quarry of Shri. George Kochuparambil

Mr. George Kochuparambil (Managing Director)



Introduction

Shri. George Kochuparambil, Kochuparambil house, Vazhithala Post, Thodupuzha Taluk, Idukki District, Kerala-685583 has been granted for a mining lease to quarry Granite Building Stone over an area of 12.2987 Ha. in Re-Sy Block No.11, Re-Sy. Nos: 354/4, 354/5, 355/1pt, 351/1pt, 350 & 352/1pt of Manakkad Village, Thodupuzha Taluk, Idukki District, Kerala State vide order No: 451/2018-19/890/M3/2017/DMG dated 01.10.2018 for a period of 12 years from 04.10.2018 to 03.10.2030.

The Environmental clearance is also obtained for this mining lease vide letter no 1137/EC/SEIAA/KL/2017, Dated: 17/03/2018, for a maximum production of 4,00,000 MTA. Vide letter no. 1137/EC/SEIAA/KL/2017 dated 02.03.2023, the validity of EC is extended for the project life of 16 years from the date of original EC (ie 17.03.2018).

The lease is located on the slope of the area gently dipping towards NE. The highest elevation in this area is 145m above MSL and the lowest elevation is 35m above MSL. This granite building stone quarry is located at 6.0 Kms from Manakkad Village in Thodupuzha Taluk. It is at a distance of 10.6 Kms by road from Thodupuzha town. It can be reached from Vazhithala - Parakkadavu Road.

Description of the project

File No.		1137/EC/SEIAA/KL/2017
Name of the project		GRANITE BUILDING STONE QUARRY (Minor Mineral) of Shri. George Kochuparambil
District and state	:	Idukki, Kerala
Taluk / Mandal	:	Thodupuzha
Village	:	Manakkad
Category & Schedule		B2 & Schedule 1(a)
Khasara No. / Plot No. / Block / Gate No. etc.,	:	Re-Sy Block No.11, Re-Sy. Nos: 354/4, 354/5, 355/1pt, 351/1pt, 350 & 352/1pt.
Extent of Area		12.2987 Ha
Ownership / Occupancy	:	Private Land
Existence of public road/railway line, if any, nearby and approximate distance Nearest Port /	:	The nearest railhead – Piravam Road (30 Kms) and Nearest airport – Cochin International Airport (48 Kms) from the mine.
Airport	•	N_00°52'22 72" to N_00°52'48 00"
	•	E - 76°38'21.51" to E - 76°38'36.07"
Address of Registered office		Shri. George Kochuparambil, Kochuparambil house, Vazhithala-Post, Thodupuzha Taluk, Idukki District Pincode: 685 583 E-mail: - <u>unitedgranitesandmetals@gmail.com</u> Website: - <u>www.unitedgranitesandmetals.in</u>

Compliance Status of the General Conditions for Mining Projects Laid down by the State Environment Impact Assessment Authority, Kerala vide their Environment Clearance No.56/2018 Dated:17/03/2018, EC Revalidated on. 02-03-2023

Part A – Specific Conditions (1137/EC/SEIAA/KL/2017, Dated: 17/03/2018)

SI.	Condition	Status of Compliance
No.		
1	If any rare, endemic and threatened	The Endemic species are properly
	plant species are noticed, they shall be	protected and transplanted to a suitable
	properly protected insitu or transplanted	area.
	to a suitable site inside the lease area.	

Specific Conditions (1137/EC/SEIAA/KL/2017, Dated: 02/03/2023)

Sl.	Condition	Status of Compliance
No.		
1	The buffer zone should be maintained	7.5m wide buffer zone is maintained.
	with a uniform width of 7.5m and it	Thick green belt is maintained. Photograph
	should be used for developing and	is attached as Annexure- 1
	maintaining thick green belt.	
2	The garland canal, silt traps and	The garland canal, silt traps and overflow
	overflow channel should be maintained	channel should be maintained periodically
	periodically by cleaning and desilting	by cleaning and desilting. Geo-tagged
	and geo-tagged photographs of the	photographs are attached as Annexure- 2
	process should be included in the half	
	yearly compliance report.	

3	The impact of vibration due to blasting	Study of blast vibration is being done.
	on the nearest houses and other built	Monitoring is done near the nearest house
	structures should monitored in terms of	also. Report is attached as Annexure-03
	Peak Particle Velocity and amplitude	
	for a maximum charge per delay and	
	included in the Half Yearly Compliance	
	Report.	
4	NONEL short delay detonator may be	Nonel initiation system is only used in
	used for initiation.	blasting.
5	Blasts should be conducted by a blasters	Blasting is done by person having statutory
	or mining mate certificate holder	certificate issued by DGMS.
6	To restrict fly rock within 10m,	Blasting mats are used to restrict fly rocks
	muffling arrangements should be made.	up to 10m. Photograph is attached as
		Annexure-04.
7	In wake of occurrence of large-scale	Initiation by NONEL is only used for
7	In wake of occurrence of large-scale landslides in the state, as per the	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance	Initiation by NONEL is only used for blasting.
7	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wild life.	Initiation by NONEL is only used for blasting.
8	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wild life. Blasting mats should be used during	Initiation by NONEL is only used for blasting. Blasting mats are used. Photograph is
8	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wild life. Blasting mats should be used during rock blasting to contain the blast,	Initiation by NONEL is only used for blasting. Blasting mats are used. Photograph is attached as Annexure- 4 .
8	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wild life. Blasting mats should be used during rock blasting to contain the blast, prevent fly rocks and suppress dust.	Initiation by NONEL is only used for blasting. Blasting mats are used. Photograph is attached as Annexure- 4 .
7 8 9	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wild life. Blasting mats should be used during rock blasting to contain the blast, prevent fly rocks and suppress dust. The violation of EC condition may lead	Initiation by NONEL is only used for blasting. Blasting mats are used. Photograph is attached as Annexure- 4 . Agreed.
7 8 9	In wake of occurrence of large-scale landslides in the state, as per the information provided by the Department of Mining and Geology, it is directed to use only NONEL for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wild life. Blasting mats should be used during rock blasting to contain the blast, prevent fly rocks and suppress dust. The violation of EC condition may lead to cancellation of EC and action under	Initiation by NONEL is only used for blasting. Blasting mats are used. Photograph is attached as Annexure- 4 . Agreed.

The Environmen	(Protection)	Act,	
1986.			

Part B – General Conditions

SI.	Condition	Status of Compliance
No.		
1	Rainwater harvesting facility should be installed as per prevailing provisions of KMBR/KPBR, unless otherwise specified.	Rainwater harvesting is a technically feasible solution for overcoming the problem of water scarcity in Mines.
		Rain water harvesting facility is installed. The photos of Rain Water harvesting Pond is attached as Annexure- 5
2	Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.	Environment monitoring cell is formed & is made functional. The details of Environmental monitoring cell are given as Annexure- 6 . Minutes of 23 rd meeting held on 07.06.2023 and 24 th meeting held on
		08.08.2023 are attached.
3	Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including approach roads and internal roads.	Suitable types of trees are planted along either side of the road & parking areas. Photographs are attached as Annexure- 7.
4	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	Solar Energy generation and utilization is adopted. Photos of solar lights are attached as Annexure- 8 .
5	Sprinklers shall be installed and used in the Project Site to contain dust emissions.	Sprinklers & Water Tankers are used in project site to control dust emission. Photos are attached as Annexure-9 .
6	Eco-restoration, including the Mine Closure Plan shall be done at the own cost	Plantation of various saplings within the project area has been initiated. The mine

	of the Project Proponent.	closure plan will be prepared as agreed
		by the project proponent. Photos are
		attached as Annexure- 10.
7	At least 10 per cent of total excavated Pit	During Closure of the mine, 10 percent
	area should be retained as water storage	of total excavated pit will be retained as
	area and the remaining area should be	water storage area and the remaining
	reclaimed with stacked dumping and	area will be reclaimed with stacked
	overburden and planted with indigenous	dumping & overburden and indigenous
	plant species that are eco- friendly if no	plant species will be planted
	other specific condition on reclamation of	plant species will be planted.
	the Pit is stimulated in the FC	
0	Corporate Social Responsibility	Several Corporate Social Responsibility
0	(CSR) agreed upon by the Proponent	(CSR) activities has been carried out hy
	should be implemented	the project proponent. The Activities
	should be implemented.	were carried in the sectors like
		Infrastructure Development Education
		Health-care etc. The details of CSR
		provided in the period is mentioned in
		the below table Attached as Anneyura-
		73
		23
0	The Lease area shall be fenced off with	Lease area is fenced off Sign boards
9	barbed wires to a minimum height of 4 ft	have been erected at prominent places
	around before starting of Mining All the	Photos are attached as Annexure-11
	boundary indicators (boards stores	
	markings etc.) shall be protected at all	
	times and shall be conspicuous	
10	Warning alarms indicating the time of	Blasting time and safety boards have
10	Blasting (to be done at specific timings) has	
	I THANHIVINI IN THIS AT NEW THE THURSDAY TANK	been erected at all entrance to the mine
	to be arranged as per stipulations of the	Siren is blown before blasting as
	to be arranged as per stipulations of the Explosives department	Siren is blown before blasting as warning and after blasting siren is
	to be arranged as per stipulations of the Explosives department.	Siren is blown before blasting as warning and after blasting siren is hooted to give all clear message
	to be arranged as per stipulations of the Explosives department.	Siren is blown before blasting as warning and after blasting siren is hooted to give all clear message. Photographs of sign boards are attached
	to be arranged as per stipulations of the Explosives department.	Siren is blown before blasting as warning and after blasting siren is hooted to give all clear message. Photographs of sign boards are attached as Annexure- 12
	to be arranged as per stipulations of the Explosives department.	Siren is blown before blasting as warning and after blasting siren is hooted to give all clear message. Photographs of sign boards are attached as Annexure- 12 .
11	to be arranged as per stipulations of the Explosives department.	 Siren is blown before blasting as warning and after blasting siren is hooted to give all clear message. Photographs of sign boards are attached as Annexure- 12. Noise and vibration
11	to be arranged as per stipulations of the Explosives department.	 been erected at all entrance to the mine. Siren is blown before blasting as warning and after blasting siren is hooted to give all clear message. Photographs of sign boards are attached as Annexure- 12. Noise and vibration control measures is
11	Control measures on noise and vibrations prescribed by KSPCB should be implemented.	 been erected at all entrance to the mine. Siren is blown before blasting as warning and after blasting siren is hooted to give all clear message. Photographs of sign boards are attached as Annexure- 12. Noise and vibration control measures is implemented by adapting

		 Use of sharp drilling bits, delivery of compressed air at optimal pressure, Proper maintenance of compressor, drilling machine, jackhammers and tipper trucks. Regular monitoring of noise levels is being done within the acre gape and the huffer gape of
		the mining lease area.
12	Quarrying activities should be limited to daytime as per KSPCB guidelines/specific conditions.	Quarrying activities are limited to daytime only as per KSPCB guidelines. Photograph of sign board showing quarry working time is attached as Annexure- 13 .
13	Blasting should be done in a controlled manner as specified by the regulations of the Explosives department or any other concerned agency.	Controlled blasting is done with Nonel initiation. Muffling is done to control fly rocks.
14	A licensed person should supervise/control the Blasting Operations	Blast design is approved by the First- Class Mines Manager. Supervision is done by the Second-Class Mines Manager
15	Access roads to the quarry shall be tarred to contain dust emission that may arise during the transportation of material.	Access road to the Quarry is tarred and tiled to control dust emission. Photographs of road are attached as Annexure- 7.
16	Overburden materials should be managed within the site and used for reclamation of Mine Pit as per Mine closure Plan/specific conditions	Overburden material is stacked very close to the site for future use of reclamation and green belt afforestation.
17	Height of Benches should not exceed 5 M and width should not be less than 5 M, if there is no mention in the Mining Plan/specific conditions	Benches are maintained in a safe way.
18	Mats to reduce fly rock blast to a maximum of 10 PPV should be provided	Mats are laid on the top of the charged holes area to control fly rock. Blasting is

		done with Nonel initiation system only.
		Controlled blasting keeps the vibration
		below 10ppv. Photographs are attached
		as Annexure-04.
19	Maximum depth of mining and general	The Mining is done as per the approved
	ground level at site shall not exceed 10m	mining plan. Maximum depth of mining
		and general ground level at site shall not
		exceed 10m.
20	No mining operation should be carried out	No mining operation will be carried out
	at place having a slope greater than 45°	at place having a slope greater than 45°
21	Acoustic enclosures should have been	Acoustic enclosures have been provided
	provided to reduce sound amplifications in	to reduce sound amplifications.
	addition to the provisions of green belt and	
	nonow bricks envelop for crushers so that	
	standards given by CPCB/KSPCB	
22	The workers on the site should be provided	All the employees are provided with
	with the required protective equipment	An the employees are provided with
	such as ear muffs helmet etc	Personal Protective equipment (PPE's).
23	Garland drains with clarifiers to be	Drains are provided to channelize Storm
25	provided in the lower slopes around the	water. Photograph is attached as
	core area to channelize storm water.	Annexure-2.
24	The transportation of minerals should be	All trucks transporting material are
	done in covered trucks to contain dust	covered by firmly tied tarpaulin.
	emissions.	
25	The proponent should plant trees at least 5	Plantations of about 5 times the loss that
	times the loss that has been occurred while	has been occurred while clearing the
	clearing the land for the project.	land is being done.
		Nursery receipts are enclosed as
		Annexure-21.
26	Disposal of spent oil from diesel engines	Spent oil is re-used as a lubricant for
	should be as specified under relevant	drilling.
	Rules/Regulations.	
27	Explosives should be stored in magazines	Explosives are stored in a Licensed
	in isolated place specified and approved by	Explosives Magazine. Copy of
	the Explosive Department.	Explosive license is attached as
		Annexure-14.

28	A minimum buffer distance of 100 M from	No dwellings are situated within 100 M
	the boundary of the quarry to the nearest	from the boundary of the quarry.
	dwelling unit or other structures, not being	
	any facility for mining shall be provided.	
29	100 M buffer distance should be	Mining area is not located near any
	maintained from forest boundaries	forest areas.
30	Consent from Kerala State Pollution	Consent from KSPCB under Air and
	Control Board under Water and Air Act(s)	Water Act(s) is obtained. Copy of the
	should be obtained before initiating mining	consent is attached as Annexure-15.
	activity.	
31	All other statutory clearances should be	All required statutory clearances are
	obtained, as applicable, by project	obtained.
	proponents from the respective competitive	
	authorities including that for blasting and	
	storage of explosives.	
32	In the case of any change(s) in the scope of	There is no change in the scope of the
	the Project, extent, quantity, process of	project.
	mining technology involved or in any way	
	affecting the environment	
	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.	
33	The Authority reserves the right to add	Agreed
	additional safeguard measures	
	subsequently, if found necessary, and to	
	take action including revoking of the	
	Environmental Clearance under provisions	
	of the Environment (Protection) Act,1986,	
	to ensure effective implementation of the	
	suggested safeguard measures in a time	
	bound and satisfactory manner.	
34	The stipulations by the Statutory	Agreed
	Authorities under different Acts and	
	Notifications should be complied with	
	including the provisions of the Water	

	(Prevention and control of Pollution)	
	Act 1074 the Air (Drevention and control	
	Act, 1974, the All (Tevention and control	
	of Pollution) Act 1981 , the Environment	
	(Protection) Act, 1986, the Public Liability	
	(Insurance) Act, 1991 and EIA	
	Notification,2006	
35	The project proponent should advertise in	Advertisements are given in two
	at least 2 newspapers widely circulated in	newspapers.
	the region, one of which (both the	1 Kanala Karana da
	advertisement and the newspaper) shall be	1. Kerala Kaumady –
	in the vernacular language informing that	Malayalam – 12/04/2018
	the Project has been accorded Environment	2. The Hindu Daily – English –
	Clearance and the copies of the Clearance	12/04/2010
	letters are available with the State	12/04/2018
	Environment Impact Assessment Authority	Copies of advertisements published in
	(SEIAA) office and may also be seen on	the newspapers are attached as
	the website of the Authority at	Annexure- 17
	www.seiaakerala.org. The advertisement	
	should be made within 10 days from the	
	date of receipt of the clearance letter and a	
	conv of the same signed in all the pages	
	should be forwarded to the Office of this	
	Authority of confirmation	
26	Automy as commation	A convert of the Clearance is submitted to
36	A copy of the clearance fetter shall be sent	A copy of the Clearance is submitted to
	by the proponent to the concerned Gram	the concerned authorities. Copy of
	Panchayat/District	Panchayat license attached as
	Panchayat/Municipality/Corporation/Urban	Annexure-16.
	local Body and also to the Local NGO, if	
	any from whom	
	suggestions/representations, if any were	
	received while processing the proposal.	
	The Environmental Clearance shall also be	
	put on the website of the company by the	
	proponent.	
37	The proponent shall submit half yearly	Half yearly compliance reports are
	reports on the status of compliance of the	submitted as stipulated to State
	stipulated EC conditions including results	Environmental Impact Assessment
	of monitored data (both in hard copies as	Authority and the Regional Office of
	well as by e-mail) and upload the status of	MoEF&CC, Bangalore.
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	compliance of the stipulated EC	The monitored data of Air, Noise and
	conditions, including results of monitored	Water is attached as Annexure-20.
	data on their website and shall update the	
	same periodically. It shall simultaneously	
	be sent to the respective regional office of	
	the MOEF, Govt. of India and also to the	
	State Environment Impact Assessment	
	Authority (SEIAA) office	
38	The details of Environment Clearance	Details of Environmental Clearances is
	should be prominently displayed in a	prominently displayed at the entrance to
	metallic board of 3 ft x 3 ft with green	the Mine.
	background and yellow letters of Times	Photograph is attached as Annexure- 18
	Roman font of size not less than 40. Sign	
	board with extent of Lease area and	
	boundaries shall be depicted at the entrance	
	of the quarry, visible to the public	
39	The proponent should provide notarized	Notarized affidavit is submitted.
	affidavit (indicating the number and date of	
	Environmental Clearance proceedings) that	
	all the conditions stipulated in the EC shall	
	be scrupulously followed.	
40	No change in mining technology and scope	Prior approval from the SEIAA will be
	of working should be made without prior	sought in case of change of mining
	approval of the SEIAA. No further	technology.
	expansion or modifications in the mine	
	shall be carried out without prior approval	
	of the SEIAA, as applicable.	
41	The Project proponent shall ensure that no	No natural water course is obstructed.
	natural water course and/or water resources	Necessary safeguard measures are
	shall be obstructed due to any mining	taken to protect first order streams if
	operations. Necessary safeguard measures	originating from the mining lease in the
	to protect the first order streams, if any,	future.
	originating from the mine lease shall be	
ļ	taken.	
42	Monitoring of Ambient Air Quality to be	Monitoring of Ambient Air Quality is
	carried out based on the Notification 2009,	carried out. Photographs are attached as
	as amended from time to time by the	Annexure-19. Monitoring reports have
	Central Pollution Control Board. Water	been enclosed as Annexure- 20 .
	sprinkling should be increased at places	

	loading and unloading points & transfer	
	point to reduce fugitive emissions.	
43	The top soil, if any, shall be temporarily be	Top Soil dump is stacked at the
	stored at earmarked site(s) only for the	designated area and will be utilized
	topsoil shall be used for land reclamation	during the Mine Closure for
	and plantation. The Over burden (OB)	Afforestation and Green belt
	generated during the mining operations	development. OB generated is stacked
	shall be stacked at earmarked dump site(s)	separately and is vegetated with locally
	only. The maximum height of the dumps	available shrubs and grasses.
	shall not exceed 8 m and the width 20 m	
	and overall slope of the dumps shall be	
	maintained to 45°. The OB dumps should	
	be scientifically vegetated with suitable	
	native species to prevent erosion and	
	surface run off. In critical areas, use of	
	geo-textiles shall be undertaken for	
	stabilization of the dump. The entire	
	excavated area should continue until the	
	vegetation becomes self- sustaining	
44	Catch drains and siltation ponds of	All storm water from the lease area is
	appropriate size shall be constructed	collected in Silt settling Tank (SST 1)
	around the mine working, mineral and OB	through garland drains. After settling it
	dumps to prevent run off of water and flow	overflows to SST 2 and then to SST3.
	of sediments directly into the river and	The clear water from SST 3 is diverted
	other water bodies. The water so collected	to Rainwater Harvesting Ponds for use
	should be utilized for watering the mine	in water sprinkling, gardening, etc.
	area, roads, green belt development, etc.	
	The drains shall be regularly de silted	
	particularly after monsoons and maintained	
	properly	
45	Effective safeguard measures such as	Regular water sprinkling is done on all
	regular water sprinkling shall be carried	necessary roads with water tankers and
	out in critical areas prone to air pollution	sprinklers.
	and having high levels of PM10 and	Photograph is attached as Annexure- 9
	PM2.5 such as haul road, loading and	
	unloading points and transfer points-it shall	
	be ensured that the Ambient Air Quality	
	parameters conform to the norms	
	prescribed by the Central Pollution Control	

	Board in this regard.	
46	Fugitive dust emissions from all sources	Fugitive dust emissions are controlled
	should be controlled regularly. Water	by using water tankers with sprinklers.
	spraying arrangements on haul roads,	
	loading and unloading and transfer points	
	should be provided and properly	
	maintained.	
47	Measures should be taken for control of	Adequate measures for noise control
	noise levels below 85 dB (A) in the work	have been adopted.
	environment.	
48	A separate environmental management cell	Environment monitoring cell is formed
	with suitable qualified personnel should be	& is made functional.
	set up under the control of a senior	The details of Environmental
	executive, who will report directly to the	monitoring cell are given as Annexure-
	head of the Organization.	6.
		Minutes of 23 rd meeting held on
		07.06.2023, and 24 th meeting held on
		08.08.2023 are attached.
49	The funds earmarked for environment	The funds earmarked for environment
	protection measures and CSR activities	protection measures and CSR activities
	should be kept in a separate account and	Shall be kept in a separate account and
	should not be diverted for other purpose.	will not be diverted for other purpose.
	Year wise expenditure should be reported	Photos of the CSR receipts are enclosed
	to the State Environment Impact	as Annexure-23.
	Assessment Authority (SEIAA) office.	
50	The Regional Office of MOEF and CC	Agreed
	located in Bangalore shall monitor	
	compliance of the stipulated conditions.	
	The Project authorities should extend full	
	cooperation to the Officer(s) if the	
	Regional Office by furnishing the requisite	
	data/information/monitoring reports	
51	Any appeal against the Environment	Agreed
	Clearance shall lie with the National Green	
	Tribunal, if preferred, within a period of 30	
	days as prescribed under Section 16 of the	
	National Green Tribunal Act, 2010	
52	Concealing the factual data or submission	Agreed
	of false/fabricated data and failure to	

mentioned above may result in withdrawal of this clearance and attract action under provisions of the Environment (Protection) Act, 1986. 53 The Regional Office of MOEF and CC located in Bangalore shall monitor compliance of the stipulated conditions. The Project authorities should extend full cooperation to the Officer(s) if the Regional Office by furnishing the requisite data/information/monitoring reportsAgreed 54 The above conditions shall prevail not withstanding anything to the contrary, inconsistent or simplified, contained in any other permit, license on consent given by any other authority for the same project.Agreed 55 The order is valid for a period of 5 years of the expiry date of Mine lease period issued by the Government of Kerala, whichever is earlierAgreed 56 The Environment Clearance will be subject to the final order of the courts in anyAgreed
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56The Environment Clearance will be subject to the final order of the courts in anyAgreed
to the final order of the courts in any
pending litigation related to the land or the
project, in any court of law.
57 The Mining operations shall be restricted Mining operations will be restricted to
to above ground water table and it should above ground water table and due care
not intersect ground water table. will be taken so as not to intersect
ground water.
58 All vehicles used for transportation and It is ensured that all transportation
within the mines shall have 'PUC' vehicles have 'PUC' Certificate issued
certificate from authorized pollution by an authorized Pollution checking
checking center. Washing of all vehicles center. All the vehicles are washed
shall be inside the Lease area inside the lease area.
59 Project proponent should obtain necessary There is no need for drawl of Surface
prior permission of the competent and ground water for the project
authorities for drawl of necessary quantity activities.
of surface and ground water for the As there is Rain Water Harvesting Pond
project. present which will be main source of

		water. Photograph of Rain water harvesting pond is attached as Annexure- 5.	
60	Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six-monthly reports to SEIAA	No perennial nallah flows through the lease or exist around the Mine Lease.	
61	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Occupational health surveillance will be undertaken periodically. Health insurance for Employees is enclosed as Annexure-22	

For Granite Building Stone Quarry of Shri. George Kochuparambil

George Kochuparambil Managing Director Date: 30-10-2023

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Annexure 1



Green Belt

Annexure- 2



Garland Drain

TECHNICAL REPORT ON BLAST INDUCED GROUND VIBRATION STUDIES AND ASSESSMENT OF EFFECT OF BLASTING OPERATIONS IN GRANITE BUILDING STONE QUARRY OF

Shri. GEORGE KOCHUPARMBIL,

MANAKKAD VILLAGE, THODUPUZHA (TK), IDUKKI DISTRICT, KERALA





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BLAST INDUCED GROUND VIBRATION STUDIES AND ASSESSMENT OF BLASTING EFFECTS IN GRANITE BUILDING STONE QUARRY OF Shri. George Kochuparambil

Cyriac Joseph BE (Mining), FCC. Sankar. S BE (Mining), FCC. Saju. K BE (Mining), FCC.



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ABSTRACT

Shri. George Kochuparambil, Kochuparambil, is operating granite building stone quarry in Re-Sy Block No.11, Re-Sy. Nos: 354/4, 354/5, 355/1pt, 351/1pt, 350 & 352/1pt in Manakkad Village, over an extent of 12.2987 Ha in Thodupuzha Taluk, Idukki District, Kerala. The Granite building Stone is very hard and has to be excavated in this stone quarry with Drilling and Blasting methodology. As a Part of Statutory requirement for DGMS & Complying the EC condition this scientific study has been taken up to ensure the ground vibration level. A field visit was made to the quarry site by a team of following mining engineers & Drilling & Blasting experts.

1) Mr. Cyriac Joseph BE (Mining), FCC.

2) Mr. Sankar S BE (Mining), FCC.

3) Mr. Saju K BE (Mining), FCC.

A reconnaissance survey was made in the First week of Sep 2023. The quarry area is surrounded by good vegetation and there are few houses outside the lease boundary of South West & South-East direction which is not visible from blasting area due to undulations. Since all the observed Dominant frequencies were above 8 Hz, as per DGMS guidelines, the permissible limit for Peak particle velocity (PPV) can be considered as 10 mm/sec.

Blasting is very important process for mining operation and lot of explosives is used for this purpose. Various studies indicate that fragmentation accounts for only 20 – 30% of total amount of explosive energy used. Rest of the energy is lost in the form of ground vibration, fly rock, air overpressure and noise.

The specific problem associated with ground vibrations represents the human response to them. Uncontrolled Blasting vibrations may also cause significant damage to nearby houses or various structures.

Scientific study was carried out to assess the intensity of ground vibration generated due to and their impacts on the surrounding structures. In total, 12 blast were conducted at Four different location in the quarry blasting operations were monitored through geophone at the distance of 89.1m, 181.3m, 202.5m and 491.5m. The data obtained from the Instantel micromate instrument were analysed and graphical output was obtained from the instrument. The Peak Particle Velocity (PPV), Maximum charge per delay, air over pressure was recorded for each blast. After that the various observations were compared with standards to determine the Conclusion.

From the analysis of Blast induced ground vibration at the Granite building stone quarry of Shri. George Kochuparambil, it was determined that the vibration level was less than 10 mm/sec for the blasts (for Building & Structures not belonging to Owner). The results determined from the study indicates that the peak particle velocity, air over pressure generated due to blasting were within the limits.

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ABBREVIATIONS:

- 1. DGMS Directorate General of Mines Safety
- 2. NABET National Accreditation Board for Education
 & Training
- 3. NABL National Accreditation Board for Testing and Calibration Laboratories
- 4. PPV Peak Particle Velocity
- 5. dB Decibel

EXECUTIVE SUMMARY

This report relates to the scientific study conducted by Global Environmental and Mining Services, Bangalore at Stone Quarry of Shri. George Kochuparambil. The main objective of the study was to check the blast induced ground vibration and air overpressure/noise generated during blasting. Fly rocks generated during the trial blasts were also observed and studied.

Twelve blasts were conducted at different locations of the mine. Blast induced vibration and air overpressure/noise were monitored at different locations. The investigational work, observations, result of the blasts conducted, analysis of the data and conclusions are summarized below.

- In total, twelve blasts were conducted and monitoring were done in nearest house of Mr. Tomy Kurian (towards South West of Mine lease boundary – M2), house of Mr. Krishnan Krishnan (towards North East of Mine lease boundary -M4), M1 (north side of the Rain Water Harvesting Pond-2), & M3 (inside the Mine). All the twelve blasts, were conducted with bench blasting pattern.
- All the blasts were conducted using 33 mm dia blast hole. Small diameter cartridge explosive of 25 mm diameter, 0.125 Kg weight per cartridge, ANFO and Nonel initiation system with DTH- 250 ms & 25 ms at surface, & STLD 42 ms were used in all blasts.
- Depth of holes used are 8ft. The total number of holes varied from 26 to 16.
 All the blasts were done in hard rock. So staggered pattern of drilling was used.

- 4. The burden and spacing for the bench blast was 1.0 m and 1.2 m respectively. The 8 ft holes were charged with two cartridges of slurry explosives and 400gm of ANFO. The explosive quantity per hole was 0.650 Kg.
- Blast induced ground vibrations and air overpressure/ noise generated during the blasts were monitored on compacted ground surface using Micromate of Instantel, Canada. Distances of monitoring points from the blast site varied from 89.1m to 491.5m.
- The Peak Particle Velocity was not detected near the house of Mr. Krishnan Krishnan. Distance of house from blast locations was 491.5m.
- The Peak Particle Velocity recorded near the house of Mr. Tomy Kurian were 0.644mm/s, 0.99mm/s and 1.02mm/s. Distance of house from blast locations was 202.5m.
- 8. The highest value of vibration recorded at 89.1m from blast site was 3.666 mm/s. This was recorded in blast no: 8 where maximum charge per delay was 0.650 Kg and total explosive charge in the blasting round was 11.70Kg.
- 9. In between the Monitoring point M1 and the blast location B1, the Rain Water Harvesting Pond-2 exists. The bottom most level of the Rain Water Harvesting Pond-2 is at a lower elevation than the Monitoring point M1 and Blast location B1. So, the values of PPV detected at that monitoring station were comparatively lower.
- 10. Fly rocks up to 20 m was observed in blasting without muffling mats and up to 5 m in muffled blasting. The control of fly rock was achieved through proper blast design, Nonel initiation system and proper implementation and supervision of blasting operation.

- 11. Details of all the blasts studied are given in the table 2. Summary of the blast are given in Table 3. All the blasts layouts are given in Appendix I. Blast events are given in Appendix II.
- 12. The readings recorded were within the DGMS permissible limit.

INTRODUCTION:

Shri. George Kochuparambil is operating a granite building stone quarry since 1998. This company is more committed towards environment. Their registered office is in, Kochuparambil house, Vazhithala Post, Thodupuzha Taluk, Idukki District, Kerala-685 583. They have been granted a mining lease to quarry Granite Building Stone over an area of 12.2987 Ha. in Re-Sy Block No.11, Re-Sy. Nos: 354/4, 354/5, 355/1pt, 351/1pt, 350 & 352/1pt of Manakkad Village, Thodupuzha Taluk, Idukki District, Kerala State (www.unitedgranitesandmetals.in). Vide order No: 451/2018/-19/890/M3/2017/DMG, dated: 01.10.2018 for a period of 12 years from 04.10.2018 to 03.10.2030.



Fig 1: Overview of Mines

The Environmental clearance is also obtained for this mining lease vide letter no. 1137/EC/SEIAA/KL/2017, Dated: 17/03/2018, for a maximum production of 4, 00,000 MTA for a period of five years. Further the validity of EC was extended for the project life of 16 years from the date of original EC (i.e. 17.03.2018) on 02.03.2023.

This granite building stone quarry is located at 6.0 Kms from Manakkad Village in Thodupuzha Taluk. It is at a distance of 10.6 Kms by road from Thodupuzha town. It can be reached from Vazhithala - Parakkadavu Road.

DETAILS OF STRUCTURES NOT BELONGING TO THE OWNER:

The house of Mr. Tomy Kurian, is located at South West side of the Mine Lease at a distance of 153 m from the Boundary Pillar No. 48. Coordinates of the House is 9°53'35.16"N & 76°38'18.64"E. This is the nearest house in South west Direction of the Lease Area. The mentioned House/Structure not belonging to the Owner is situated near the Current year production Face of the Mine Lease.



Fig 2: House of Mr. Tomy Kurian

The house of Mr. Krishnan Krishnan, is located at North East side of the Mine Lease at a distance of 187 m from the Boundary Pillar No.12. Coordinates of the House is 9°53'48.36"N & 76°38'41.28"E. This the nearest house located in the North East direction of the Lease Area.



Fig 3: House of Mr. Krishnan Krishnan

TOPOGRAPHY & LOCAL GEOLOGY OF THE AREA:

The lease is located on the slope of the area gently dipping towards NE. The highest elevation in this area is 142.0 m above MSL and the lowest elevation is 37 m above MSL.

The granite building stones are well exposed in the working pit, whereas the part of area with lower elevation is covered with topsoil/waste of about 0 to 2.2m thickness.

BLAST VIBRATION STUDY:

On 19.09.2023 & 20.09.2023, 12 Rounds of Blasts were conducted. The locations of Blasting & Monitoring stations are plotted in the Google Earth and shown below.



Fig 4: Google Earth Image of the Mine showing Blasting Locations & Monitoring Points

DRILLING & BLASTING:

Drilling and blasting combination are still an economical and viable method for rock excavation and displacement in mining as well as in civil construction works. The ill effects of blasting, i.e., ground vibrations, air blasts, fly rocks, back breaks, noises, etc. are unavoidable and cannot be completely eliminated but certainly minimize up to permissible level to avoid damage to the surrounding environment with the existing structures. Among all the ill effects, ground vibration is major concern to the planners, designers and environmentalists. A number of researchers have suggested various methods to minimize the ground vibration level during the blasting. Ground vibration is directly related to the quantity of explosive used and distance between blasting face to monitoring point as well as geological and geotechnical conditions of the rock units in excavation area. Blast induced ground vibration is an impact from the use of explosives that has historically been an extremely difficult problem to effectively mitigate. There are many variables and site constants involved in the equation that when combined, result in the formation of a complex vibration waveform generated by the confined detonation of an explosive charge.

The application of proper field controls during all steps of the drilling and blasting operation will help to minimize the adverse impacts of ground vibrations, providing a well-designed blast plan. This design would consider the proper hole diameter and pattern that would reflect the efficient utilization and distribution the explosives energy loaded into the blast hole. It would also provide for the appropriate amount of time between adjacent holes in a blast to provide the explosive. The optimum level of energy confinement. After the blast has been properly designed, the parameters that have the greatest effect on the composition of the ground vibration waveform are:

Geology between the blast site and the monitoring location

> Accurate delay timing between blast holes in a detonation sequence Geological and geotechnical conditions and distance between blasting face to monitoring point cannot be altered but the only factor, i.e. quantity of explosive can be estimated based on certain empirical formulae proposed by the different researchers to make ground vibrations in a permissible limit. An appropriate and rock friendly blasting can be only alternative for smooth progress of the rock removal process.

OBJECTIVES

To study the blast vibrations caused due to the mine blasting, and prediction of safe explosive charge for protection of surface structures.

- > To conduct the reconnaissance survey at the mine to identify the nearest villages
- To monitor ground vibration produced from blasting at different distances by consultation with mine authorities
- To analyze the monitored ground vibration data to arrive at the sitespecific predictor equations.
- To recommend the safe maximum charge per delay to keep the vibration level within the safe limits as per DGMS standards.

METHODOLOGY

- A preliminary reconnaissance survey was done to understand the quarrying operations, location of surrounding structures or houses
- Twelve blasts were conducted at Four locations in the quarry with the different blast configurations
- Ground vibrations generated from the blasting operation were monitored with Instantel Micromate instrument.

Data generated was analyzed systematically and conclusions were drawn. Suitable recommendations are made to conduct the blasting operations in the quarry in a safe manner.

GROUND VIBRATIONS

The movement of any particle in the ground can be described in three ways; displacement, velocity and acceleration. Velocity transducers (Geophones) produce the voltage which is proportional to the velocity of movement, and can be easily measured and recorded. They are robust and relatively inexpensive and so are most frequently used for monitoring. It has been shown in many studies, most notably by USBM that it is velocity which is most closely related to the onset of damage, and so it is velocity which is almost always measured. If necessary, the velocity recording can be converted to obtain displacement or acceleration. Each trace has a point where the velocity is a maximum (+ve or -ve) and this is known as peak particle velocity (or PPV) which has a unit of mm/s. Geophones are only able to respond to vibrations.

Ground vibration radiates outwards from the blast site and gradually reduces in magnitude. When an explosive charge is detonated in a blast hole, strain waves are generated in the surrounding rock mass carrying huge quantity of energy. This energy generates cracks and fractures in the strata due to various breakage mechanisms such as crushing, radial cracking, reflection breakage etc. Combined, the crushed and fractured zones encompass a certain volume of permanently deformed rock. When the intensity of strain waves diminishes to the level where no permanent deformation occurs in the
rock mass, i.e., beyond the fragmentation zone, strain waves propagate through the strata in the form of elastic waves. These waves in the elastic zone are known as ground vibrations.

The Ground vibration wave motion consists of different kinds of waves:

- a. Longitudinal (or L) waves.
- b. Rayleigh (or R) waves.
- c. Transverse (or T) waves.



Fig 5: Different kind of waveforms

c. Transverse Wave

PARAMETERS AND PROPOGATIONS

The parameters, which exhibit control on the amplitude, Dominant frequency and duration of the ground vibrations, are divided in two groups as follow:

- a) Non-controllable parameters
- b) Controllable parameters

The non-controllable parameters are those, over which the blasting engineer does not have any control. The local geology, rock characteristics and distance of the structures from the blast site is non-controllable parameters. However, the control on the ground vibrations can be established with the help of controllable parameters. The same have been reproduced below:

- 1. Charge weight
- 2. Delay interval
- 3. Type of explosives
- 4. Direction of blast propagation
- 5. Burden, spacing and specific charge
- 6. Coupling
- 7. Stemming amount
- 8. Type of stemming
- 9. Charge depth
- 10. Angle of borehole

DAMAGE LEVEL

In India the Directorate General of Mines safety (Government of India) suggest safe limit of ground vibration for different categories of structures with frequencies of <8 Hz, 8 to 25Hz and >25Hz Respectively. Details of the permissible ground vibration standards given by DGMS (Technical Circular no: 7/1997) is given below

True of Stanotune	Dominant Excitation Frequency, Hz			
Type of Structure	<8 Hz	8-25 Hz	>25 Hz	
(A) Buildings/Struct	ures not bel	ong to the Owne	er	
(i) Domestic Houses/Structures (Kuchha Brick & Cement)	5	10	15	
(ii) Industrial Buildings (RCC & Framed Structures)	10	20	25	
(iii) Objects of Historical importance & Sensitive Structures	2	5	10	
(B) Buildings belonging to Owner with limited span of life			of life	
(i) Domestic Houses/Structures (Kuchha Brick & Cement)	10	15	25	
(ii) Industrial Buildings (RCC & Framed Structures)	15	25	50	

Table 1: Permissible PPV Levels recommended by DGMS

HUMAN RESPONSE TO GROUND VIBRATION

Human beings are more sensitive to ground vibration and noise. People inside buildings will respond differently than people outside. One of the most important factors is the presence of secondary sounds, such a rattling windows and doors. Complaints resulting from blast vibration to a large extent mainly due to rattling effect and fear of damage, rather than damage. The human body is very sensitive to low vibration levels, but unfortunately it is not a reliable damage indicator. Blasting nowadays is highly technological and precisely planned. In spite of this there are complaints because humans are very sensitive to vibrations and can detect levels as low as 0.5mm/s. people tend to complaint about ground vibrations even below the accepted damage level because of many reasons. How they notice and respond to vibration varies greatly from person to person. For the same intensity different persons may react differently with age, health, state of mind and attitude. Blast vibrations effects became intolerable to humans at levels appreciably lower than levels at which structural damage takes place. The result is that often complaints can be received due to human response and not due to situation producing damage.

FIELD INVESTIGATION

Quarrying starts with drilling of 33mm small diameter blasthole of 8 Feet (2.40m) depth, using hand held jackhammer drills (Fig. 6). The Burden is about 1.0 m & the Spacing is about 1.2 m. Once the blast hole is ready, these holes are charged with small diameter (25mm) explosive cartridges, weighing 125g (fig. 9) & ANFO. NONEL detonators (25ms) are used for initiating the

blast holes and also Surface Trunk Line Delay (STLD of 42ms) for achieving required delay in the blast round (Fig. 8). (Fig. 11) shows the charged holes after placing required quantity of explosive into the blast holes. The remaining length of the hole is stemmed using the 3 mm material and Drill cuttings (Fig. 10). Fig. 12 shows the muffling arrangement of blasting area/charged holes with blasting mats to control the fly rocks. Fig.13 shows the fragmented material from the blasting operations.



Fig 6: Drilling of Blast Holes using Jack Hammer



Fig 7: A Close view of the Bench Face



Fig 8: Non-Electric Detonator & Surface Trunk Line Delay used in the Quarry



Fig 9: Explosive Cartridges used in the Quarry



Fig 10: Stemming of Blast holes



Fig 11: Charged Holes



Fig 12: Muffling arrangements to control the Fly rocks



Fig 13: Fragmented Rock after Blasting



Fig 14: Blast Vibration Monitoring

GROUND VIBRATION MONITORING

Scientific study was carried out to assess the intensity of ground vibrations generated due to blasting operations and their impact on the surrounding structures. In total, 12 blasts were conducted at different locations in the quarry. Blastholes of 8 Ft depth were charged with the 400gms of ANFO & 250gms of Slurry explosive. NONEL based shock tube detonator & Surface Trunk Line Delays (STLD) are used for achieving required delay timing. The blast round was initiated after getting safety clearance from all directions. Ground vibration generated from different blast were monitored using Instantel Micromate, Canada and geophone of these blast vibration monitors records the ground vibration. Trigger level geophone was set to a minimum PPV of 0.127 mm/sec. This indicate that the instrument will start monitoring the ground vibration. Geophone of the instrument is glued to the ground effectively using Plaster of Paris. Monitoring was done at different distances from blasting site to know the propagation of ground vibration from the quarry site. Fig.14 shows the study carried out to monitor the ground vibration towards the nearby house & inside the Mine. Details of all the blasts studied are given in the table-2 & the summary of the blast are given in Table-3. All the blasts layouts are given in Appendix- I. Blast events are given in Appendix-II.

Table 2: Monitored Blast details

S. No	Description	Blast No. 1	Blast No. 2	Blast No. 3	Blast No. 4
1	Date of Blast	19.09.2023	19.09.2023	19.09.2023	19.09.2023
2	Time of Blasts (Hours)	10:02:29	10:03:28	10:07:20	10:23:00
3	Location of blasts	9°53'38.58"N, 76°38'28.68"E	9°53'38.58"N, 76°38'28.68"E	9°53'38.58"N, 76°38'28.68"E	9°53'37.68"N, 76°38'24.48"E
4	Diameter of blast hole (mm)	33	33	33	33
5	Burden (m)	1.0	1.0	1.0	1.0
6	Spacing (m)	1.2	1.2	1.2	1.2
7	Depth of blast hole (Ft)	8	8	8	8
8	No of blast holes	26	26	25	18
9	Explosive charge/ Hole (kg)	0.65	0.65	0.65	0.65
10	Maximum Charge per delay (kg)	0.65	0.65	0.65	0.65
11	Total Charge / Blast (kg)	16.90	16.90	16.25	11.70
12	Initiation System	Nonel	Nonel	Nonel	Nonel
13	Initiation Pattern	Row to Row	Row to Row	Row to Row	Row to Row
14	Location of instrument	9°53'44.04"N, 76°38'31.68"E	9°53'44.04"N, 76°38'31.68"E	9°53'44.04"N, 76°38'31.68"E	9°53'35.10"N, 76°38'18.36"E
15	Distance (m)	181.3	181.3	181.3	202.5
16	PPV (mm/s)	0.325	0.564	0.446	1.020
17	Noise (dB)	91.77	113	113	91.6
18	Dominant Frequency (Hz)	154.4	62.13	56.38	55.00

Table 2: Monitored Blast details

S. No	Description	Blast No. 5	Blast No. 6	Blast No. 7	Blast No. 8
1	Date of Blast	19.09.2023	19.09.2023	20.09.2023	20.09.2023
2	Time of Blasts (Hours)	10:27:23	10:31:00	10:01:51	10:03:12
3	Location of blasts	9°53'37.68"N, 76°38'24.48"E	9°53'37.68"N, 76°38'24.48"E	9°53'38.76"N, 76°38'30.60"E	9°53'38.76"N, 76°38'30.60"E
4	Diameter of blast hole (mm)	33	33	33	33
5	Burden (m)	1.0	1.0	1.0	1.0
6	Spacing (m)	1.2	1.2	1.2	1.2
7	Depth of blast hole (Ft)	8	8	8	8
8	No of blast holes	16	18	16	18
9	Explosive charge/ Hole (kg)	0.65	0.65	0.65	0.65
10	Maximum Charge per delay (kg)	0.65	0.65	0.65	0.65
11	Total Charge / Blast (kg)	10.40	11.70	10.40	11.70
12	Initiation System	Nonel	Nonel	Nonel	Nonel
13	Initiation Pattern	Row to Row	Row to Row	Row to Row	Row to Row
14	Location of instrument	9°53'35.10"N, 76°38'18.36"E	9°53'35.10"N, 76°38'18.36"E	9°53'39.90"N, 76°38'27.90"E	9°53'39.90"N, 76°38'27.90"E
15	Distance (m)	202.5	202.5	89.1	89.1
16	PPV (mm/s)	0.644	0.990	3.296	3.666
17	Noise (dB)	107.8	104.1	118.0	110.3
18	Dominant Frequency (Hz)	84.75	49.75	135.6	85.38

Table 2	2: Moni	tored B	last a	letails
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S. No	Description	Blast No. 9	Blast No. 10	Blast No. 11	Blast No. 12
1	Date of Blast	20.09.2023	20.09.2023	20.09.2023	20.09.2023
2	Time of Blasts (Hours)	10:05:31	10:26:42	10:27:57	10:30:11
3	Location of blasts	9°53'38.76"N, 76°38'30.60"E	9°53'37.80"N, 76°38'29.34"E	9°53'37.80"N, 76°38'29.34"E	9°53'37.80"N, 76°38'29.34"E
4	Diameter of blast hole (mm)	33	33	33	33
5	Burden (m)	1.0	1.0	1.0	1.0
6	Spacing (m)	1.2	1.2	1.2	1.2
7	Depth of blast hole (Ft)	8	8	8	8
8	No of blast holes	16	25	24	25
9	Explosive charge/ Hole (kg)	0.65	0.65	0.65	0.65
10	Maximum Charge per delay (kg)	0.65	0.65	0.65	0.65
11	Total Charge / Blast (kg)	10.40	16.25	15.60	16.25
12	Initiation System	Nonel	Nonel	Nonel	Nonel
13	Initiation Pattern	Row to Row	Row to Row	Row to Row	Row to Row
14	Location of instrument	9°53'39.90"N, 76°38'27.90"E	9°53'48.36"N, 76°38'41.28"E	9°53'48.36"N, 76°38'41.28"E	9°53'48.36"N, 76°38'41.28"E
15	Distance (m)	89.1	491.5	491.5	491.5
16	PPV (mm/s)	3.145			
17	Noise (dB)	110.4		NOT DETECTED	
18	Dominant Frequency (Hz)	52.13			

Summary of the Blast Monitoring:

Monitoring Station	Blast Points	Distance (m)	Max Charge Per Delay (Kg)	PPV (mm/s)	Noise (dB)	Dominant Frequency (Hz)
	Blast No 1	181.3	0.650	0.325	91.77	154.4
M1	Blast No 2	181.3	0.650	0.564	113.0	62.13
	Blast No 3	181.3	0.650	0.446	113.0	56.38
	Blast No 4	202.5	0.650	1.020	91.6	55.00
M2	Blast No 5	202.5	0.650	0.644	107.8	84.75
	Blast No 6	202.5	0.650	0.990	104.1	49.75
	Blast No 7	89.1	0.650	3.296	118.0	135.6
МЗ	Blast No 8	89.1	0.650	3.666	110.3	85.38
	Blast No 9	89.1	0.650	3.145	110.4	52.13
	Blast No 10	491.5	0.650			
M4	Blast No 11	491.5	0.650	Not detected		ted
	Blast No 12	491.5	0.650			

Table 3: Summary of the Blast monitoring

From the Table 2, it can be observed that the highest peak Particle velocity (PPV) recorded was 3.666 mm/sec at the distance of 89.1 m in Blast No 8 and the next highest PPV was 3.296 mm/sec at the distance of 89.1 m in Blast No 7.

The ground vibrations recorded in the Buildings/Structures not belonging to Owner is less than 10 mm/sec. Thus, the Ground Vibration values were within the Permissible limits standards as mentioned by DGMS *[Technical Circular: 7/1997]*.

Use of Nonel detonating system provided required delay time to reduce the maximum charge per delay, which helped in controlling ground vibrations within permissible limits. The highest noise level of 118 dB was recorded at the distance of 89.1 m from blast location in blast No. 7 and the next highest noise level was 113 dB at the distance of 181.3 m from blast location in Blast No 2 & Blast No 3. The noise level recorded while monitoring in the nearby house were 91.6 dB, 104.1 dB and 107.8dB. Fly rocks another serious problem associated with blasting operations. It was observed to a distance of 20 m from blast site without muffling arrangement and with muffling the fly rocks was within 5m. This is also due to free face available in all the blasts and also the proper delay timing followed using shock tube detonators.

Remarks: It may therefore, be concluded that the intensity of ground vibrations, Noise and fly rock caused due to blasting operations carried out in Granite Building Stone quarry of Shri. George Kochuparambil in Re-survey Block no 11 & Re-survey no. 354/4, 354/5, 355/1pt, 351/1pt, 350, 352/1pt of Manakkad Village, Thodupuzha Taluk, Idukki District, Kerala., are within Permissible limit.

RECOMMENDATIONS

Blasting operations may be conducted in the Granite Building stone quarry of Shri. George Kochuparambil in Re-Survey Block No 11 and Re-survey No. 354/1, 354/5, 355/1pt, 350, 352/1pt over an extent of 12.2987Ha in Manakkad Village, Thodupuzha taluk, Idukki District, Kerala. With the following recommendations:

- Blasts may be conducted with a maximum of 25 holes in a blast round using 33 mm diameter blast holes drilled with hand held jackhammer drills to a maximum depth of 8 feet (2.4 m), each hole charged with maximum of 650 gm of explosive.
- 2. NONEL detonator & Surface Trunk Line Delay (STLD) may be used for initiation.
- Blasts to be conducted by a Competent Blaster or Mining Mate certificate holder only, following all the rules and regulations stipulated by Director General of Mines Safety (DGMS) and other regulating agencies.
- 4. If fly rock to be restricted to within 10m, muffling arrangement to be made.
- 5. Blasting methodology suggested in Table-4 may be followed
- 6. Blast layouts suggested in Fig No.15 may be used with the available initiation system.

All other rules and regulations imposed by various agencies like DGMS/ Dept. of Mining and Geology/ any other relevant organization to be followed from time to time.



Fig 15: Recommended Blasthole pattern

S1 No	Parameters	Suggestion- I	Suggestion- II
1	Diameter of the Blast hole (mm)	33	33
2	Burden (m)	1.0	1.0
3	Spacing (m)	1.2	1.2
4	Depth of Blast hole (m)	1.80	2.40
5	No of Blast Holes	Maximum of 25	Maximum of 25
6	Explosive charge/ Hole (gm)	425	650
7	Maximum charge/ Delay (gm)	425	650
8	Total charge/ Blast (kg)	10.625	16.25
9	Initiation system	Short delay detonators	Short delay detonators
10	Initiation Pattern	Row by row	Row by row
11	Delay timing between any two blast holes	At least 25ms	At least 25ms
12	No. of rows	Maximum of 3	Maximum of 3

Table 4: Blasting recommendations

Cyriac Joseph, Managing Partner& EIA Coordinator, Global Environment & Mining Services.

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Indian Standard (2001), "Method for blast vibration monitoring. Int J Rock Mech MinSciGeomechAbstr;29(2):145-6

http://www.vulcanhammer.net/svinkin/prediction.php http://terrock.com.au/vibration/blasting.html

APPENDIX – I (LAYOUTS OF BLASTS STUDIES)



25 ms Delay	Burden - 1.0 m
🛶 🕨 42 ms Delay	Spacing - 1.2 m

Layout of Blast No: 2



	Burden - 1.0 m
🔶 42 ms Delay	Spacing - 1.2 m

Layout of Blast No: 3









Burden - 1.0 m
Spacing - 1.2 m

Layout of Blast No: 8 Free Face 1111111 Oms 25ms 50ms 75ms 100ms 125ms 192ms 217ms 92ms 117ms 142mis 167ms 1.59ms 184ms 209ms 234mis 259ms 284ms



Sterring

3











APPENDIX – II (BLAST EVENT REPORTS)



Velocity (mm/s)

Date/Time Trigger Source	Long at 10:02:29 September 19, 2023 Geo: 0.127 mm/s, Mic: 100.00 dB(L)
Range	Geo: 254.0 mm/s
Record Time	5.0 sec at 2048 sps
Job Number:	1
Operator/Setup:	Operator/factory.MMB

Notes

Location:	STATION-1
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	

Microphone	Linear Weighting
PSPL	91.77 dB(L) at 1.432 sec
ZC Freq	N/A
Channel Test	Passed (Freq = 19.7 Hz Amp = 1182 mv)

	Tran	Vert	Long	
PPV	0.260	0.189	0.268	mm/s
ZC Freq	>200	>200	171	Hz
Time (Rel. to Trig)	2.784	2.784	2.780	sec
Peak Acceleration	0.035	0.026	0.035	g
Peak Displacement	0.000	0.000	0.000	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.0	4.2	4.1	

Peak Vector Sum 0.325 mm/s at 0.077 sec N/A: Not Applicable

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230919100229.IDFWScaled Distance216.7 (181.3 m, 0.7 kg)

DGMS India (A)



a)Industrial Buildings b)Domestic houses/structures c)Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div Trigger = ►------





Velocity (mm/s)

Date/Time	Long at 10:03:28 September 19, 2023
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)
Range	Geo: 254.0 mm/s
Record Time	5.0 sec at 2048 sps
Job Number:	1
Operator/Setup:	Operator/factory.MMB

Notes

Location:	STATION-1
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	

Microphone	Linear Weighting
PSPL	113.0 dB(L) at 0.488 sec
ZC Freq	28 Hz
Channel Test	Passed (Freq = 19.7 Hz Amp = 1161 mv)

	Tran	Vert	Long	
PPV	0.378	0.331	0.481	mm/s
ZC Freq	60	146	68	Hz
Time (Rel. to Trig)	0.290	0.286	0.292	sec
Peak Acceleration	0.031	0.035	0.039	g
Peak Displacement	0.001	0.001	0.001	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.0	4.2	4.1	

Peak Vector Sum 0.564 mm/s at 0.292 sec

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230919100328.IDFWScaled Distance216.7 (181.3 m, 0.7 kg)

DGMS India (A)



a)Industrial Buildings b)Domestic houses/structures c)Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div Trigger = ►------



FFT Report

Date/Time	Long at 10:03:28 September 19, 2023	Serial Number	UM18455 V 10-90FB Micromate ISEE
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)	Battery Level	3.8 Volts
Range	Geo: 254.0 mm/s	Unit Calibration	November 18, 2021 by UES New Delhi
Record Time	5.0 sec at 2048 sps	File Name	UM18455 20230919100328.IDFW
Job Number:	1	Scaled Distance	216.7 (181.3 m, 0.7 kg)
Operator/Setup:	Operator/factory.MMB		

Notes

Location:	STATION-1
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	





Velocity (mm/s)

Date/Time	Tran at 10:07:20 September 19, 2023
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)
Range	Geo: 254.0 mm/s
Record Time	5.0 sec at 2048 sps
Job Number:	1
Operator/Setup:	Operator/factory.MMB

Notes

Location:	STATION-1
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	

Microphone	Linear Weighting
PSPL	113.0 dB(L) at 0.531 sec
ZC Freq	33 Hz
Channel Test	Passed (Freq = 19.7 Hz Amp = 1139 mv)

	Tran	Vert	Long	
PPV	0.378	0.284	0.418	mm/s
ZC Freq	47	128	54	Hz
Time (Rel. to Trig)	0.032	0.131	0.025	sec
Peak Acceleration	0.028	0.025	0.033	g
Peak Displacement	0.001	0.000	0.001	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.5	Hz
Overswing Ratio	4.0	4.2	4.1	

Peak Vector Sum 0.446 mm/s at 0.038 sec

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230919100720.IDFWScaled Distance216.7 (181.3 m, 0.7 kg)

DGMS India (A)







Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div Trigger = ►------





Velocity (mm/s)

Date/Time	Long at 10:23:00 September 19, 2023
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)
Range	Geo: 254.0 mm/s
Record Time	5.0 sec at 2048 sps
Job Number:	1
Operator/Setup:	Operator/factory.MMB

Notes

Location:	STATION-2
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	

Microphone	Linear Weighting
PSPL	91.60 dB(L) at 4.206 sec
ZC Freq	N/A
Channel Test	Passed (Freq = 19.7 Hz Amp = 1229 mv)

	Tran	Vert	Long	
PPV	0.512	0.946	0.560	mm/s
ZC Freq	54	60	68	Hz
Time (Rel. to Trig)	0.518	0.692	0.569	sec
Peak Acceleration	0.021	0.054	0.030	g
Peak Displacement	0.002	0.002	0.003	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.1	4.2	4.1	

Peak Vector Sum 1.020 mm/s at 0.692 sec N/A: Not Applicable

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230919102300.IDFWScaled Distance242.1 (202.5 m, 0.7 kg)

DGMS India (A)



a)Industrial Buildings b)Domestic houses/structures c)Historic objects, sensitive structures



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div Trigger = ►------





Velocity (mm/s)

Vert at 10:27:23 September 19, 2023
Geo: 0.127 mm/s, Mic: 100.00 dB(L)
Geo: 254.0 mm/s
5.0 sec at 2048 sps
1
Operator/factory.MMB

Notes

Location:	STATION-2
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	

Microphone	Linear Weighting
PSPL	107.8 dB(L) at 0.668 sec
ZC Freq	20 Hz
Channel Test	Passed (Freq = 19.7 Hz Amp = 1234 mv)

	Tran	Vert	Long	
PPV	0.504	0.544	0.441	mm/s
ZC Freq	64	79	79	Hz
Time (Rel. to Trig)	0.129	0.089	0.153	sec
Peak Acceleration	0.025	0.035	0.021	g
Peak Displacement	0.001	0.001	0.001	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.3	Hz
Overswing Ratio	4.0	4.2	4.1	

Peak Vector Sum 0.644 mm/s at 0.136 sec

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230919102723.IDFWScaled Distance242.1 (202.5 m, 0.7 kg)

DGMS India (A)







Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div Trigger =



FFT Report

Date/Time	Vert at 10:27:23 September 19, 2023	Serial Number	UM18455 V 10-90FB Micromate ISEE
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)	Battery Level	3.8 Volts
Range	Geo: 254.0 mm/s	Unit Calibration	November 18, 2021 by UES New Delhi
Record Time	5.0 sec at 2048 sps	File Name	UM18455_20230919102723.IDFW
Job Number:	1	Scaled Distance	242.1 (202.5 m, 0.7 kg)
Operator/Setup:	Operator/factory.MMB		

Notes

Location:	STATION-2
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	



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1000	In a hand had
ALC: NOT THE OWNER OF	STREET STREET

Velocity (mm/s)

Date/Time	Vert at 10:31:00 September 19, 2023
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)
Range	Geo: 254.0 mm/s
Record Time	5.0 sec at 2048 sps
Job Number:	1
Operator/Setup:	Operator/factory.MMB

Notes

Location:	STATION- 2
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	

Microphone	Linear Weighting
PSPL	104.1 dB(L) at 0.491 sec
ZC Freq	14.6 Hz
Channel Test	Passed (Freq = 19.7 Hz Amp = 1134 mv)

	Tran	Vert	Long	
PPV	0.725	0.899	0.843	mm/s
ZC Freq	41	146	102	Hz
Time (Rel. to Trig)	0.043	0.001	0.014	sec
Peak Acceleration	0.058	0.076	0.067	g
Peak Displacement	0.002	0.002	0.001	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.3	7.5	Hz
Overswing Ratio	4.0	4.1	4.0	

Peak Vector Sum 0.990 mm/s at 0.014 sec

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230919103100.IDFWScaled Distance242.1 (202.5 m, 0.7 kg)

DGMS India (A)







Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div Trigger = ►------

Printed: September 22, 2023 (V 10.72 - 10.72.1)


FFT Report

Date/Time	Vert at 10:31:00 September 19, 2023	Serial Number	UM18455 V 10-90FB Micromate ISEE
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)	Battery Level	3.8 Volts
Range	Geo: 254.0 mm/s	Unit Calibration	November 18, 2021 by UES New Delh
Record Time	5.0 sec at 2048 sps	File Name	UM18455_20230919103100.IDFW
Job Number:	1	Scaled Distance	242.1 (202.5 m, 0.7 kg)
Operator/Setup:	Operator/factory.MMB		

Notes

Location:	STATION-2
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	





Event Report

Velocity (mm/s)

Date/Time	MicL at 10:01:51 September 20, 2023
rngger source	Geo. 0.127 mm/s, Mic. 100.00 ub(L)
Range	Geo: 254.0 mm/s
Record Time	5.0 sec at 2048 sps
Job Number:	1
Operator/Setup:	Operator/factory.MMB

Notes

Location:	STATION-3
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	

near Weighting
8.0 dB(L) at 0.422 sec
Hz
issed (Freq = 19.7 Hz Amp = 1208 mv)

	Tran	Vert	Long	
PPV	1.876	2.049	2.680	mm/s
ZC Freq	85	146	>200	Hz
Time (Rel. to Trig)	0.226	0.188	0.188	sec
Peak Acceleration	0.158	0.189	0.301	g
Peak Displacement	0.093	0.005	0.029	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.3	7.3	Hz
Overswing Ratio	4.0	4.2	4.2	

Peak Vector Sum 3.296 mm/s at 0.188 sec

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230920100151.IDFWScaled Distance106.5 (89.1 m, 0.7 kg)

DGMS India (A)



Tran: + Vert: x Long: ø





Sensor Check



FFT Report

Notes

Location:	STATION-3
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	





Event Report

Date/Time Trigger Source Range Record Time Job Number: Operator/Setup	Long at 10:03:12 September 20, 2023 Geo: 0.127 mm/s, Mic: 100.00 dB(L) Geo: 254.0 mm/s 5.0 sec at 2048 sps 1 Operator/factory.MMB	Serial Number Battery Level Unit Calibration File Name Scaled Distance	UM18455 V 10-90FB Micromate ISEE 3.8 Volts November 18, 2021 by UES New Delhi UM18455_20230920100312.IDFW 106.5 (89.1 m, 0.7 kg)
Notes			DGMS India (A)
Location: S ⁻ Client: G	TATION-3 EORGE KOCHUPARAMBIL	254	Permissible Ground Vibration
User Name: G General:	LOBAL ENVIRONMENT AND MINING SERVICES	200	
Microphone PSPL ZC Freq Channel Test	Linear Weighting 110.3 dB(L) at 0.445 sec 27 Hz Passed (Freq = 19.7 Hz Amp = 1224 mv)	100	
PPV	Tran Vert Long	+	
ZC Freq	85 128 79 Hz E	20—	
Peak Accelerat	tion 0.163 0.166 0.163 g	10	
Sensor Check	Passed Passed Passed		
Frequency Overswing R	7.3 7.3 7.3 Hz Ratio 4.1 4.2 4.1	5	
Peak Vector Su	um 3.666 mm/s at 0.185 sec	+	
		2	
		1 2	+ + + + + + + + + + + + + + + + + + +
			Frequency (Hz) Tran: + Vert: x Long: ø
		c	a)Industrial Buildings b)Domestic houses/structures)Historic objects, sensitive structures
_ _		+ + + + +	
+	and that a second		
MicL	MANINA MANINA DAVA	*****	-
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Vert	hikitaka kata kata kata kata kata kata ka		
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Tran	al al a second		
Ť.			
Ó	.0 1.0 2.0	3.0	4.0 5.0

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div Trigger = ►------

Sensor Check

а

b

100

0.0

0.0

0.0

0.0



FFT Report

Date/Time	Long at 10:03:12 September 20, 2023	Serial Number	UM18455 V 10-90FB Micromate ISEE
Trigger Source	Geo: 0.127 mm/s, Mic: 100.00 dB(L)	Battery Level	3.8 Volts
Range	Geo: 254.0 mm/s	Unit Calibration	November 18, 2021 by UES New Delh
Record Time	5.0 sec at 2048 sps	File Name	UM18455_20230920100312.IDFW
Job Number:	1	Scaled Distance	106.5 (89.1 m, 0.7 kg)
Operator/Setup:	Operator/factory.MMB	Scaled Distance	106.5 (89.1 m, 0.7 kg)

Notes

 Location:
 STATION-3

 Client:
 GEORGE KOCHUPARAMBIL

 User Name:
 GLOBAL ENVIRONMENT AND MINING SERVICES

 General:
 Closer Value





Event Report

Velocity (mm/s)

Date/Time		Long at 10:05:31 September 20, 2023
Trigger Source		Geo: 0.127 mm/s, Mic: 100.00 dB(L)
Range		Geo: 254.0 mm/s
Record Time		5.0 sec at 4096 sps
Job Number:		1
Operator/Setup:		Operator/factory.MMB
Notes Location: Client: User Name: General:	STA GEC GLC	TION-3 DRGE KOCHUPARAMBIL DBAL ENVIRONMENT AND MINING SERVICES

Linear Weighting
110.4 dB(L) at 0.455 sec
11.8 Hz
Passed (Freq = 19.7 Hz Amp = 1216 mv)

	Tran	Vert	Long	
PPV	2.207	1.805	2.514	mm/s
ZC Freq	120	120	114	Hz
Time (Rel. to Trig)	0.325	0.173	0.324	sec
Peak Acceleration	0.165	0.135	0.171	g
Peak Displacement	0.003	0.003	0.005	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.3	7.3	Hz
Overswing Ratio	4.0	4.2	4.2	

Peak Vector Sum 3.145 mm/s at 0.324 sec

Serial NumberUM18455 V 10-90FB Micromate ISEEBattery Level3.8 VoltsUnit CalibrationNovember 18, 2021 by UES New DelhiFile NameUM18455_20230920100531.IDFWScaled Distance106.5 (89.1 m, 0.7 kg)

DGMS India (A)



Tran: + Vert: x Long: ø





Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div Trigger = ►------

Sensor Check



FFT Report

Date/Time Trigger Source Range Record Time Job Number: Operator/Setup:	Long at 10:05:31 September 20, 2023 Geo: 0.127 mm/s, Mic: 100.00 dB(L) Geo: 254.0 mm/s 5.0 sec at 4096 sps 1 Operator/factory.MMB	Serial Number Battery Level Unit Calibration File Name Scaled Distance	UM18455 V 10-90FB Micromate ISEE 3.8 Volts November 18, 2021 by UES New Delhi UM18455_20230920100531.IDFW 106.5 (89.1 m, 0.7 kg)
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Notes

Location:	STATION-3
Client:	GEORGE KOCHUPARAMBIL
User Name:	GLOBAL ENVIRONMENT AND MINING SERVICES
General:	



Annexure- 4



Blasting Mats





Rainwater Harvesting Pond

Annexure- 6

Sl No	Name	Post
1	Shri. Sonu Jose	Head of Monitoring Cell
2	Mr. Baby P Poulose	In charge
3	Mr. Joseph K Y	Member
4	Mr. Prasanth P P	Member
5	Mr. Jomy Joy	Member
6	Mr. John Peter	Member

Environment Monitoring Cell

23rd Meeting of the Environment Monitoring Commotive held on 07.06. 2023 at 4 PM.

Minutes of the 22nd meeting are veriewed. 1. New water tanker purchased is in aperation. So now there are two water sprinkless. 2. Two solar lights are installed in the 3. Water cooler was installed and is in use 4. "Chappath constructed in the new far road is filled with water I is repretive

New Points

1. Committe is informed that our lease is of Mining is also approved till 03.10.2030 2 Rainy season is starting Road mainleng has to be done prequently. Mind Roads are to be taken much care. 3. Grass & Shrubs also being planted at Slopes of mind road to prevent soil espera 4. As agreed in scheme of Minip we will plant '300 Baplings This rainy' season Work at bottom bench is stopped. We 5. have started filling with clay. Bottom bench has to be fenced b.___ securely because we are storing rain water of clay also. A "anarry view" paint is demarcated behind canteen. A small shed is 7. also fabricated. A new weigh bridge is fabricated of 8. has to approve the same for 100 M9 capacity

- could.

9. A lightning arrestor has to be fixed over canteen building workshop 10. Garland drain near workshop was cleaned in view of coming monsoon. 11. Licenses of all drivers to be nechecked. Members: 1. Mr. Baley. P. Poulose 2. Mr. Joseph KY 3. Mr. Prasanth P.P Stat. 4. Mr. Janny Joy 5. Mr. John Peter. (Somu Jok) Head of committee.

an Meeting of the Environment Monistoring Committee held on 08:08:23 at 3PM. Minutes of the 23rd meeting are neviewed Which Roads are well manitained. slope Eide is planted with should & creepers. All these souds are well compacted. We have prochased 600 saplings. About gaplings abel 150, is planted. Balance will be planted affer start of rains. and installed Proper pencing also provided. New weigh bridge is calibrated by The Legal Metridogy department. After receiving the approval certificate, our sales will be on the basis of tommage. Quarativer is received for the lighting avrester over conteen abold is under progress. Licences of all drivers were checked and found all valid. New Points -1. Bottom bench Fencing to be done. 2. Management is planning for expansion of lease area. Survey of land ete is under progress to demarcate a Safe lease area. 3. Medical Examination of the balance employed are to be arranged. Few changes (additions) Maminations) are incorporated in the new form, 4. M/s Orica Exel is Supplying high quality NONA which produce less noise & vibration. We have Started using it from today though the cost is very high.

75 4. Hepatitis B preventive Vaccination drive was organised with the assistance of PHC (Pruniary Health centre) of yort. of Kerala. It is administered as in 3 dopes. First doze was received by 545 Employees. Second doze vaccinitian is going on. Members. 1. Mrs. Baly. P. Poulose 2. Mr. Joseph Ky 3. Mr. Prasouth P.P. STYAB .. 4. Mr. Somy Joy 5. Mr. John Deter. Head of Committees.





Access Roads





Access Roads









Solar Lights

Annexure-9



Water Tanker with Sprinkler









Plantation









Fencing and boundary pillars

Annexure- 12



Blasting Sign Board



Local 12:48:23 PM GMT 07:18:23 AM Altitude 77 meters Wednesday, 22.03.2023

Blasting Timings







				Anne	xure-14
	अनुज्ञाप्ते प्रर	हप एल. ई3 LICH	ENCE FORM	LE-3	
· (वि	रफोटक नियम, 2008 क	र्ग अनसची 4 के भाग	। के अनच्छेद 3	क) से (घ) देखिए।)	
Č.	See article 3(a) to (d) c	of Part 1 of Schedul	e IV of Explosi	ves Rules, 2008)	
(ग) उपयोग के लिप	१ एक समय पर वर्ग 1,2,3,4	,5 या वर्ग 7 के विस्फोटर	रु या किसी मैगजी	न में वर्ग 6 के विस्फोटव	क रखने के लिए
	Licence to possess : (c) f	ত্রণার্থাপ or use explosives of cl	lass 1 2 3 4 5 6 n	7 in a magazine	-
अनजीति सं त क	mee No.) · E/SC/KL/22/1	(730/F72220)		i i in a magazine	
वार्षिक फीस रुपए ((Annual Fee Rs): 2400/-	())(())(2220)			00
				10	
I. Licence is hereb	by granted to				
George Kolhupa Granites & Metal- Kerala, Pincode -	rambil,Proprietor (औधभाग s, Vazhithala P.O., Thodupuz 685588	ll / Occupier : George K ha,, Town/Village - Vazh	olhuparambil), M ithala, District-IDU	s. United Spece KKI, State-Decorera Signal	T
को अनुज्ञप्ति अनु	दत्त की जाती है।			1 Start	5.1
2. अनुज्ञप्तिधारी की	प्रास्थिति Status of licens	ce : Proprietorship F	īrm		12161
3. अनज्ञप्ति निम्रलि	खित प्रयोजनों के लिए विधिम	मान्य है। possess f	or use of Detons	tors, Safety Fuse	Nitrate
Licence is valid	only for the following pu	rpose. Mixture	, - के उपयोग के वि	लेप हि	(#/ j -)
4. अनुज्ञप्ति विस्फोत	टकों के निम्नलिखित किस्मों,	प्रकार और मात्रा के लि	ए विधिमान्य है।	aretan.	1. S.
Licence is valid	for the following kinds a	nd quantity of explosi	ves: (क) (a)	and the second se	in the second
क्र	नाम और विवरण	वर्ग और प्रभाग	उप-प्रभाग	मात्रा किसी एक स	मय में
Sr. No.	Name and Description	Class & Division	Sub-division	Quantity at any on	e time
1.	Nitrate Mixture	2,0	0	250 Kg.	
	Detonators	6,3	0	5000 Nos.	and the second second
	Satety Fuse	0,1	0	2000 MIrs	
(6) and (c)] : 5. निम्नलिखित रेखां	चित्र (रेखाचित्रों) से अनुज्ञप्त	परिसर की पुष्टि होती है	। रेखाचित्र क्र. (Di	awing No.) E/SC/KI	./22/1730
The licensed pr (s): .	emises shall conform to th	he following drawing	: (E72220) दिनांक (Dated)	01/04/2015	
6. अनुज्ञप्ति परिसर Survey No. 357	निम्नलिखित पते पर स्थित हैं 7/3, Block No. 11 , ग्राम (7	The licensed premis fown/Village) : Mana	es are situated at kkadu (y) Kh od	following address:	. Thodupuzha
जिला (District)	IDUKKI राज्य	ज्य (State) गोल (F. Main)	Kerala पिनक	(Pincode)	685588
पूरमाप (Filone) 7 अल्पन्नकि महिस्स	2. Tř oncon no emi sia	नारा (E-Mail) र्जिल के	পদ্পদ্ম	(Fax)	
The licensed pr facilities.	emises consist of followir	ig Construction	ted magazine fo tion 2 of Schedu	r explosives and det le VII of Explosives	onator as per Rules, 2008.
8. अनुज्ञप्ति समय – उपबंधो शर्तों औ	. समय पर यथासंशोधित विर र अतिरिक्त शर्तों और निम्रां	फोटक अधिनियम, 188 लेखित उपाबध्दों के अध	4 और उनके अधी धीन रहते हुए अनद	न विरचित विस्फोटक त्त की जाती है।	नियम, 2004 के
The licence is g	ranted subject to the prov	ision of Explosives A	ct 1884 as amend	ed from time to time	and the
Explosives Rule	es, 2008 framed there und	er and the conditions,	additional condit	ions and the followin	g Annexures.
1. उपयुक्त व	रुम से. 5 में यथा कथित रेख	ाचित्र (स्थान, सन्निमाण र	सबंधी और अन्य वि	वरण दांशत करते हुए	D
Drawing a arrente	s (showing site, constructi पाथिकारी ज्वापन ब्यून भवि	ional and other details त हुया अवस्थित की सार्वे) as stated in seria	u No. 5 above.	
Z. organer	ns and Additional Conditi	র হর অনুয়ান্য কা বর ions of this licence sig	ned by the licensi	ne authority.	
 दूरी प्ररूप 	DE-2 Distance Form D	E-2.	in of the needed	-B annound.	
9. यह अनुज्ञप्ति तार्र	ीख 31 मार्च 2 019 तक विशि	धमान्य रहेगी। This lie	ence shall remain	valid till 31st day of	March 2019.
यह अनुज्ञप्ति, अ उपवर्णित इस अ	धिनियम या उसके अधीन वि नुज्ञप्ति की शर्तों का अधिक्रम	रचित नियमों या अनुसूर नण करने या यदि अनुज्ञ	बी ∨ के भाग 4 के ! प्त परिसर योजना ?	त्रति निर्दिष्ट सेट-VII के 11 उससे संलग्न उपबंध	अधीन तथा में दर्शित
विवरण के अनुरू	ज्य नहीं पाए जाने पर निलंबि	त या प्रतिसंहत की जा र	सकती है, जहां वह	लागू हो।	
This licence is I	iable to be suspended or r	evoked for any violati	ion of the Act or I	Rules framed there un	ider 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 - 01/04/2015

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

Amendments :

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 25/09/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 09/11/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 20/03/2018
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 23/03/2018
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 29/06/2018

नवीनीकरण के पृष्ठांकन के लिए स्थान

Space for Endorsement of Renewal

नवीकरण की तारीख	समाप्ति की तारीख	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प
Date of Renewal	Date of Expiry	Signature of licensing authority and stamp
31/01/2022	31/03/2027	Dy. Chief Controller of Explosives, Emakulam

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.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

(सेट VIII | Set VIII)

मैगजीन में वर्ग 1,2,3,4,5,6, और 7 के विस्फोटकों को बिक्री या प्रयोग हेतु रखने के लिए प्ररूप एल.ई. 3 (अनुच्छेद 3 (ख) से (ग)। में मुख्य विस्फोटक नियंत्रक या विस्फोटक नियंत्रक व्दारा प्रदान किए जाने वाले अनुज्ञप्ति सं. E/SC/KL/22/1736(E72220) की शर्ते निम्नलिखित हैं । The following are the conditions of licence number E/SC/KL/22/1730(E72220) to possess for sale or use, explosives of Class 1,2,3, 4, 5, 6 and 7 in a magazine in Form LE-3 (articles 3(b) to (c)) granted by Chief controller of Explosives or Controller of Explosives.

- परिसर में किसी भी समय विस्फोटकों की मात्रा अनुज्ञापन योग्य सामर्थ्य से अधिक नहीं होगी । L.
- The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.
- विस्फोटकों के भंडारण के लिए प्रयुक्तर होने वाली मेंगजीन अनुसूची III और अनुइप्ति के उपाबंध में विनिर्दिष्ट सुरक्षा दूरी बनाए रखना होगा। 2 The magazine used for storage of explosives shall maintain safety distance specified in Schedule III and annexure to the licence.
- मैगजीन का प्रयोग उन सभी विस्फोटकों के, जो इस अनुइप्ति में विनिर्दिष्ट है, रखे जाने के लिए और ऐसे रखे जाने से संबध्द आधान या औजार या 3. उपकरणों के रखे जाने के लिए ही किया जाएगा; अन्ययाँ नहीं । The magazine shall be used only for keeping all explosives specified in this licence and of receptacles for, or tools or implements
 - for work connected with the keeping of such explosives.
- पैकजों को खोलने का कार्य और विस्फोटकों को तौलने तथा पैक करने का कार्य मैगजीन में नहीं किया जाएगा । 4
- The opening of packages and the weighing and packing of explosives shall not be carried on in the magazine. दो या दो से अधिक वर्णन के विस्फोटकों को, जिन्हें मैगजीन में रखे जाने की अनुज्ञा दी जा सकती है, मैगजीन में तभी रखे जाएंगे जब उनमें से प्रत्येक को, ऐसे प्रदार्थ या स्वरूप का कोई सब्धवर्ती विभाजक लगाकर या उनके बीच ऐसा सध्यवर्ती स्थान छोठकर, परस्पर पृथक कर दिया जाए कि किसी वजह से विस्फोटक में लगने वाली आग या होने वाला विस्फोट किसी अन्य वर्णन के विस्फोटक तक न पहुंच सके : परंतु -

(घ) २ (नाइटेट मिश्रण), वर्ग ३ (नाइटो योगिक) के विभिन्न विस्फोटक, वर्ग 6 प्रथम प्रभाग के अंतर्गत आने वाले सुरक्षा पक्षीते और वर्ग 6 प्रभाग २ के अंतर्गत आनेवाले विस्फोटक प्रेरक पलीते. जिनमें कोई खला लोहा या इस्पात नहीं है, एक दूसरे के साथ बिना किसी मध्यवर्ती विभाजक या स्थायन के रखें जा सकते हैं । (ड) वर्ग 6 प्रभाग 3 के अंतर्गत आनेवाले विस्फोटक प्रेरक अलग रखे जाएंगे ।

(च) वर्ग । के अंतर्गत आने वाले बारूद को अलग रखा जाएगा ।

Two or more description or explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening space, as will effectually prevent explosion or fire in the one communicating with the other; Provided that-

(d) the various explosives of Class 2 (nitrate-mixture), Class 3 (nitro-compound), safety fuses belonging to Class 6 Division land detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space :

(e) Detonators belonging to Class 6 Division 3 shall be kept separately.

- (f) Gun powder belonging to Class 1 shall be kept separately.
- वर्ग ३ (नाइट्रो योगिक)) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात सिवाय अनुझापन प्राधिकारी की विशेष 6 मंजुरी के मैगजीन में नहीं रखा जाएगा ।

Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.

वर्ग 3 (नाइट्रो योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पक्षात मैगजीन में तभी रखा जाएगा जब कि किसी विस्फोटक नियंत्रक ने इसके लिए विशेष मंजूरी दे दी हो ।

(i) जब ऐसी मंजूरी दे दी गई हो तो प्रत्येक निरीक्षण पर किसी विस्फोटक नियंत्रक से ऐसा लिखित प्रमाणपत्र अभिप्राप्त कर लिया जाए जिसमें दी गई मंजरी के अंतर्गत आनेवाली अवधि दर्शित की गई हो और ऐसे प्रमाणपत्र के अनुइप्तिधारी अपने पास रखेगा और मांग की जाने पर प्रस्तरत करेगा ।

(ii) जब कोई विस्फोटक मानक शुध्दता का न रह जाने के कारण या द्रवणीकरण या नाइट्रो ग्लीअसरीन या द्रव नाइट्रो योगिक के निकल जाने के बिन्ह प्रकट होने के कारण मैगजीन में भण्डारित किए जाने के उपयुक्त नहीं रह जाता है तो अनुत्राप्तिधारी अपने ही व्यय पर ऐसे विस्फोटक के निपटारे के लिए ऐसे निदेशों का अनुपालन करेगा जो मुख्य नियंत्रक या विस्फोटक नियंत्रक जारी करें ।

Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of the Controller of Explosives.

(i) When such sanction has been given, a written certificate showing the period covered by the sanction shall be obtained from the Controller of Explosives at each inspection, and shall be kept by the licensee and produced on domand.

(ii) When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerin or liquid nitro-glycerin or liquid nitrocompound is no longer fit for storage in the magazine or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Controller or Controller of Explosives may issue.

मेगजीन के भीतरी भाग या उसमें लगी बेंचो, 🛛 शेल्फों और उसकी फिटिंग का इस प्रकार सन्निर्माण किया जाएगा या उन्हें इस प्रकार अंतरित या 8 अवतरित किया जाएगा कि विस्फोटक का किसी लोहे या इस्पात के साथ संपर्क रोका जा सके । भीतरी भाग में लगी बेंचे, शैल्फें और फिटिंग यथासाध्य ग्रिट से मुक्त एवं साफ रखे जाएंगे तथा ऐसे विस्फोटक, जो जल से खतरनाक रूप में प्रभावित हो सकते हैं, इस बाबत सम्पक सावधानी बरती जाएगी कि वहां कोई जल मौजूद न रहे : परंतु किसी खेहे या इस्पात के खुले होने के विरूध्द सावधानी से संबंधित इस शर्त का वह भाग ऐसे किसी भवन में बाध्येकर नहीं होगा जिसमें वर्ग 6 (गोला बारूद) के प्रथम के विस्फोटक से भिन्न कोई विस्फोटक रखा गया है ।

The interior of the magazine and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel contact with the explosives. Such interior, benches, shelves and fittings shall so far as is reasonably practicable, be kept free from grit and shall otherwise be clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water there from;

Provided that so much of this condition as relates to precautions against the exposure of any iron or steel shall not be obligatory in a building in which no explosive other than explosive of the 1st Division 6th (Ammunition) Class is kept.

यदि तहित चालक का परीक्षण विस्फोटक नियंत्रक करता है तो अनुज्ञाप्तिधारी ऐसे परीक्षण के लिए विहित फीस का संदाप करेगा यदि परीक्षण असमाधानकारी साबित होता है तो उतनी ही फीस अनुइप्तिधारी व्यारा पश्चावर्ती प्रत्येक परीक्षण के लिए तब तक दी जाती रहेगी जब तक कि परीक्षण अधिकारी तडित चालक को समाधानप्रद घोषित नहीं कर देता :

परंतु किसी एक परीक्षण के लिए देय फीस किसी एक दिन के दौरान किसी चालक के किए गए सभी परीक्षणों के लिए प्रभार्थ होगा : परंतु यह और कि यदि दो या अधिक तडित चालक एक ही मैगजीन से संबध्द हैं तो ऐसे सभी चालकों के परीक्षण के लिए फीस ऐसी किसी फीस

रा आपक गठा छाना जा किसा एक ताडत चालक के पराक्षण के लिए हर स्थिति में विहित की गई है । If the lighting conductor is tested by the Controller of Explosives, the licensee shall pay the fees prescribed for test- in the even of the test proving unsatisficatory, the same few shall be markle by the the test proving unsatisfactory, the same fees shall be payable by the licensee for each subsequent test until the lighting conductor is

For Deputy Chief Controller of Explosives THEFT LETTERATE
passed by the testing officer as satisfactory;

Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day :

Provided further that where two or more lighting conductors are attached to one and the same magazine, the fee for the testing of all such conductors shall not exceed the fee prescribed in this condition for testing a single lighting conductor.

10. उपयुक्त तथा जेब रहित कार्यकरण वस्त्रों . उपयुक्त जुतों के प्रयोग व्दारा तथा तलाशी लेकर या अन्यथा अथवा ऐसे किन्हीं साधनों व्दारा इस बाबत सम्पक उपबंध किया जाएगा कि फैक्ट्री परिसर में अप्रि, दियासलाई अधवा ऐसी कोई वस्तुऐ या पदार्थ, जिससे विस्फोट हो सकता है या आग लग सकती हो, किन्तु इस शर्त के कारण ऐसी संरचना, स्थिति या स्वरूप में किसी कृत्रिम बत्ती का प्रवेश वर्जित नहीं है जिससे आग लगने या विस्फोट होने का खतरा न हो

परंतु इस शर्त का वह भाग, जो लोहे या इस्पात के अपकर्जन को लागू होता है, ऐसे किसी भवन के संबंध में बाध्य कर नहीं होगा जिससे भिन्न कोई विस्फोटक नहीं रखा गया है ।

Due provisions shall be made, by the use of suitable working clothes without pockets, suitable shoes and by searching or otherwise or by such means, for preventing the introduction into danger area of the factory premises of fie, Lucifer matches or any substance or article likely to cause explosion or fire, but this condition shall not prevent the introduction of an artificial light of such construction, position or character as not to cause any danger of fire or explosion:

Provided that so much of this condition as applies to the exclusion of iron or steel, shall not be obligatory in a building in which no explosive other than an explosive of the 1st Division of the 6th (Ammunition) Class is kept.

अनुज्ञाप्तिधारी प्ररूप आर.ई.-3 और आर.ई.-4 या आर.ई.-3, जैसी स्थिति हो, में सभी विस्फोटकों का अभिलेख और लेखा रखेगा और विस्फोटक नियम, 2008 के अधीन प्राधिकृत किसी भी अधिकारी के समक्ष उसके व्यारा ऐसा करने की मांग की जाने पर स्टाक पुस्तक और अभिलेख प्रस्तुत करेगा । स्टाक पुस्तक विहित प्रोफार्मा में पृष्ठ संख्यांकित होगी ।

The licensee shall keep records and accounts of all explosives in Forms RE-3 and RE-4 or RE-5, as the case may be, and exhibit the stock books and records to any of the officers authorised under the Explosives Rules, 2008 whenever such officer may call upon him to do so. The stock books in the prescribed proforma shall be page numbered.

 परिसरों में कोई परिवर्तन या तबदीली अनुजापन प्राधिकारी के पूर्वानुमोदन बिना नहीं की जाएगी और अनुज्ञप्तिधारी ऐसी किसी शर्त का अनुपालन करगा जो इस निमित्त अनुज्ञापन प्राधिकारी विनिर्दिष्ट करें। No changes or alterations shall be carried out to the premises without prior approval of the licensing authority and the licensee shall

comply with any condition that may be specified by the licensing authority in this behalf. मेंगजीन सभी समयों पर अच्छी मरम्मत की स्थिति में बनाई रखी जाएगी (या अच्छी हालत में बनाई रखी जाएगी ¶ायदि किसी कारणवश किसी 13. विस्फोटक के भण्डारण के लिए मैगजीन अनुपयुक्त हो जाती है तो अनुइप्तिथारी इस बात की सूचना अनुहापन प्राधिकारी को तुरंत देगा । Magazine shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing

authority forthwith, if the magazine becomes unfit for storage of any explosives for any reason whatsoever. मेंगजीन का अनुआप्तिधारी इन नियमों के नियम 24 के उप-नियम 3 के अनुसार त्रैमासिक विवरणी प्रस्तुत करेगा ।

The licensee of the magazine shall submit quarterly return as per sub-rules (3) and (4) of rule 24 of these rules.

14. यदि सुरक्षा दूरी का कोई अधिक्रमण होता है तो उसकी सूचना अनुझापन प्राधिकारी को आवश्यक सलाह और कार्यवाही के लिए तरंत दी जाएगी

Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.

यदि कोई विस्फोटक विनष्ट हुआ अथवा अनुपयोगी जाया जाता है तो उसकी सूचना अनुज्ञापन प्राधिकारी को, सलाह प्राप्त करने के लिए, तुरंत दी 15. जाएगी।

The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.

विस्फोटकों के पैकेटों के चड़े इस प्रकार लगाए जाएंगे कि कम से कम एक व्यक्ति भण्डार किए गए सभी पैकजों की हालत की जांच करने और प्रत्येक पैकेज की विनिर्माण विशिष्टियों को पड़ने के लिए उनके बीच से होकर आ जा सके । 16

The explosive packages shall be stocked in such a way so as to allow movement of at least one person to check the condition of all packages stored and to read the manufacture particulars of each package. तडित चालकों की भूमि के लिए प्रतिरोध यथासंभव न्यूनतम होगा और किसी भी दशा में 10 ओहा से अधिक नहीं होगा ।

- The resistance of the lightning conductor to earth shall be as low as possible and in no case be more than 10 ohms.
- 17. मैगजीन के चारों ओर 15 मीटर की दूरी के अंतर्गत कोई शुल्क घास या झांड़ी या ज्वलनशील सामग्री नहीं रहने दी जाएगी ।
- A distance of 15 meters surrounding the magazine or store house shall be kept clear of dried grass or bush or flammable materials. विस्फोटकों के प्रत्येक पैकेट की, जब उसे मैगजीन के भीतर लिया जा रहा हो, ठीक दशा जानने के लिए परीक्ष की जाएगी ।
- Every package of explosive at the time of bringing inside the magazine shall be examined for its sound condition.

किसी मेगजीन / भंडारगृह में किसी एक समय में चार व्यक्तियों से अधिक को नहीं रहने दिया जाएगा । 19

- Not more than 4 persons shall be allowed inside the magazine or store house at any one time. विस्फोटकों के खाली पैकजों को शीघ्रतिशीघ्र वहां से हटा दिया जाएगा और नष्ट कर दिया जाएगा । 20.
- Empty packages of the explosives shall be removed at the earliest and destroyed. \
- अनुवाद्यिधारी और कर्मचारीयों को परिसर के भीतर आपातकाल के दौरान की जाने वाली प्रक्रियाओं से अवगत होना चाहिए।
- The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises
- निरीक्षण या नमूना अधिकारी को सभी युक्तियुक्त समयों पर अनुजत परिसर में अबाध रूप से पहुंचने दिया जाएगा और यह सनिश्चित करने के 22 लिए कि अधिनियम और इन नियमों के उपबंधों और सरक्षा स्थितियों को सम्यकत: अनुपालन किया जा रहा है, अधिकारी को प्रत्येक सुविधा प्रदान की जाएगी ।

Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

यदि अनुझापन प्राधिकारी या विस्फोटक नियंत्रक अनुझारिाधारक को अनुझात परिसरों या मशीनरी, 🛛 टूल या उपकरण में ऐसी कोई मरम्मत या 23. परिवर्धन या परिवर्तन करने या सिफारिशों को लागू करने को लिखित रूप में सूचित करता है जो परिसर के अंदर या बाहर या व्यक्तियों की सुरक्षा के लिए आवश्यक है, अनुवाप्तिधारक सिफारिशों को निष्पादित करेगा और विनिर्दिष्ट अवधि के भीतर अनुपालन रिपोर्ट ऐसे प्राधिकारी को देगा ।

If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either en-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority

24. अनुप्राणिधारी मैगजीन में रखने और बिक्री के लिए प्राधिकृत विस्फोटक सूची में उल्लिखित अनुप्रत फैक्टरी या कंपनी से प्राधिकृत विस्फोटक. आतिशबाजी या सुरक्षा पलीते खरीदेगा । भन्ने जन मुख्य पिसाविक

Fue Deputy Costs Controller of Explication

The licensee shall purchase authorised explosives/ fireworks or safety fase as mentioned in the list authorised explosives from a licensed factory or company for possession and sale from the magazine.

25. निम्न से अधिक ध्वनि स्तर उत्पदित करने वाले आतिश्वबाजियों पटाखों की बिक्री और रखने के लिए –

(क) जो फटने की जगह से चार मीटर की दूरी पर है, 125 डी.बी.(ए1) या 145 डी.बी.(सी)पी.के. प्रतिबंधित होंगे;

(ख) श्रंखला (जुड़े हुए पटाख) को गठन करने वाले व्यक्तिगत पटाखों के लिए उपर्युक्त उल्लिखित सीमा 5 लॉग.10(एन) डी.बी. (सी) पी.क.प्रतिबंधित होंगे ;

The possession and sale of fire-crackers generating noise level exceeding;

a) 125 dB(AI) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited;

b) For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log10 (N) dB. where N = number of crackers joined together.

आग या विस्फोट व्दास दुर्घटना या नुकसान पटाखों की कमी या चोरी. प्राधिकारी के स्थानीय कार्यालय को रिपोर्ट की जाएगी । 26

तुरंत पास के पुलिस थाने और अनुज्ञापन प्राधिकारी और अनुज्ञापन

Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

अतिरिक्त गातें / Additional Conditions :

 अनज्ञप्तीधारी विदेशी मुल के आतिशवाजी को ना प्रदर्शित करेगा, ना रखेगा और ना ही उसकी बिजी करेगा 1 The licensee shall not exhibit, possess and sell fireworks of foreign origin.

OE! onvo

कृतै संयुक्त मुख्य विस्फोटक नियंत्रक For Joint Chief Controller of Explosives दक्षिणांचल, चेन्ने | South Circle, Chennai

Note :- This is system generated document does not require physical signature. Applicant may

take printout for their records.

कृते चय मुख्य विसंगेटन नियन्त्रध For Deputy Onter Controller of Explanites Compose Ernakulara

Form DE-2 (See rule 113 of the Explosives Rules, 2008) (Distance Form to be attached to the licence)

Safety distances required to be kept clear around magazine for high explosives or fire works or factory licence number E/SO/KL/22/1730(E72220) in form LE-3 granted to George Kolhuparambil, Proprietor, M/s. United Granites & Metals, Vazhithala P.O., Thodupuzha, Kerala-685588.

	Type of Structure(s)	Safety dista	nces meters
	Inside Safety Distances(ISD)	м	UM
Ē.	Room or Workshop used in Connection with the Mazazine	16	24
2	Any other Explosives Magazine or store House or Factory of the Applicant		
5	Magazine Office		
	Middle Safety Distances(MSD)		
Ê.	Mazazine Keeper's or Chowkidar's Dwelling house		
Ê.	Railway including Minerals and Private Railways		
6.	Canal (in active use) or other navigable water		
ŧ.	Dock or Pier or Jetty		
£.	Public Highway or Public Road		45
2	Private Road which is PRINCIPAL means of access to a Temple, Mosque, Church, Garudwara or o	other	
	places of worships, Hospital, College, School or Factory		
10	River Embaskment or Sea Embaskment or Public Well		
п.	Reservoir or Bounded tank/rope way		
12	Windmillor or Solar panel for Power Generation		
	Outside Safety Distances(OSD)		
3	Duelling House		
4	Gowt and Public Building		
15	Temple, Mosque, Church or Guradwara or other Places of Worshies		
16	Shons, Market place, Public recreation and Sports Ground, College, School, Hospital, Theater, Cir,	cime.	
	or other Building where the public are accustomed to assemble		
7	Factory		
18	Buildings or Works used for the Storage in Bulk of Petroleum, Serit, gas, or other inflammable	le or	
12.0	hazardous substances		1005
9	Building or Works used for Storage and Manufacture of Explosives or of articles which con	utain	68
~	Explosives		
10	Aerodrome		
8	Furnace, Kiln or Chimney		
2	Quarry or mine pit head		
1	Power House or Electric Substation		
4	Wireless Station		
5	Warehouse or other Storage Building		
ń	Any other Protected works		
_	Overhand Fleetele lines		
19	Plastria Bouwr ouwr hand Ternemission I iner chous 6400/		49
	Electric Power over head Transmission Lines arove 4409		15
	connectower over more transmission runs due aver	_	12
			Tit

The Date : 01/04/2015

Amendments :

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 25/09/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 09/11/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 20/03/2018
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 23/03/2018
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 29/06/2018

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

1 march

South Circle, Chennai कृते उप मुख्य विस्फोटक नियन्त्रक For Deputy Chief Controller of Explosives एरनाकुलम Ernakulam

For Joint Chief Controller of Explosives





भारत सरकार | Government of India वाणिज्य और उद्योग मंत्रालय | Ministry of Commerce & Industry पेट्रोलियम तथा विस्फोट्क सुरक्षा संगठन् (पेसी) | Petroleum & Explosives Safety Organisation (PESO) पूर्व नाम. विस्फोटक विभाग | Formerly- Department of Explosives केन्द्रीय् भवन, ब्लाक सी-2ू तीसरी मजिल | Kendriya Bhavan, Block C-2, 3rd Floor CSEZ पी.ओ.कक्कानाड कोच्ची | CSEZ PO Kakkanad Dist. Emakulam Eruakulam 682037 फूनि (Phone):- 2427286 | फेक्स (Fax):- 2427276

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

संख्या (No.): E/SC/KL/22/1739(E72220)

दिनोंक (Date): 31/01/2022

संवा में। To,

George Kolhuparambil, Proprietor,

M's. United Granites & Metals, Vazhithala P.O., Thodupraha, Town/Village - Vazhithala District-IDUKKI, State-Kerala, Pincode - 685388

विषय : Survey No.357/3, Block No. 11, ग्राम Manakkadu (v), Thodupuzha Taluk, जिला IDUKKI, राज्य Kerala में विस्फोटक के मैगजीन में उपयोग के लिए कब्जा हेतु विस्फोटक नियम, 2008 के अंतर्गत LE-3 में जारी अनुइप्ति से E/SC/KL/22/1730(E72220) के नवीनीकरण संदर्भ में।

Possession for Use of of Explosives from magazine situated at Survey No.: 357/3, Block No. 11, Manakkadu (v), Thodupuzha Taluk, Dist. IDUKKI, Kerala -Licence No .: E/SC/KL/22/1730(E72220) granted in Form LE-3 of Explosives Rules, 2008 - Renewal Subject: regarding

महोदय | Sir.

आपका उपर्युक्त विषय पर पत्र संख्या NII दिनांक 19/01/2022 का संदर्भ प्रहण करें। विस्फोटक नियम, 2008 के अंतर्गत प्ररूप LE-3 में जारी अनुजापित दिनांक 31/3/2027 तेंक नवीनीकृत कर इस पत्र के साथ भेजी जा रही है।

Reference to your letter No.: Nil dated: 19/01/2022, the subject licence duly renewed upto 31/3/2027 and issued in Form LE-3 of Explosives Rules, 2008 is forwarded herewith.

Conditions:

IJUSE OF EXPLOSIVES IN QUARRY SHALL BE STARTED ONLY AFTER GRANT OF QUARRYING LEASE FROM THE DIRECTOR OF MINES & GEOLOGY, PLEASE NOTE THAT THE USE OF EXPLOSIVES IN THE OUARRIES SHALL BE AS PER THE DIRECTION OF THE DGMS, BANGALORE AS REQUIRED UNDER THE MINES ACT 1952 AND METTALIFERROUS MINES REGULATIONS 1961 अनुज्ञपित के आगामी नवीकरण हेतु कपया निम्नलिखित दस्तावेज दिनांक 31,037 2027 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 31/3/2027.

- प्ररूप आरई-1 में विधिवत पर्ण एवं हस्ताक्षरित आवेदन। Application in Form RE-1 duly filled in and signed.
- एक से पाँच वर्ष के अनुज्ञादित शुल्कों का, विस्फोटक निथम, 2008 के तहत औंनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से लाइसेंस जुल्क ऑनलाइन जमां किया जॉना 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 मुल अनुज्ञप्ति।
- 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 कय हेत आसई-11 में मांगपत्र (इंडेंट) आपूर्तिकर्ता को दिया जाए और उसी की एक प्रति इस कार्यालय को भेजी जाएं (आतिशबाजी गोदाम के लिए लाग 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)

- कपया विस्फोटकों की त्रैमासीक विवरणी हर तिमाही के अंत में आरर्ड-7 में प्रस्तुत की आएं। विवरणी इस कार्यालय के कार्यालय में आगामी तिमाही के 10 तारीख से पहले पहुंच जानी चाहिए (आतिखबाजी गोदाम के लिए लागू नहीं ¶⊡Please submit quarterly returns of explosives in RE-7 at the end of every quarter so as to reach this office by 10th of the succeeding quarter.(Not applicable for fireworks store house) सभी ब्लास्टिंग आपरेशन एक सक्षम द्वारा की जाएगी जो उपरोक्त नियमों के तहत एक वेध शॉट फायर प्रमाणपत्र धारक हो। हालांकि, खान अधिनियम
- 1952 के अधीन आने वाले खानों में ब्लास्टिंग आपरेशन करने वाले ब्लास्टर की योग्यता उसी अधिनियम से निर्धारित हो। All blasting operations shall be carried out by a competent person holding a valid shot firer's permit granted under above rules. However, blasting operations in mines coming under the purview of the Mines Act 1952, the blaster shall have qualifications prescribed in the regulations framed under the said Act.

भवदीय। Your's faithfully

MADENT (UL& TIMI (Dr. P. K. Rana)

विस्फोटक निर्मत्रक | Controller of Explosives

कृते उप मुख्य विस्फोटक नियंत्रक। For Dy. Chief Controller of Explosives

कते खप मुकोष्पी (Emakulam प्रायम) For Denuty Chief Controller of Explosives

प्रतिशिपि प्रवित | Copy Forwarded to:

शिला मॉअस्ट्रेट (District Magistrate), IDUKKI (Kerala)- सुचना के लिए (for information)

कृते उप मुख्य विस्फोटक नियंत्रक | For The Dy. Chief Controller of Explosives, कोच्ची। Ernakulam (अधिक जानकारी जैसे आवेदन को स्थिति, शुल्क आदि के लिए हमारी वेबसाइट http://peso.gov.in देखें.) (For more information regarding status,fees and other details please visit our website http://peso.gov.in) Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

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अनुज्ञप्ति 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/22/811(E38112) वार्षिक फीस रुपए (Annual Fee Rs): 2400/-

1. Licence is hereby granted to

Shri George Kochuparambil (31041711 / Occupier : Shri George Kochuparambil), M/s.United Granites & Metal, Vazhithala P/O, Idukki, Kerala., Town/Village - , District-IDUKKI, State-Kerala, Pincode -

को अनुइप्ति अनुवत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : Individual



- अनुज्ञाप्ति निम्रशिखित प्रयोजनों के लिए विधिमान्य है। Licence is valid only for the following purpose.
 Detonators, Electric Detonators, - के उपयोग के लिए
- अनुज्ञप्ति विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है।

Licence is valid for the following kinds and quantity of explosives: -- (Φ) (a)

क्र Sr. No.	नाम और विवरण Name and Description	वर्ग और प्रभाग Class & Division	उप-प्रभाग Sub-division	मात्रा किसी एक समय में Quantity at any one time
1.	Nitrate Mixture	2.0	0	100 Kg.
2.	Safety Fuse	6,1	0	1500 Mtrs
3.	Detonators	6,3	0	5000 Nos.
4.	Electric Detonators	6.3	0	1000 Nos.

(ख) किसी एक कलैंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुइप्ति के लिए] (b) Quantity of explosives to be purchased in a calendar month[applicable for licence under

20 times as above.

article 3(b) and (c)) : 5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पुष्टि होती रेखाचित्र क्र

रेखाचित्र क. (Drawing No.) E/SC/KL/22/811 (E38112) दिनांक (Dated) 05/05/2004

drawing(s): -6. अनुज्ञपित परिसर निग्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:

Survey No(s). 519/1-1.	3, ग्राम (Town/	/illage) : Manakkadu,	Thod प्रिलेस थाना	(Police Station) : Thodupuzha
जिला (District)	IDUKKI	राज्य (State)	Kerala	पिनकोड (Pincode)
दूरभाष (Phone)		इ. मल (E-Mail)		फैक्स (Fax)

NA

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

The licensed premises shall conform to the following

8. अनुझप्ति 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, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुएए। Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
- अनुइप्ति प्राधिकारी व्याररा हस्ता.क्षरित इस अनुइप्ति 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 2006 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2006.

यह अनुज़प्ति, 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 प्रतिसंडत 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 - 05/05/2004

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

Amendments :

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 27/12/2011
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 04/03/2014

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1000	100	C. COMPANY	100 200	Distance in the second second	100 100	Contract of the local division of the local	THE OWNER
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. 1	Space for En	idorsement of Renewal
नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
06/02/2020	31/03/2025	Dy. Chief Controller of Explosives, Ernakulam
		истрени Егонкијат

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.

(सेट VIII | Set VIII)

मैगजीन में वर्ग 1.2.3.4.5.6. और 7 के विस्फोटकों को विक्री या प्रयोग हेतु रखने के लिए प्ररूप एत.ई. 3 (अनुच्छेद 3 (ख) से (4)। में मुख्य विस्फोटक नियंत्रक या विस्फोटक नियंत्रक व्हारा प्रदान किए जाने वाले अनुइप्ति सं. E/SC/KL/22/811(E38112) की शतें निम्नतिखित हैं ।

The following are the conditions of licence number E/SC/KL/22/811(E38112) to possess for sale or use, explosives of Class 1,2,3, 4, 5, 6 and 7 in a magazine in Form LE-3 (articles 3(b) to (c)) granted by Chief controller of Explosives or **Controller** of Explosives.

परिसर में किसी भी समय विस्फोटकों की मात्रा अनुजापन योग्य सामर्थ्य से अधिक नहीं होगी।

- The quantity of explosives on the premises at any one time shall not exceed the licensable capacity,
- विस्फोटकों के भंडारण के लिए प्रयुक्तर होने वाली मैंगजीन अनुसूची III और अनुइप्ति के उपाबंध में विनिर्दिष्ट सुरक्षा दूरी बनाए रखना होगा।

The magazine used for storage of explosives shall maintain safety distance specified in Schedule III and annexure to the licence.

- मैगजीन का प्रमोग उन सभी विस्फोटकों के. जो इस अनुइति में विनिर्दिष्ट है, रखे जाने के लिए और ऐसे रखे जाने से संबध्ध आधान या औजार या उपकरणों के रखे जाने के लिए ही किंया जाएगा: अन्यया नहीं ।
- The magazine shall be used only for keeping all explosives specified in this licence and of receptacles for, or tools or implements for work connected with the keeping of such explosives.
- पैकर्जी को खोलने का कार्य और विस्फोटकों को तौलने तथा पैक करने का कार्य मैगजीन में नहीं किया जाएगा।
- The opening of packages and the weighing and packing of explosives shall not be carried on in the magazine.
- दो या दो से अधिक वर्णन के विस्फोटकों को. जिन्हें मैगजीन में रखें जाने की अनुझा दी जा सकती है. मैगजीन में तभी रखे जाएंगे जब उनमें से प्रत्येक को, . ऐसे पदार्थ या स्वरूप का कोई मध्यवर्ती विभाजक लगाकर या उनके बीच ऐसा मध्यवर्ती स्थान छोड़कर. परस्पर प्रथक कर दिया जाए कि किसी वजह से विस्फोटक में लगने वाली आग या होने वाला विस्फोट किसी जन्य वर्णन के विस्फोटके तक न पहुंच सके : परंतु -

(घ) 2 (नाइट्रेट मिक्षण), वर्ग 3 (नाइट्री योगिक) के विभिन्न विस्फोटक, वर्ग 6 प्रथम प्रभाग के अंतर्गत आने वाले सुरक्षा पलीते और वर्ग 6 प्रभाग 2 के अंतर्गत आनेवाले विस्फोटक प्रेरक प्रलीते, जिनमें कोई खुला लोहा या इस्पात नहीं है, एक दूसरे के साथ बिना किसी मध्यवती विभाजक या स्थायन के रखे जा सकते हैं । (त) वर्ग 6 प्रभाग 3 के अंतर्गत आनेवाते विस्फोटक प्रेरक अंतग रखे जाएंगे ।

(च) वर्ग 1 के अंतर्गत आने वाले बारूद को अलग रखा जाएगा ।

Two or more description or explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening space. as will effectually prevent explosion or fire in the one communicating with the other; Provided that-

(d) the various explosives of Class 2 (nitrate-mixture), Class 3 (nitro-compound), safety fuses belonging to Class 6 Division 1and detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space ;

(e) Detonators belonging to Class 6 Division 3 shall be kept separately.

(f) Gun powder belonging to Class 1 shall be kept separately.

 वर्ग 3 (माइट्री योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पक्षात सिवाय अनुझायन प्राधिकारी की विशेष मेंजुरी के मैगजीन में नहीं रखा जाएगा ।

Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.

 वर्ग 3 (नाइट्रो पोणिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पक्षात मैगजीन में तभी रखा जाएगा जब कि किंसी बिस्फोटक नियंत्रक ने इसके लिए विशेष मंजूरी ये दी हो ।

(i) जब ऐसी मंजूरी दे दी गई हो तो प्रत्येक निरीक्षण पर किसी विस्फोटक नियंत्रक से ऐसा टिखित प्रमाणपत्र अभिप्राप्त कर लिया जाए जिसमें दी गई मंजूरी के अंतर्गत आनेवाली अवधि दर्शित की गई हो और ऐसे प्रमाणपत्र के अनुझप्तिधारी अपने पास रखेगा और मांग की जाने पर प्रस्तुरत करेगा ।

(ii) जब कोई विस्फोटक मानक शुध्दता का न रह जाने के कारण या द्रवणीकरण या नाहटो म्लीअसरीन या द्रव नाइटो योगिक के निकल जाने के चिन्ह प्रकट होने के कारण मैगजीन में भण्डारित किए जाने के उपयुक्त नहीं रह जाता है तो अनुइप्तिधारी अपने ही व्यय पर ऐसे विस्फोटक के निपटारे के लिए ऐसे निदेशों का अनुपालन करेगा जी मुख्य निपंत्रक या विस्फोटक निपंत्रक जारी 071

Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of the Controller of Explosives.

(i) When such sanction has been given, a written certificate showing the period covered by the sanction shall be obtained from the Controller of Explosives at each inspection, and shall he kept by the licensee and produced on demand.

(ii) When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerin or liquid nitro-glycerin or liquid nitrocompound is no longer fit for storage in the magazine or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Controller or Controller of Explosives may issue.

 मैगजीन के भीतरी भाग या उसमें लगी बैंचो, शेल्फों और उसकी फिटिंग का इस प्रकार सत्रिमांण किया जाएगा या उन्हें इस प्रकार अंतरित या अवतरित किया जाएगा कि विस्फोटक का किसी लोहे या इस्पात के साथ संपर्क रोका जा सके । भौतरी भाग में लगी बेचे, 'जैल्कें और फिटिंग यथासाध्य ग्रिट से मुक्त एवं शाफ रखे जाएंगे तथा ऐसे विस्फोटक, 'जो जल से खतरनाक रूप में प्रभावित हो सकते हैं, इस बाबत सम्पक सावधानी बरती जाएगी कि वहां कोई जल मौजूद न रहे : परंतु किसी लोहे या इस्पात के खुले होने के विरूध्द सावधानी से संबंधित इस शर्त का वह भाग ऐसे किसी भवन में बाध्येकर नहीं होगा जिसमें वर्ग 6 (गोला बारूद) के प्रथम के विस्फोटक से भिन्न कोई विस्फोटक रखा गया है ।

The interior of the magazine and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel contact with the explosives. Such interior, benches, shelves and fittings shall so far as is reasonably practicable, be kept free from grit and shall otherwise be clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water there from; Provided that so much of this condition as relates to precautions against the exposure of any iron or steel shall not be obligatory in a building in which no explosive other than explosive of the 1st Division 6th (Ammunition) Class is kept.

 यदि तडित चालक का परीक्षण विस्फोटक नियंत्रक करता है तो अनुज्ञाप्तिधारी ऐसे परीक्षण के लिए विंहित पंगिस का संदाय करेगा थदि परीक्षण असमाधानकारी साबित होता है तो उतनी ही फीस अनुज्ञप्तिधारी व्दारा पक्षात्वर्ती प्रत्येक परीक्षण के लिए तब तक दी जाती रहेगी जब तक कि परीक्षण अधिकारी तडित चालक को समाधानप्रद घोषित नहीं कर देता :

परंतु किसी एक परीक्षण के लिए देय फीस किसी एक दिन के दौरान किसी चालक के किए गए सभी परीक्षणों के लिए प्रभार्य होगा :

परंतु यह और कि यदि दो या अधिक तडित चातक एक ही मैंगजीन से संबद्ध हैं तो ऐसे सभी चालकों के परीक्षण के शिए फीस ऐसी किसी फीस से अधिक नहीं होगी जो किसी एक तहित चालक के परीक्षण के लिए हर स्थिति में विहित की गई है ।

If the lighting conductor is tested by the Controller of Explosives, the licensee shall pay the fees prescribed for test. In the even of the test proving unsatisfactory, the same fees shall be payable by the licensec for each subsequent test until the lighting conductor is passed by the testing officer as satisfactory:

Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day :

Provided further that where two or more lighting conductors are attached to one and the same magazine, the fee for the testing of all such conductors shall not exceed the fee prescribed in this condition for testing a single lighting conductor.

 उपयुक्त तथा जेब रहित कार्यकरण वस्त्रों, उपयुक्त जुतों के प्रयोग व्दारा तथा तलाशी लेकर या अन्यथा अथवा ऐसे किन्हीं साधनों व्दारा इस बाबत सम्यक उपबंध किया जाएगा कि फैक्ट्री परिसर में अग्नि, दियासलाई अथवा ऐसी कोई वस्तुोर्ए या पदार्थ, जिससे विरफोट हो सकता है या आग लग सकती हो, किन्तु इस शर्त के कारण ऐसी संरचना, स्थिति या स्वरूप में किसी कृत्रिम बत्ती का प्रवेश वर्जित नहीं है जिससे आग लगने या विस्फोट होने का खतरा न हो :

परंतु इस सर्त का वह भाग, 🔄 लो लोहे या इस्पात के अपवर्जन को लागू होता है, 🛛 ऐसे किसी भवन के संबंध में बाध्य कर नहीं होगा जिससे भिन्न कोई विस्फोटक नहीं रखा गया है ।

Due provisions shall be made, by the use of suitable working clothes without pockets, suitable shoes and by searching or otherwise or by such means, for preventing the introduction into danger area of the factory premises of fit, Lucifer matches or any substance or article likely to cause explosion or fire, but this condition shall not prevent the introduction of an artificial light of such construction, position or character as not to cause any danger of fire or explosion:

Provided that so much of this condition as applies to the exclusion of iron or steel, shall not be obligatory in a building

in which no explosive other than an explosive of the 1st Division of the 6th (Ammunition) Class is kept. 11. अनुइष्टिधारी प्ररूप आर.ई.-3 और आर.ई.-4 या आर.ई.-5, जैसी स्थिति हो, में सभी विस्फोटकों का अभिलेख और लेखा रखेगा और विस्फोटक नियम, 2008 के अधीन प्राधिकृत किसी भी अधिकारी के समक्ष उसके व्यारा ऐसा करने की मांग की जाने पर स्टाक पुस्तक और अभिलेख प्रस्तुत करेगा । स्टाक पुस्तक विहित प्रोफार्मा में पृष्ठ संख्यांकित होगी ।

The licensee shall keep records and accounts of all explosives in Forms RE-3 and RE-4 or RE-5, as the case may be, and exhibit the stock books and records to any of the officers authorised under the Explosives Rules, 2008 whenever

such officer may call upon him to do so. The stock books in the prescribed proforms shall be page numbered. परिसरों में कोई परिवर्तन या तबदीली अनुज्ञापन प्राधिकारी के पूर्वानुमोदन बिना नहीं की जाएगी और अनुज्ञप्तिथारी ऐसी किसी 12. शर्त का अनुपालन करेगा जो इस निमित्त अनुज्ञापन प्राधिकारी विनिर्दिष्ट करें ।

No changes or alterations shall be carried out to the premises without prior approval of the licensing authority and the licensee shall comply with any condition that may be specified by the licensing authority in this behalf.

मेंगजीन सभी समयों पर अच्छी मरम्मत की स्थिति में बनाई रखी जाएगी (या अच्छी हालत में बनाई रखी जाएगी ¶ायदि किसी 23. कारणवश किसी विस्फोटक के भण्डारण के लिए मैगजीन अनुप्रयुक्त हो जाती है तो अनुस्रुदिधारी इस बात की सूचना अनुझापन प्राधिकारी को सुरंत देगा ।

Magazine shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing authority forthwith, if the magazine becomes unfit for storage of any explosives for any reason whatsoever.

मैंगजीन का अनुज्ञप्तिधारी इन नियमों के नियम 24 के उप-नियम 3 के अनुसार त्रैमासिक विवरणी प्रस्तुत करेगा ।

- The licensee of the magazine shall submit quarterly return as per sub-rules (3) and (4) of rule 24 of these rules.
- 14. यदि सुरक्षा दूरी का कोई अधिक्रमण होता है तो उसकी सुचना अनुज्ञापन प्रार्थकारी को आवश्यक सलाह और कार्यवाही के लिए तुरंत दी जाएंगी।

Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.

15. पदि कोई विस्फोटक विनष्ट हुआ अथवा अनुपयोगी जाया जाता है तो उसकी सूचना अनुझापन प्राधिकारी को, सलाह प्राप्त करने के लिए, तुरंत दी जाएगी ।

The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.

16. विस्फोटकों के पैकेटों के चड़े इस प्रकार लगाए जाएंगे कि कम से कम एक व्यक्ति भण्डार किए गए सभी पैकजों की हालत की जांच करने और प्रत्येक पैकेज की विनिर्माण विशिष्टियों को पढ़ने के लिए उनके बीच से होकर आ जा सके ।

The explosive packages shall be stocked in such a way so as to allow movement of at least one person to check the condition of all packages stored and to read the manufacture particulars of each package.

तजित चालकों की भूमि के लिए प्रतिरोध यथासंभव न्यूनतम होगा और किसी भी वशा में 10 ओहा से अधिक नहीं होगा ।

- The resistance of the lightning conductor to earth shall be as low as possible and in no case be more than 10 ohms.
- 17. मेमजीन के चारों ओर 15 मीटर की दूरी के अंतर्गत कोई शालक घास या झांडी या ज्वलनश्चील सामग्री नहीं रहने दी जाएगी 🛚

A distance of 15 meters surrounding the magazine or store house shall be kept clear of dried grass or bush or flammable materials.

- 18. विस्फोटकों के प्रत्येक पैकेट की, जब उसे मैगजीन के भीतर लिया जा रहा हो, ठीक दशा जानने के लिए परीक्षा की जाएगी । Every package of explosive at the time of bringing inside the magazine shall be examined for its sound condition.
- किसी मैगजीन / भंडारगृह में किसी एक समय में चार व्यक्तियों से अधिक को नहीं रहने दिया जाएगा । Not more than 4 persons shall be allowed inside the magazine or store house at any one time.
- 20. विस्फोटकों के खाली मैकजों को शीघ्रतिशीघ्र वहां से हटा दिया जाएगा और नष्ट कर दिया जाएगा ।
- Empty packages of the explosives shall be removed at the earliest and destroyed. \
- अनुराधिांधारी और कर्मचारीयों को परिसर के भीतर आपातकाल के दौरान की जाने वाली प्रक्रियाओं से अवगत होना चाहिए । The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.
- 22. निरीक्षण या नमूना अधिकारी को सभी युक्तियुक्त समयों पर अनुज्ञत परिसर में अबाध रूप से पहुंचने दिया जाएगा और यह सुनिश्चित करने के लिए कि अधिनियम और इन नियमों के उपबंधों और सुरक्षा स्थितियों को सम्यकत: अनुपालन किया जा रहा है. अधिकारी को प्रत्येक सुविधा प्रदान की जाएगी।

Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

23. यदि अनुज्ञापन प्राधिकारी या विरफोटक नियंत्रक अनुज्ञतिपारक को अनुज्ञात परिसरों या मशीनरी, टूल या उपकरण में ऐसी कोई मरम्मत या परिवर्धन या परिवर्तन करने या सिफारिश्चों को लागू करने को लिखित रूप में सूचित करता है जो परिसर के अंदर या बाहर या व्यक्तियों की सुरक्षा के लिए आवश्यक है, अनुज्ञाप्तिधारक सिफारिशों को निष्पादित करेगा और विनिर्दिष्ट अवधि के भीतर अनुपालन रिपोर्ट एस प्राधिकारी को देगा।

If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.

 अनुज्ञानिधारी मैराजीन में रखने और बिक्री के लिए प्राधिकृत विस्फोटक सूची में उल्लिखित अनुज्ञत फैक्टरी या कंपनी से प्राधिकृत विस्फोटक / आतिशाबाजी पा सुरक्षा पतीत खरीदेगा।

The licensee shall purchase authorised explosives/ fireworks or safety fuse as mentioned in the list authorised explosives from a licensed factory or company for possession and sale from the magazine.

- निम्न से अधिक ध्वनि स्तर उत्पादित करने वाले आतिशबाजियों पटाखों की बिक्री और रखने के लिए
 - (क) जो फटने की जगह से चार मीटर की दूरी पर है, 125 डी.बी.(ए१) या 145 डी.बी.(सी)पी.के. प्रतिबंधित होंगे;

(ख) श्रंखला (जुड़े हुए पटाख) को गठन करने वाले व्यक्तिगत पटाखों के लिए उपर्युक्त उल्लिखित सीमा 5 लॉग.।α(एन) डी.बी. (सी) पी.के.प्रतिबंधित होंगे ;

The possession and sale of fire-crackers generating noise level exceeding;

n) 125 dB(AI) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited;

b) For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log10 (N) dB, where N = number of crackers joined together.

26. आन या विस्फोट ब्दारा दुर्घटना या नुकसान पटाखों की कमी या चोरी, तुरंत पास के पुलिस थाने और अनुझापन प्राधिकारी ओर अनुझापन प्राधिकारी के स्थानीय कार्यातय को रिपोर्ट की जाएगी।

Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

अतिरिक्त शर्ते / Additional Conditions :

 अनुज्ञप्तीधारी विदेशी मूल के आतिशवाजी को ना प्रदर्शित करेगा, ना रखेगा और ना ही उसकी बिक्री करेगा I The licensee shall not exhibit, possess and sell fireworks of foreign origin.

कृते संयुक्त मुख्य विस्फोटक नियंत्रक For Joint Chief Controller of Explosives दक्षिणांचल, चन्ने | South Circle, Chennal

> Deputy Onial Controller of Explosives protected Secalation

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Form DE-2

(See rule 113 of the Explosives Rules, 2008) (Distance Form to be attached to the licence)

Safety distances required to be kept clear around magazine for high explosives or fire works or factory licence number E/SC/KL/22/811(E38112) in form LE-3 granted to Shri George Kochuparambil, M/s.United Granites & Motal, Vazhithala P.O, Idukki, Kerala., Kerala.

	Inside Safety Distances(ISD)	M	- TIME
D.	arm or Workshop used in Connection with the Magazine	11	17
A.	on or workshop used in Connection with the Magazine	11	A.C.
M	agazine Office		
	Middle Safety Distances(MSD)		
M	agazine Keeper's or Chowkidar's Dwelling house		
i Ra	lway including Minerals and Private Railways		
Ca	nal (in active use) or other navigable water		
D	ock or Pier or Jetty		
Pu	blic Highway or Public Road		33
Pr	vate Road which is PRINCIPAL means of access to a Temple, Mosque, Cl	hurch.	
Gu	rudwara or other places of worships, Hospital, College, School or Factory	and and a	
10 Ri	ver Embankment or Sea Embankment or Public Well		
II Re	servoir or Bounded tank/rone way		
2 W	indmillor or Solar panel for Power Generation		
	Outside Safety Distances(OSD)		
13 Dv	velling House		
14 Ge	ovt. and Public Building		
15 Te	mple, Mosque, Church or Gurudwara or other Places of Worships		
6 Sh	ops, Market place, Public recreation and Sports Ground, College, St	chool.	
He	spital. Theater, Cinema or other Building where the public are accustom	ned to	
355	emble		
7 Fa	ctory		
8 Bu	ildings or Works used for the Storage in Bulk of Petroleum, Sprit, gas, or	other	
inf	lammable or hazardous substances		45
19 Bu	ilding or Works used for Storage and Manufacture of Explosives or of an	ticles	
wh	ich contain Explosives		
10 Ae	rodrome		
1 Fu	mace. Kiln or Chimney		
2 0	arry or mine pit head		
B Po	wer House or Electric Substation		
4 W	ireless Station		
s w	rehouse or other Storage Building		
26 An	y other Protected works		
	Overhead Electric lines		
27 Ele	ectric Power over head Transmission Lines above 440V		45
8 Ele	ectric Power over head Transmission Lines upto 440V		15
	0		1
Date :	05/05/2004	-	
	For Joint Chi	ef Controlk South	r of Explosi Circle, Che
ndme	nts:	जा विसंधित	क निवयव
mande	nant of Cupatity of Evploying Manthly Durchass I init dated - 22/12/2019	/ Chief Coa	stroller of E
incontenti	new or Anorthy or exhibitives productly release must deter 2011/12/111	Ecoaki	tem





भारत सरकार | Government of India

वाणिज्य और उद्योग मंत्रात्म् । Ministry of Common & Industry योट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पमि) | Permethy- Department of Explosives Safety Organisation (PESO) पूर्व नाम: विस्फोटक दिभाग | Farmethy- Department of Explosives वेन्द्रीय भवन, स्वाक सी.2, दीसरी मजित | Kendriya Bhavan, Block C-2, 3rd Floor CSEZ पी.जी.कक्कालाड कोच्ची | CSEZ PD Kakkanad Dist. Emakulam Emakulam 682037

明可 (Phone):- 2427286 | 年田 (Fax):- 2427236 「竹門 Email dycceemakulami@explosives.gov.in

HOFE (No.) E/SC/KL/22/8LF(E38112)

संवा में (Te.

Stri George Kochuparambil,

Mr. United Granites & Metal, Vachithala P.O. hlukki, Kerala, Toren/Village -District-IDUKEI, State-Kerala, Pincode -

Buil-

Sarvey No[s],519/1-13, ग्राम Manakkadu,Thodupuzha, जिला IDUKKI, राज्य Kerala में विस्कीटक के मेगजीन में उपयोग के लिए कब्जा तेल विस्फोटक निपम, 2008 के अंतर्गत LE-3 में जारी अनुइष्ति से E/SC/SL/22/811(E38112) के नवीनीकरण संदर्भ में।

Possession for Use of of Explosives from magizine situated at Survey No(2):519/1-13, Manukkadu, Thodupuzhu, Dist. IDUKKI, Kerela-Licencer No.: E/SC/KL/22/811(E38112) granted in Form LE-3 of Explosives Rules, 2008 - Rezewal regarding Subject

HEIGH ! Sir.

आपका उपर्युक्त विषय पर पत्र संबद्धा (n) दिन्होंक 25:01:2020 का संदर्भ प्रहण करें। विस्कोटक नियम, 2008 के अंतर्गत प्ररूप LE-3 में जारी अनुसचि दिनांक 31/3/2025 लंक नवीनीवाल कर इस पत्र के साथ भेजी जा रही है।

Reference to your letter No.: Nil dated: 29/01/2020, the subject licence duly renewed upto 31/3/2025 and insued in Form LE-3 of Explosives Rules. 2008 is forwarded herewith

अनुवर्णि के आगामी नवीकरण हेतु कृषया निहलिसित दस्तावेज दिनोंक 31/85/ 2025 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 31/3/2025.

- प्ररूप आरई-1 में विधिवत पूर्ण एवं इस्ताक्षरित आवेदन। Application in Form RE-1 duly filled in and signed
- एक से प्रान तब के अनुसान शल्का का, जिस्फोटक नियम 2008 के तहत अनिलाइन अखदन पार्टल पर उपलब्ध इन्मुगतान सायधा के माय्यम से सडसस संवय ऑनतहन जाग 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 अनुवृद्धिः Original licence with approved plan.

कपणा इस संबंध में विस्पतेटक नियम, 2008 के नियम 112 का भी संबर्भ जहण करें।

- In this connection, please also refer to Rule 112 of Explosives Roles, 2008.
- विश्लोटकों के क्रथ हेंदु आरई-11 में मांगपत्र (इंडेंट) आपूर्तिकर्ता को दिया जाए और उसी की एक प्रति इस कार्यालय को भेधी जाएं (आतिशवाजी मोदाम के लिए लाग) नहीं १८

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)

- कृष्यथा विस्फोटकों की त्रेमासीक विवरणी हर तिमाही के अंत में आर्ख-1 में प्रस्तुत की लाएं। विवरणी इस कार्यातप के कार्यातय में आगामी तिमाही के 10 तारीख रें. पहले पहुंच जानी चहिए (आतिधावाजी गोदाम के लिए लागू नहीं १ : Passe submit quarterly returns of explasives in RE-7 at the end of every quarter so as to reach this office by 10th of the succeeding quarter (Not applicable for fireworks store house)
- सभी आस्टिंग आपरेशन एक सक्षम द्वारा की वाएगी को उपरोक्त नियमों के तहत एक वैध घाँट कायर प्रमाणयत धारक हो। हालांकि, खान अधिनियम 1953 के अधीन अले वाते खानों में ब्लास्टिंग आपरेशन करने वाती ब्लास्टर की योग्पता उसी अधिनियम से निर्धारित हो। All blasting operations shall be carried out by a competent person bolding a valid abor firer's permit granted under above rules. However, blasting operations in stines coming under the purview of the Mines Art 1952, the blaster shall have qualifications presented in the regulations framed under the said Act.

भवदीय | Your's faithfully

(आर.वेणुगोपाल | Dr. B. Venagopal)

उप मुख्य विस्फोटक निर्मत्रक | Deputy Chief Controller of Explosives-

कोब्दी (Emakulam) Deputy Chief Controller of Explosition

प्रतिविधि प्रेषित | Copy Forwarded to: 1. ज़िला मणिस्टेंट (District Magistrate), IDUKKI (Kurala)- स्थला के लिए (for information.)

COMPACT Prostantian

त्य मुख्य विस्कृटिक नियंत्रक | Deputy Chief Controller of Explosives कीन्दी (Ereakulan

(अधिक जानकारी धीर्श आवेदन की लिगते, सुल्क आदि के लिए इमारी देवसाइट majoripess gos in देखें) (For more information regarding status fires and other details please visit our website http://peso.gov.in)

【中日本 (Dale): 06/02/2020

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भारत सरकार | Government of India वाणिज्य और उद्योग मंशालय | Ministry of Commerce & Industry पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसी) | 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. औ कक्कानाइ कोव्वी | CSEZ PO Kakkanad Dist. Ernakulam Ernakulam 682037 फोन (Phone):- 2427286 | फेन्स (Fax):- 2427276

UBIT/ No:A/SC/EL/P3/14(A2264)

दिनोक / Dated : 01/02/2022

सेवा में (. Fu. GEOMGE KOCHUPARAMBIL, Prop. M/s United Granites and Metal, S.Ko. 357/3, Block No. 11, Manakkadu Village, Thodapusha Tk., TorowWillage - Thodapusha

Disti, IDUKKI, State, Kerala, Pincode-685588

 [2] [4] /
 Licence to possess for use of Ammonium Nitrate from a store house attached to explosives manufacturing unit (ANFO) situated at Subject:
 Survey No.:357/3, Block No.11, Village/Town. Manakkadu, Distt. IDUKKI, State Kerala Licence No.: A/SC/KL/P3/14(A2264) granted in Form P-3 of Ammonium Nitrate Rules, 2012 - Renewal regarding

महोदय / Sints),

आपके पत्र संस्था Nil दिनांक 19/01/2022 के सन्दनर्भ में अमोनियम नाइट्रेट नियम 2012 के प्ररूप पी.-3 में जरी विषयक अनुश्वपित्र दिनांक 31/3/2027 तक विधिवत नवीनीकृत कर आपको ऐथित की जा रही है :कृपपा अनुश्वपिप की पावती स्वीमकार करें 17 Reference to your letter No.: Nil dated: 19/01/2022, the subject licence duly renewed upto 31/3/2027 and issued in Form F-3 of Ammonium Nitrate Rules, 2012 is forwarded herewith, Please acknowledge receipt of the licence.

अनुवादित के आगामी नवीनीकरण हेलु कृपया निग्रसिखित दस्तावेज इस प्रकार प्रेषित करें कि वह दिनांक 31/3/2027, को या उससे पूर्व this office में प्राप्तन हो जाएं / For further renewal of licence, please submit the following documents so as to reach this office on or before 31/3/2027.

- विधिवत भरा हुआ एवं हस्तापदरित प्ररूप आर -- 1 /Application in Form R-1 duly filled in and signed.
- एक से पाँच वर्षे के अनुप्रति खुल्कों का, अमोनियम माइंट्रेट नियम, 2012 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से लाइसेंस युल्क 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 Ammonium Nimes Rules, 2012.
- मूल अनुइष्ट्रि मय अनुमोदित आरेखन / Original licence with approved plan.
- इस सम्बन्धत में कृपमा अमोनियम नाइट्रेट नियम, 2012 के नियम 36 का भी सन्दर्भ हैं / In this connection, please also refer to Rule 36 of Ammonium Nitrate Rules, 2012.
- रंगीन पासपोर्ट साइज के 6 फोटोग्राफ जिन पर सामने की ओर काले रंग की अमिट स्थाही से ऑक्यूप्ययर (अमोनियम नाइट्रेट नियम, 2012 के नियम 2 (O) के अन्तर्शात यथा परिभाषित) द्वारा विधिवत इस्ताक्षर किया गया हो (यदि जागा नहीं किया गया हो) / Six copies of colour passport size photographs duly signed by the occupier (as defined under Rule 2 (O) of Ammosium Nizate Rules,2012) 'In front' by 'Black color indelible ink' (if not submitted).

संलग्नक / Enclosures :

(पी.के.राणा) I(Dr. P. K. Rana) विस्कोटक नियंत्रक I Controller of Explosives For Dy. Chief Controller of Explosives कोरवी हिस्त Deputy Chief Controller For Deputy Chief

भवदीय्/Yours faithfully.

प्रतितिपि प्रेषित / Copy Forwarded to:

1. District Magistrate, IDUKKI (Kerala) for information

कृते उप मुख्य विस्फोटक निर्यत्रक I For Dy. Chief Controller of Explosives, कोण्पी । Emakalam

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Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.



License Endorsed under Sale 107(3) of Explosivet Roles, 2008 By Sin Dr. R. Versgepal, Joint Chief Controller of Explosives, Ereskalam on 26/06/2018

> अनुज्ञप्ति प्ररुप P.3 (अमोनियम नाइटेट नियम, 2013 की अनुसूची । की क्रम संख्या-3 और नियम 35 देखें)

> > LICENCE FORM P-3

(See Sr.No.-3 of Schedule I and rule 35 of Ammonium Nitrate Rules,2012)

विस्फोटक विनिर्माण इकाई (एएनएफओ) से जुड़े गोदाम से, अमोनियम नाईटेट के उपयोग के लिए, रखने हेत Licence to possess for use of Ammonium Nitrate from a store house attached to explosive manufacturing

अनुइप्ती संरक्षा | Licence No. : A/SC/KL/P3/14(A2264) वार्षिक अनुराप्ती युल्म (Annual licence Fee Rs: 1000/-

अनुवालि एतद्वारा जारी की जाती है : Licence is hereby granted to :

GEORGE KOCHUPARAMBIL, Prop. M/s United Granites and Metal (different GLORG) KOCHUPARAMBIL) S.No.357/3, Block No.11, Manakkadu Village, Thodupuzha Tk., , ग्रहर । गांध - Thedupasha जिला- IDUKKI , राज्य- Keenia , पिन कोंड - 685588 Phone ., Email. , Boos.

- 1. अनुहाविधारी का स्तर: Individual
 - Status of licence holder: Individual
- अनुप्राधि केवत निम्नलिखित प्रयोधन हेतु वैध है : विस्फोटक विनिर्माण इकाई (एएनएफओ) से खढे गोढाम से, अमोनियम नाईटेट के उपयोग के लिए, रखने हेत् अनुप्राप्ति

Licence is valid only for the following purpose : Licence to possess for use of Ammonium Nitrate from a store bouse attached to explosives manufacturing unit (ANFO) 3. अनुद्वापि आगोनियम नाइट्रेंट की निग्रेशिखित मात्रा के शिए वैध है :

Licence is valid for the following	quantity of Ammonium Nitrate:
------------------------------------	-------------------------------

नाम तथा विवरण Name and Description	किसी एक समय में मात्रा (कि.स.) Quantity at a time (Kg.)	किसी एक वित्तीय वर्ष में क्रय की जाने वाली अमोनियम नाइट्रेट की माण्ड(कि.प्रा.) Quantity of Ammonium Nitrate to be purchased in a financial Year (K.g.)
Ammonium Nitrate (Solid)	35000	420000

- अनुहृष्त परिसर निम्नलिखित आरेखण(णो) के अनुरूप होगा The licensed premises shall conform to the following drawing(s): आरेसण संख्या | Drawing No : A/SC/KL/P3/14 (A2264) दिनांक | Dated : 69/11/2017
- अनुह्रात परिसर निम्नलिखित पते पर स्थित है : The Licensed premises are situated at following address: Survey No. 357/3, Block No.11, 3063 (1914 | Town (Village : Manakkadu पुलिस स्टेशन | Police Station : Thodepuzha जिला | District : IDUKKIराज्य | State : Kerala पिन कोड | PinCode : 685588फोन | Phone :इमेल | E-Mail : फेक्स | Fax :
- अनुज्ञप्त परिसर में निग्रतिखित सुविधाएँ उपलब्ध है : The licensed premises consist of following facilities : Consist of one store house .
- अनुब्रुदि, समय-समय पर यथा संशोधित विस्फोटक अधिनियम १८६४, एवं उसके अधीन बनाए गए अमोनियम नाइट्रेट नियम, 2012 की शर्त, अतिरिक्त शर्ते तथा निम्नेलिखित उपबन्धों के अधीन जारी की जाती है 7. (तउक्त क्रम संख्या ५ में उल्लिशित आरंखाज (जिसमें स्वल, निर्माण एवं अन्य विवरण दर्थाए गए हैन्।)

(iii)अनुइष्टि जारी करने वाले प्राधिकारी द्वारा हस्ताक्षरित अनुइष्टि की मातें एवं अतिरिक्त मातें ।

The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Ammonium Nitrate Rules, 2012 framed there under and the conditions, additional conditions and Annexures. (i) Drawings (showing site, constructional and other details) as stated in serial No. 5 above. (ii) Conditions and Additional Conditions of this licence signed by the license issuing authority.

यह अनुहालि 31 सार्च 2022 तक वैध रहेगी ।

This licence shall remain valid till 31st day of March 2022

यह अनुशक्ति विस्फोटक अधिनिषम, 1884 या उसके अधीन बनाए गए अमोनियम नाइट्रेट नियम, 2012 या इस अनुशक्ति की किसी शर्तों का उल्लंघन करने पर या पदि अनुशक्त परिसर, आरेखज और उससे संलघ्न उपाबद्ध में दर्शित विवरण के अनरूप नहीं पए जाने पर निलम्बित या प्रतिशंहत की जा सकती है।

This licence is liable to be suspended or revoked for any violation of the Explosives Act 1884 or Ammonium Nitrate Rules, 2012 framed there under or the conditions of this license if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

信司章 | Date: 09/11/2017

Sd/-संयुक्त मुख्य विस्फोटक नियंत्रक Joint Chief Controller of Explosives दक्षिणांचल, चले | South Circle, Chennel

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अनुशोध्ते नवीकरण के लिए पृष्ठकिन: | Endorsement for renewal of licence:

नवीकरण की तारीख	समापि की तारीख	अनुझापन प्राधिकारी के इस्ताक्षर
Date of Renewal	Date of Expiry	Signature of liggnsing authority
01/02/2022	31/03/2027	Dy. Chief Controller of Explosives, Ernskulam

सांविधिक चेतावनी: अमोनियम नाइट्रेट कानून का दुरूपयोग कानूनी तौर पर गंभीर दण्डनीय अपराध है । Statutory Warning : Misuse of Ammonium Nitrate shall constituit serious criminal offence under the law.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

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Conditions

मुख्य विस्फोटक नियंत्रक / या विस्फोटक नियंत्रक व्दारा प्रदत्त प्ररूप P-3 में विस्फोटक विनिर्माण इकाई (एएनएफओ) से जुड़े गोढ़ाम से, अमोनियम नाईट्रेट के उपयोग के लिए, रखने हेतु अनुइष्जि, अनुइप्जि संख्या ASC/KL/P3/14(A2264) की बार्ते निम्नलिखित है।

The following are the conditions of licence number A/SC/KL/P3/14(A2264) to Licence to possess for use of Ammonium Nitrate from a store house attached to explosives manufacturing unit (ANFO) in Form P-3 granted by the Chief Controller or Controller of Explosives.

- अमोनियम ताइट्रेट का भण्डारण अनुइायि के साथ संतप्त अनुमोदित आरेखण में दर्शाए गए अनुझप्त गोदाम या मेल्ट भण्डारण टैंक में ही किया जाएगा। The Ammonium Nitrate shall be possessed only in the licensed storehouse or melt storage and shown in the approved plan attached with the License.
- अगोनियम नाइट्रेट की मात्रा परिसर, में या उसके किसी भी भाग में, अनुइप्त मात्रा, किसी एक समय में, से अधिक नहीं होनी चाहिए । The quantity of Ammonium Nitrate in the premises or any part thereof shall not exceed at any one time the quantity for which Liornse has been issued.
- छलका हुआ या अपश्चिष्ट अमोनियम नाईट्रेट को एकत्र कर अनुद्राप्तिधारी द्वारा विनष्ट किया जाना चाहिए एवं विनष्ट किए गए अमोनियम नाईट्रेट की मात्रा का लेखाजोखा रखा जायेगा।

Spilled or sweepings of Ammonium Nitrate the waste Ammonium Nitrate collected from sweeping or spilled shall be destroyed by the License holder and account thereof shall be maintained indicating the quantity of the Ammonium Nitrate destroyed.

- 4. अनुस्रादिवारी और बिनिर्माण तथा संपरिवर्तन के लिए परिसर में निपुक्त प्रत्येक व्यक्ति को विनिर्माण तथा संपरिवर्तन के लिए अनुश्चर्यि परिसर में अत्रि या विश्कोट से होने वाली दुर्घटना से बचाव तथा बिनिर्माण तथा संपरिवर्तन के लिए अनुश्चर्य परिसर में अत्रि या विश्कोट से होने वाली दुर्घटना से बचाव तथा बिनिर्माण तथा संपरिवर्तन के लिए अनुश्चर्य परिसर में अन्धिकृत व्यक्तियों के प्रवेश से बचाव के लिए पूर्ण सावधानी बरतनी होगी एवं ऐसे किसी भी कार्य से बिरित करना होगा जो अग्नि या विश्कोट का कारण बने एवं जो बिनिर्माण तथा संपरिवर्तन परिसर में अन्धिकृत व्यक्तियों के प्रवेश से बचाव के लिए पूर्ण सावधानी बरतनी होगी एवं ऐसे किसी भी कार्य से बिरित करना होगा जो अग्नि या विश्कोट का कारण बने एवं जो बिनिर्माण तथा संपरिवर्तन परिसर में कार्य के उद्देश्य से आवश्यक न हो । The License holder and every person employed shall take all due precautions for prevention of accidents by fire or explosion in the licensed premises and for preventing unauthorized person from laving access to licensed premises and shall abstain from any act from whatsoever which tunds to cause or explosion and is not reasonably necessary for the purpose of works related thereto.
- 5. मुख्य विस्फोटक निपंत्रक या अनुझायन प्राधिकारी को पूर्व लिखित स्वीकृति के बिना अनुझाय परिसर में किसी भी प्रकार का परिवर्तन एवं परिवर्धन नहीं किया जाएगा । स्वीकृत किए गए इस प्रकार के परिवर्तन एवं परिवर्धन अनुझाय के साथ संवप्त संयोधित अरिखण में दर्शाए जाएंगे । No additions and alterations shall be carried out in the licensed premises without a previous succion in writing of the Licensing Authority. Such
- No additions and alterations shall be carried out in the licensed premises without a previous sanction in writing of the Licensing Authority. Such additions and alterations so sanctioned shall be shown in the amended plan attached to the License. 6. अनुप्राधितधरक द्वारा चिनिर्माण तथा संपरिवर्तन प्रक्रिया के पर्यवेक्षण एवं कार्यों का संचालन इन नियमों के अनुरूप करने हेतु एक योग्य एवं सक्षम व्यक्ति नियुक्त किया
- अनुशोध्वेधरक द्वारा विनिमाल तथा संयोरवतेन प्रक्रिया के पर्यवेद्वण एवं कार्यों का संवालन इन नियमा के अनुरूप करने ईतु एक योग्य एवं सक्षम व्यक्ति नियुक्त किया पाएगा।
- The License holder shall appoint a competent person to supervise the operations shall be conducted under the supervision of the competent person.
- किसी निरीक्षण अधिकारी या नमूना लेने वाले अविकारी को अनुहान परिसर में युक्तियुक्त समय पर बराबर अबाध पहुँच प्रदान की जाएगी और ऐसे अधिकारी को वे सभी सुविधाएँ उपतब्ध की जाएगी जिससे कि वह सुनिश्चित कर सके कि अधिनियम और इन नियमों के उपबंधों एवं सुरक्षा संबंधी शर्तों का सम्धक रूप से पालन किया जा रहा है।

Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and all facilities shall be offered to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

8. यदि जिला प्राधिकारी या निरीक्षण अधिकारी अनुञ्चयिकारी को लिखित में अधिकृत परिसर में कोई मरम्मत या कोई परिवर्तन या परिवर्धन या ऐसी सिफारियों को किपानित करने के लिए जो ऐसे अधिकारी तो राय में अखीतार्य जोलिम तरपत्र कर सकती है और इस प्रकार वह परिसर के बाहर या भीतर या व्यक्तियों को सुरक्ष के लिए जो ऐसे अधिकारी हो सुरक्ष के लिए जो ऐसे अधिकारी की सुरक्ष के लिए आवश्यक है, सुचित करता है, तो अनुञ्चयिधारी उन सिफारियों को निष्पादित करना जे हैं और इस प्रकार वह परिसर के बाहर या भीतर या व्यक्तियों को सुरक्ष के लिए आवश्यक है, सुचित करता है, तो अनुञ्चयिधारी उन सिफारियों को निष्पादित करेगा और ऐसे प्राधिकारी द्वारा विनिर्देष्ट अवधि में अनुपालन की रिपोर्ट देगा । If the License Issuing authority or the inspecting officer informs in writing, the holder of the License to execute any repairs or to make any additions or alterations to the licensed premises or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and therefore the same is necessary for the safety or security of the premises or persons, the holder of the License shall execute the recommendations and report compliance within the period specified by such authority.

 अत्रि या विस्फोट से होने वाशी दुर्घेटनाओं और अमोनियम नाइट्रेट की हानि, उसमे कभी या चोरी की सूचना निकटतम पुलिस स्टेशन और जिला प्राधिकारी के स्थानीय कार्यालय की तुरन्त, दी जाएगी।

Accidents by fire or explosion and losses, shortage or theft of Ammonium Nitrate shall be immediately reported to the nearest police station and the District Authority.

- अनुवादिधारी अनुसूची-॥ भाग 3 में विनिर्दिष्ट प्ररूप में इनका अभिलेख रखेंगे जिससे कि अमोनियम नाइट्रेट के तिए उत्तरदायित्व सुनिश्चित कर उनकी पहचान कर खोज की जा सके एवं नियम 50 में विहित प्राधिकारी के मांगे जाने पर ऐसे अभिलेख प्रस्तुत किए जाएं।
- License holder shall maintain records in the prescribed forms specified in Schedule II Part 3 to ensure accountability, identification and traceability of Ammonium Nitrate and shall produce such records on demand to authority specified in rule 50.
- अनुवादिधारी. अनुसूची 11 भाग 3 में विनिर्दिष्ट प्रारूप द-9 में जिला प्राधिकारी की मासिक विवरणी इस प्रकार प्रोषित करेंगे कि वह प्रत्येक आगामी महीने की 10 तारीख तक अनुवापन प्राधिकारी या जिला प्राधिकारी की प्राप्त हो जाए।

The License holder shall submit monthly returns of AN received, sold (used/stolen or short received and destroyed in the form prescribed in Form R-9 of Part 3 of Schedule II so as to reach Licensing Authority and District Authority within 10th day of every succeeding month.

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कृते संयुक्त मुख्य विस्फोटक नियंत्रक दक्षिणांचल, चेन्ने For Joint Chief Convoller of Explosives South Circle, Chennai

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

For Deputy Chief Controller of Explosiver Verogener Expansionary



भारत सरकार | Government of India

वाणिज्य और उद्योग मंत्रालुय | Ministry of Commerce & Industry पेट्रोलियम तथा विस्कोटक सुरक्षा संगठन (पेसी) | Petroleum & Explosives Safety Organisation (PESO) पूर्व नाम. विस्फोटक विभाग | Pormerly- Department of Explosives केन्द्रीय भवन, ब्लाक सी-2, तीसरी मंजिल | Kendriya Bhavan, Block C-2, 3rd Floor CSEZ पी.ओ.कक्कानाड कांच्वी | CSEZ PO Kakkanad Dist. Emakulam Emakulam 682037 पुणेन (Phone):- 2427286 | फेक्स (Fax):- 2427276 5-Het Email: dycceernakulam@explosives.gov.in

संख्या (No.): E/SC/KL/38/21(E98818)

दिनांक (Date): 01/02/2022

सेवा में। To,

Gegege Kochuparambil, Proprietor,

Ms United Granites & Metals, Manakkadu (v). Vazhithala P.O., Thodupuzha Taluk,, Town/Village - IDUKKI District-IDUKKI, State-Kerala, Pincode - 685588

विषय Survey No.357/3, Block No.11,, ग्राम Manakkadu (v), Thodupuzha Taluk, जिला IDUKKI, राज्य Kerala में एनफ्रों विस्कोटक के एनफ्रों शेड में विनिर्माण हेतु विस्फोटक नियम, 2008 के अंतर्गत LE-1 में जारी अनुप्रचित सं E/SC/KL/38/21(E98818) के नवीनीकरण संदर्भ में।

Manufacturing of ANFO situated at Survey No.:357/3, Block No.11,, Manakkadu (v), Thodupuzha Taluk, Dist. IDUKKI, Kerala -Subject: Licence No.: E/SC/KL/38/21(E98818) granted in Form LE-1 of Explosives Rules, 2008 - Renewal regarding

HEIGH | Sir.

आपका उपयुंबत विषय पर पत्र संख्या NJI दिनांक 19/01/2022 का संदर्भ ग्रहण करें। विस्फोटक नियम, 2008 के अंतर्गत प्ररूप LE-1 में जारी अनुइप्ति दिनांक 31/3/2027 तॅंक नवीनीकृत कर इस पत्र के साथ भेजी जा रही है।

Reference to your letter No.: Nil dated: 19/01/2022, the subject licence duly renewed upto 31/3/2027 and issued in Form LE-1 of Explosives Rules, 2008 is forwarded herewith.

अनुइाप्ति के आगामी नवीकरण हेतु कृपया निम्नलिखित दस्तावेज दिनांक 31/03/ 2027 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 31/3/2027.

- प्ररूप आरई-1 में विधिवत पूर्ण एवं हस्ताधारित आवेदन। Application in Form RE-1 duty filled in and signed.
- एक से पाँच वर्ष के अनुङ्गप्ति शुल्कों का, विस्फोटक नियम, 2008 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान संविधा के माध्यम से लाइसेंस शुल्क ऑनलाइन जमा किया जीना 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 अनुज्ञप्ति।

Original licence with approved plan. • कृपया इस राबंध 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. आपके द्वारा विनिर्माण किए गए विस्फोटको का रिकार्ड (खाता) विस्फोटक नियम, 2008 के प्रारूप आर.इ.2 और आर.इ.5 में बनाए रखने की सलाह दी जाती है।

You are advised to maintain accounts of explosives manufactured by you in Form RE-2 and RE-5 of Explosives Rules, 2008.

भवदीय | Your's faithfully

JAS mm

(पी.के.राणा | Dr. P. K. Rana) विस्फोटक नियंत्रक | Controller of Explosives

कृते उप मुख्य विस्फोटक नियंत्रक | For Dy. Chief Controller of Explosives

कोची | Ernakulam

प्रतिशिपि प्रेषित | Copy Forwarded to:

1. ज़िली मजिस्ट्रेंट (District Magistrate), IDUKKI (Kerala)- सूचना के लिए (for information.)

कृते उप मुख्य विस्फोटक नियंत्रक | For The Dy. Chief Controller of Explosives,

कोच्ची | Ernakulam

(अधिक जानकारी जेसे आवेदन की स्थिति, शुल्क आदि के लिए हमारी वेबसाइट http://peso.gov.in देखें.) (For more information regarding status,fees and other details please visit our website http://peso.gov.in) Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.



Licener Endorsed under Rule 107(3) of By Shri Dr. R. Venugopal, Joint Chief C	Explosives Rules, 200 ontroller of Explosive	08 es. Emakulam	on 29/04/2019	
अनजाप्ते	प्ररुप एल. ई1। ।	ICENCE F	ORM LE-1	
(विस्फोटव	र नियम 2008 की उ	अनसची 4 के	1/हा देखिए।)	
(See article)	(d) of Schedule IV	of Explosiv	es Rules, 2008)	
(घ) एक समय में 200 किलोग्राम र	ते अनधिक स्थल पर ए.।	एन.एफ.ओ. विर	फोटक के विनिर्माण के 1	लेए अनजप्ति
Licence to manufacture : (d)	ANFO explosives no	t exceeding 20	00 kilogrammes at any	one time.
अनुज्ञाप्ते सं. (Licence No.) : E/SC/KL/. वार्षिक फीस रुपए (Annual Fee Rs): 1200	38/21(E98818))/-		T	0
1. Licence is hereby granted to				
George Kochuparambil,Proprietor (ATA Granites & Metals, Manakkadu (v), Vazhit District-IDUKKI, State-Kerala, Pincode - (MMI / Occupier : Geo hala P.O., Thodupuzha 1 585588	rge Kochuparas Faluk,, Town/Vil	mbil), M/s.United	C
को अनज्ञप्ति अनदत्त की जाती है।			1. (3) ¥	MA.
2. अनुइप्तिधारी की प्रास्थिति। Status of lic	ensee : Proprietorsh	io Firm		TELET
3. अनजप्ति निम्नलिखित प्रयोजनों के				
तिएँ विधिमान्य है।	Manufacture of -	1002	13/200	13/2)
Licence is valid only for the	ANFO - के विनिमा	ण के लिए।	* Contra	20/
4 ward friday to for the	é en els eren fe	- D- DD	.à.	
Licence is valid for the following king	HI, UPIR SIR HISI OF	्रालए विधमान	161	
	and quantity of exp	Avaires, - (4-	(10)	
Sr. No. Name and Descriptio	on Class & Divis	ion Sub-div	HIM HIM I DAN U	क समय म
1. ANFO	2.0	0	200 1	kg.
5. निमलिखित रेखाचित्र (रेखाचित्रों) से अनज	प्त परिसर की पछि			
होती है।	a area an Bic	रेखाचित्र क्र. ([Drawing No.) E/SC/KL	/38/21(E98818)
The licensed premises shall conform t	o the following	दिनकि (Dated	02/04/2018	10 10 10 10 10 10 10 10 10 10 10 10 10 1
drawing(s): .				
• अनुशाप्त परिसर निम्नालाखत पत पर स्थि	d El The licensed pre	emises are situ	ated at following addre	55:
(Police Station) : Thodupuzha	((I OWIL V HIAGE) : M	anakkadu (v)	, inodupuzna laluk,	पुलस याना
जिला (District) IDUKKI	राज्य (State)	Kerala	पिनकोड (Pincode)	685588
दूरभाष (Phone)	इ. मल (E-Mail)		फेक्स (Fax)	000000
7. अनुज्ञप्ति परिसर में निम्नलिखित				
the licensed premises consist of	as per attached Ann	exture details		
following facilities.				
8. अनुज्ञप्ति समय - समय पर यथासंशोधित	विस्फोटक अधिनियम,	1884 और उन	के अधीन विरचित विस्फो	टक नियम, 2004 के
उपबंधो, शर्तों और अतिरिक्त शर्तों और नि	म्मलिखित उपाबध्दों के	अधीन रहते हु।	ए अनुदत्त की जाती है।	CANAL AND
The licence is granted subject to the po	rovision of Explosive	s Act 1884 as	amended from time to	time and the
Explosives Rules, 2008 tramed there i	inder and the condition	ons, additional	conditions and the foll	owing Annexures.
1. 34990 \$PH th. 5 H 441 \$P140	egilian (eqir, einer det	wile) as stated	अन्य विवरण दाशत करत	i êkadî
2. अनज्ञप्ति प्राधिकारी व्यारा हस्ताक्ष	रेत इस अनज़प्ति की श	ति और अतिरिव	त शर्ते।	
Conditions and Additional Con	ditions of this licence	signed by the	licensing authority.	
9. यह अनुज्ञप्ति तारीख 31 मार्च 2022 तक वि	वेधिमान्य रहेगी। This	licence shall	remain valid till 31st d	ay of March 2022.
यह अनज्ञप्ति अधिनियम या उसके अभीन	विरचित नियमों या अन		1 4 के पनि निर्दिष सेट e	ल 111 के अधीन तथा
उपवर्णित इस अनुजप्ति की शर्तों का अधि	क्रमण करने या यदि अ	नज्ञप्त परिसर य	गेजना या उससे संलग्न ज	पबंध में दर्शित
विवरण के अनुरूप नहीं पाए जाने पर निल	बित या प्रतिसंहत की ग	जा सकती है, ज	हां वह लाग हो।	
This licence is liable to be suspended of	or revoked for any vid	olation of the A	Act or Rules framed the	are under or the
conditions of this licence as set forth u	nder set Set III, wher	ever applicabl	e, 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 - 02/04/2018

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

नवीनीकरण के प्रष्ठांकन के लिए स्थान Space for Endorsement of Renewal

नवीकरण की तारीख	समाप्ति की तारीख	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प
Date of Renewal	Date of Expiry	Signature of licensing authority and stamp
01/02/2022	31/03/2027	उप मुख्य विस्फोटक नियत्रक, एरणाकुलम Dy. Chief Controller of Explosives, Ernakulam

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.

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

(HC III | Set III)

मुख्य विरकोटक नियंत्रक या विस्फोटक नियंत्रक व्यारा अनुवत्त प्ररूप एल ई 1 (अनुच्छेद्र (घ)) में ए.एन.एफ.ओ. विस्फोटकों के विनिर्माण के लिए अनुइप्रि सं. E/SC/KL/38/21(E98818) की यतें निम्नलिखित हैं ।

The following are the conditions of licence number E/SC/KL/38/21(E98818) for manufacture of ANFO explosives in Form LE-1 [article 1(d)] granted by Controller or Controller of Explosives.

परिसर या उसके किसी भाग में एएनएफओ विस्फोटकों की मात्रा किसी एक समय में उस मात्रा से अधिक नहीं होगी, जिसके लिए अनुज्ञपिते L जारी की गई है। The quantity of ANFO explosives in the premises or any part thereof shall not exceed at any one time the quantity for which licence has been issued एएनुएफओ विनिर्माण शेड को 15 मीटर की दूरी पर बाड लगा कर संरक्षित किया जाएगा और वह अनुसूची- VIII की सारणी 1 में यथविनिर्दिष्ट सेरक्षित संकर्मों से सुरक्षा दूरी बनाए रखेगा । The ANFO manufacturing shed shall be protected by a fencing at a distance of 15 metres and it shall maintain safety distance from protected works as specified in table 1 of Schedule VIII. शेड में कार्य कडाई में अधिकधित सुरक्षाकार्य प्रक्रियाओं और अनुदेशों के अनुसार किया जाएगा। Work in the shed shall be carried out strictly in accordance with the laid down safe working procedures and instructions एएनएफओ विस्फोटकों को विनिर्माण अनुद्राशिधारी व्यारा नियक्त किसी अर्हित उत्तरदायी व्यक्ति के सीधे पर्यवेक्षणाचीन किया जाएगा । The ANFO explosives shall be manufactured under the immediate supervision of a qualified responsible person appointed by the licensee अनुइप्तिधारी और प्रत्येक नियोजित व्यक्ति उस स्थान या उन स्थानकों में जहां एएनएफओ तिस्फोटकों का विनिर्माण किया जात है या देखभाल की जाती है या उपयोग किया जाता है, अग्नि या विस्फोटक के कारण होने वाली दुर्घटनाओं को सेकने के लिए सभी सम्यक पूर्वाधानियां बरतेंगे । The licensee and every person employed shall take all due precautions for the prevention of accidents by fire or explosion, in the place or places where the ANFO explosives is manufactured, handled or used. एएनुएफओ विस्फोटकों के सभी अवशेषों को एकत्रित किया जाएगा और अनुभवी व्यावित के पर्यवक्षण के अधीन अनुझारा परिसर से दर किसी स्रक्षित स्थान में नष्ट किया जाएगा । All spillage of ANFO explosive shall be collected and destroyed at a safe place away from the licensed premises under the supervision of experienced person. एएनएफओ विस्फोटकों के विनिर्माण के लिए प्रयुक्त आधानों और मिश्रणों को प्रयोग के पश्चात उपयुक्त डिटरजेन्टण घोल से अच्छी तरह साफ 7. किए जाएगा और जल से धोया जाएगा । All containers and mixers used for manufacturing the ANFO explosive shall after use, be thoroughly cleaned with suitable detergent solution and washed with water. अनुइपिधारी और कर्मचारी परिसरों के भीतर अपात के दौरान की जानेवाली प्रक्रिया से अवगत लोगे। The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises. किसी निरीक्षण या नमूना लेने वाले अधिकारी को सभी पुक्तिपुक्त समयों पर अनुझप्त परिसर में अबाध पहुंच प्रदान की जाएगी और यह अभिनिश्चित करने के लिए कि अधिनियम और इन नियमों के उपबंधों या सरक्षा संबंधी शतों का सम्यक रूप से पालन किया जाता है. उस अधिकारी को प्रत्येक सुविधा उपलब्धक करवाई जाएगी । Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed. यदि अनुज्ञापन प्राधिकारी या विस्फोटक नियंत्रक लिखित में अनुज्ञप्ति धारक को अनुज्ञप्त परिसर या मशीनरी. औजारों या साधित्रों में कोर्ड मरम्मत या कोई परिवर्धन या परिवर्तन करने के लिए या ऐसी सिफारिशों को क्रियान्वित करने के लिए. जोखिम प्रदर्शित कर सकती है और परिसर या व्यक्तियों की स्थल पर या स्थल से बाहर सुरक्षा के लिए आवश्यक है, सुचित करता है जो अनुइप्ति धारक उन सिफारियों को निष्पादित करेगा और ऐसे प्राधिकारी व्या रा विनिर्दिष्ट अवधि के भीतर अनुपालन की रिपोर्ट देगा । If the licensing authority or a Controller of Explosives informs in writing , the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority, अग्नि या विस्फोट के कारण होनेवाली दर्घटनाओं और विस्फोटकों की हानि. कमी या चोरी के बारे में निकटतम पुलिस स्टेंशन और अनजापन प्राविकारी तथा अनुझयन प्राधिकारी के स्थारनीय कार्यालय में तरंत रिपोर्ट की जाएगी । Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority Jas m

कृते संयुक्त मुख्य विस्फोटक नियंत्रक For Joint Chief Controller of Explosives दक्षिणांचल, चेत्रे। South Circle, Chennal

Note :- This is system generated document does not require physical signature. Applicant may

take printout for their records.

For Deputy Chief Gentralier of Explosives Contracted Construints



Annexure-15

KSPCB LICENSE

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			- Ul			
		KERAL	A STATE POLI	UTION CONTR	OL BOARD	
FILE N Date of	O. :PCB/ issue :10	RO-EKM/IDK/# /08/2021	R18IDU446677/20	21		
		INTEGR	ATED CONSEN	T TO OPERATE	- RENEWAL	
Consen	t No : R18	IDUCTOR44667	7			
Ref : 1. 2. Conso 3. Conso	Consent N ent Variat ent Variat	io.018IDKCTOA ion Order No:O1 ion Order No : O	7515269 dated 16/ 8LDKCVO 845427 18IDKCVO883113	07/2018 valid Up to 13 Dated:04.09.2011 16 dated 17.10.2018	15/07/2023	
QUARR GEORG issued to QUARR GEORG reference	Y OF UNI E KOCHU M/s SRL0 Y OF UNI E KOCHU are integr	ITED GRANITES PARAMBIL, VA JEORGE KOCHI TED GRANITES PARAMBIL, VA	& METALS ZHITHALA P O TI JPARAMBIL, & METALS ZHITHALA P O TI	HODUPUZHA is be HODUPUZHA The	reby renewed up to 1 consent(s)/ variation	5/07/2024 and
fallowing I. GENI	g modifica ERAL	tions/ additions.	wal order and this o	rder is subject to the	conditions stipulated	I therein and the
following I. GENI S.No.	g modifica ERAL	tions/ additions.	wal order and this o	rder is subject to the	conditions stipulated	I therein and the
following I. GENI S.No.	g modifica ERAL CAPIT	AL INVESTME	wal order and this o ms NT	rder is subject to the Rs.1200L/	Description	I therein and the
following I. GENI S.No. 1 2	g modifica ERAL CAPIT ANNU	Itens/ additions. Ite AL INVESTME AL FEE	wal order and this o ms NT	rder is subject to the Rs.1200L4 Rs.81,000/	Description	I therein and the
following I. GENI S.No. 1 2 3	g modifica ERAL CAPIT ANNU FEE RI	Ite AL INVESTME AL FEE EMITTED	wal order and this o ms NT	rder is subject to the Rs.1200L/ Rs.81,000/ Rs.81,000/	Description	I therein and the
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following I. GENI S.No. 1 2 3 4 I. Stack	g modifica ERAL CAPIT ANNU FEE RI VALID	Ite AL INVESTME AL FEE EMITTED MITY	ms NT	rder is subject to the Rs.1200L/ Rs.81,000/ Rs.81,000/ 15.07.2024	Description AKH	I therein and the
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following I. GENI S.No. 1 2 3 4 I. Stack Stack II. CON	g modifica ERAL CAPIT ANNU FEE RI VALID Details	Ite Itens/ additions. Ite AL INVESTME AL FEE EMITTED OTTY Source of Emission	ms NT Emission Rate(Nm3/Hr)	rder is subject to the Rs.1200L/ Rs.81,000/ Rs.81,000/ 15.07.2024 Stack He Ground Level(In Meters)	Description KH - - - - - - - - - - - - -	Control Equiptisent

For renewal of the consent in case of continuance of operation of the quarry, application in the prescribed form shall be submitted through the web portal of the Board for Online Consent Management & Monitoring System 2 months prior to the date of expiry. Late application will be accepted only with fine

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

DATE :10/08/2021

SIGNATURE & SEAL OF ISSUING AUTHORITY CHIEF ENVIRONMENTAL ENLINEER Chief Environmental Engineer



To SRLGEORGE KOCHUPARAMBIL, QUARRY OF UNITED GRANITES & METALS VAZHITHALA P O, THODUPUZHA

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

 For verifying this document please go to krocnums.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.

Page1

Annexure-16

PANCHAYAT LICENSE

ການຕົ້: 7/2022-2023/JC3/1445/2023	<u>AN</u>	ano.	MD1: 01/04/2023		
<u>മണ്</u> പുത, പിന്: 685668, പോണ	നക്കാട് ഗ്രാമപ പ്രരിയാരം പി.ഒ., ട്: 64662-202248, ഇ-ര	<u>ഞ്ഞായത്ത്</u> . ഇടുക്കി (ഭില്ല) മയില് : manakkadgp@gmail	.com		
വ്യവസായം, വാണിജ്യം ക്ര.പി.ആർ ആക്ട് പ	, സംരഭകത്വം, മു സെക്ഷൻ 232, FTE 8	റ്റ് സേവനങ്ങൾക്കുള്ള & 08 ബൈസൻസ് ചട്ടങ്ങ	ലൈസൻസ് 0 1996)		
മൈസൻസിയുടെപേര്	മോർജ്ജ് കൊപ്പും	มากกิด			
ലെടന്നത്തിയുടെ മേൽവിരാസം	കൊള്ളപറയില്, വഴിഞ്ഞ പി.ര.				
സാപനത്തിന്റെ പേരും, ബാതാസ്റ്റം	യുണ്ടൈറ്റഡ് ഗ്രാഞെറ്റ്സ്കേറ്റെതിസ്, വഴിഞ്ഞല				
ബെസർന് നടികിയിട്ടുക്ക പ്രസർത്തനങ്ങൾ	മരിമൽ കാറി തണ്ടി സ്റ്റോൺ അഗ്രിശേയ്റ്റ് സ് ഉൽപ്പാനിപ്പിക്കുന്നതിന്				
വാർഡ് തയർന്തകൃടിടെ നയർ	XIII-				
ലെലെ സർസ് കാലാവധി	01/04/2023	മുതൽ 31/03/2028	niee		
	aye	ຄະຫາ ໄດ້ໃຫຍ	രിയരി		
ലൈസെൻസ് ഹീസ്	750001- മൂപ	1220300816, 3817, 6430	16/03/2023, 21/03/2023		
ലോട്ടോർ ഫീസ്	ليرية 4,0022	1220300516, 3017, 6430	15/03/2023,		
ടൊഴിൽ നികുതി	12160 4 തുപ	1220303016, 4430	15/03/2023		
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	Tool developed by X Ariser Thackeye
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1	(nunguajeeessanowimi)
2	രോഗിൽ സ്ഥലവും അതിലുട്ടള് സാധസൊലുറികളും പഞ്ചായത്തധികാരികർക്കോണെക്രട്ടറി അധികാരപ്പെടുത്തുന്ന മറ്റ് ഉദ്യോഗസ്ഥർക്കോ പതിരോധിക്കുന്നതിര് മേഖനൽസി വേണ്ട സെകര്യം തൽകേണ്ടരും അവർ മേവശ്യപ്പെട്ടാൽ ഈ മൈനൽസ് കാണിക്കേണ്ടരുമാണ്.
3	എന് സ്ഥലങ്ങിന്റെ കാര്യങ്ങിൽ ലോസൽസ് നൽകിയിടിക്കുന്നവോ ആ സ്ഥലങ്ങ് എല്ലാവയും കാണങ്ങക്ക വിധങ്ങിലുള്ള ഒരു ഭാതത് ലൈസൻസി അന്റ പേയും, ലൈസൻസിന്റെ നയരും ഉദ്യേശവും കാണിക്കുന്ന ഒരു അയോളപ്പലക വച്ചിരിക്കണ്ടെന്നത്.
4	പങ്കാരത്തിൽ നിന്നും അഭ്യവാദം ലഭിച്ചതേഷമല്ലാരെ ഒരാഴിൽ ശേഖം മാറ്റാൻ പാടില്ലാങ്കരും ഒരാഴിൽ നിർത്തുന്ന പലം വിവരം മുൻകൂട്ടി പഞ്ചാത്രത്തിൽ അറിയിക്കണ്ടത്രുമാകുണ്ടു.
5	രോഗ്ട് സ്ഥലവും പടിതരങ്ങളും വൃത്തിയായും സാംക്രമികരോഗാണുക്കൾ ഉണ്ടാക്കാത്ത വിധരതിലും പോരുമാസപുഭവയാകാത്ത വിധരതിലും വൃപാരത്തിരു വച്ചിട്ടുള്ള ഭക്ഷണപ്പാദിവാക്കൾ ഈട്ടുത്തനുകൾ,പൊടി മുതലായവയുടെ ശല്യം ഉണ്ടാകാത്ത വിധത്തിലും സുക്ഷിക്കണമൊണ്.
6	ഞാ പ്രവർത്തിരിവസത്തിന്റെയും ഒടുവിൽ ത്ഥലം വൃത്തിയാക്കേണ്ടമാണ്.
7	ആ സ്ഥലങ്കിന്റെയോ പരിസരത്തിന്റെയോ, ഏതെമിലും ഭാഗത്ത് വീഴുതയോ നിമേലപിക്കുകയോ ചെയ്യുന്ന ചപ്പുചവനോ, മൃഗങ്ങളുടെ അവതിരുങ്കളോ ഒറ്റ് പടാർത്ഥമാ ശേഖതിച്ച്, സെക്രട്ടറിക്ക് ത്യപ്തികതോയ തിതിയിൽ നിക്കം ചെയ്യിക്കേങ്ങമാണ്,
8	ലോസർതി ഏമൊരു ചെട്ടിഞ്ഞിന്റെയും ചുവരുകളുടെ അവേശത്തിന്റെ എങ്കാരു ഭാതവും മേജ്പറഞ്ഞ പത്തരങ്ങിലുള്ള മറയും അപ്പാരയും അവിദെ മെറിച്ചുവിഴാതിടെട്ടുള്ള ഏതെമിലും ശ്രാദ്ധരങ്ങം, മാലിരുമോ, ചട്ടുപ്രവാദാ, തൈപ്പോറും, ഉപവേശമെപ്പോം എത്തേമിലും പദാർത്രമോ അവിദഭ ലയിക്കുന്നത് അത്തേഷവിയം എപ്പോഴും നെറായി കേടുപാട് തീർത്ത് നിഷനിർത്തേണ്ടരാണ്.
9	ലൈസർസി മേർപറഞ്ഞ ബലഞ്ഞു, പരിസരമേഖ അരോള ചേർന്നോ ഉള്ള എതൊരു ഓവുചാലും. അഴുക്കുലല കളയുന്നതിനുള്ള പ്രകരങ്ങവും എപ്പോഴും നന്നായി കേടുപാഴ് തീർത്ത് വയ്പിംബെയാണ്
10	അയിലെം എചരിക്കുന്ന കടകളുടെ ലൈസൻസ് റഖ്യപേയ്യുന്നമാണ്.
11	പ്പിങ്കെടിലും താന്തിലുള്ള താക് രോഗങ്ങാ കൃഷ്ഠ മോഗമോ സ്രണ്ടങ്ങ പകർച്ചു വ്യാധികണ്ണോ ഉള്ള യാട്രൊടാലും കച്ചവടം നടങ്ങുന്നതില് ഇപയോഗിക്കുന്ന സ്ഥലങ്ങും പടിലാകങ്കും പ്രവർത്തിക്കുമ്പാൻ പാടില്ലാങ്കൊകുന്നു.
12	17652019 ലെ സ.ഉ. (ലേക) നം.72019 പരിസ്ഥിരി ഉങ്ങരവ് പ്രകാരം ഒറ്റത്തവണ് ഉപയോഗിക്കുന്ന തിരോധിര വസ്തുക്കർ: ഉർപ്പാഴിപ്പിലുകയോ: ശേഖരിലുകയോ: വിൽക്കുകയോ: ലേകമാര്യം ചെയ്യുകയോ: വിരേണം ചെയ്യുകയോ ചെയ്യാൻ പാഴില്ല
13	സ്ഥാപനത്തിന്റെ ബോർസിൽ സ്ഥലനാരം മലയാളത്തിലും ഇംഗ്ലീഷിലും ദേഖപ്പെടുത്തേണ്ടമാണ്.
14	ത സീറ്റിൽ കൂടുതലുള്ള എല്ലാ ഹോട്ടലുകൾക്കും റെസ്റ്റോറന്റുകൾക്കും ടോയ്യറ്റ് സൗകര്യം ഏർപ്പെടുത്തങ്ങങ്ങാണ്.
15	രിരോധിര ഉർപന്നങ്ങളായ പാർത്താല, ശുഡ്ഖ മുടങ്ങിയവ തംഭരിച്ചുവയിക്കുവാടോ വിൽക്കുവാനോ പാഴില്ല.
6	നാലവേഖ അഭ്യവഴിക്കാൽ ഫാമില്ല.
7	ടുകളിൽ കാണിച്ചിരിക്കുന്ന വ്യവസ്ഥകളുടെ ലംഘടം ഈ ലൈസർന്ദ് റട്ട് ചെയ്യപ്പെടുന്നതിന് കാരണമാകാവുന്നമാണ്.
	CHURATO CONTRASCI
1.0:	ഇത് മൈനത്ത് മറ്റെയുതിക്കുന്ന തീയതിക്ക് 26 മിവയം ലന്ത് റോയും പ്രത്യാകം പ്രത്യാതിക്ക് ഈ മോനത്ത് മറ്റെയുതിക്കുന്ന തീയതിക്ക് 26 മിവയം ലന്ത് റോയും മിയ്ലാകം പ്രത്യാക്ക് പ്രവേശം പ്രത്യാക്ക് പ്രവേശം പ്രത
	Allow Colors 201248 COLORS 405 - 535 608

Annexure-17

NEWSPAPER ADVERTISEMENT

നോട്ടിസ് പൊള്ളനവ്യായി, കേരള സംസ്ഥാനം, ഇടക്കി ജില്ല, തൊട്ടപ്പഴ വുക്ക്, മണക്കാട് ഗ്രാപേഞ്ഞ, തന്, മണക്കാട് allagiziana alungan mmaid 154/4, 354/5, 355/1pt, 351/1pt, 350, 352/1pt-m8 ADDANE ANT ANTARA ANTARANA പരിസ്ഥിതി അനാരതി ശ്രീ. ജോർത്ത് കൊച്ചപറമ്പിൽ-ന് കേരള സംസ്ഥാന പരിസ്ഥിതി ജാപാക്ട് അസ്സ്മെന് ടെത്താറിറ്റിയിൽനിന്നും ഓർഡർ menuti 1137/EC/SELAA/KL/2017 തിയതി 17-03-2018 ഓർഡർ പ്പകാരം ലഭിച്ചിരിക്കന്ത ഈ ഓർഡറിന്റെ പകർപ്പ് കോള സംസ്ഥാന പരിസ്ഥിതി ഇംപാക് അനുസ്മെന് അതോറിറ്റിയിൽ cusyacorri, www.seiaakerala.org am enerieerugimiesime ന്നുരണുറണ്ടാക്

DUDUIC NOTICE
POBLIC NOTICE
NOTICE
This is in inform in the Ceneral Dublic
that the proposed quarty ormed
in Re-Survey Nos 354/4 354/5
355/1pt 351/1pt 350 352/1pt
of Shri George Kochuparambil at
Manalokad Village, Manalokad Grama
Panchaval, Thodupuzha Taluk, Idukki
District, Kerala is accorded with
ENVIRONMENTAL CLEARANCE by
State Environment Impact Assessment
Authority, Kerala vide Order No. 1137/
EC/SEIAA/KL/2017 dt 17-03-2018
and the copy of the Environmental
Clearance is available with the
office of State Environment Impact
Assessment Authority and may also be
seen on the website of the Authority at
www.seisakerala.org



Annexure- 18

Details Of Ec

Annexure- 19

MONITORING PHOTOS





Monitoring Reports

Annexure-20



GLOBAL ENVIRONMENT & MINING SERVICES

(Consulting Engineers, Mine designers, Geologist & Surveyors) NABL & MOEFCC RECOGNIZED LABORATORY 3 nd Main Road, Basaveswara Badavane, HOSPETE - 583201, Dist., Vijayanagara (Karnataka) : +918394 229433, 295018 Ph : gems hpt@yahoo.com, e-mail : www.globalmining.in Website

> GEMS-LD/TF/11/01 Date: 22.05.2023

Analysis Report of Ambient Air Quality Monitoring

t	Name of the Customer/Address	 Granite Building Stone Quarry of Shri, George Kochuparambil Extent: 12.2987Ha Re-Sy.Nos: 354/4, 354/5, 355/1pt, 351/1pt, 350 & 352/1pt, Manakkad Village, Thodupuzha Taluk, Idukki District, Kerala.
2	Sample Description	: Ambient Air Quality Monitoring
3	Sample Collected By	: GLOBAL Environment & Mining Services
4	Particulars of Sample Collected	: Combined Sampler (GTI-241)
5	Duration of the Monitoring	: 24 Hour of Sampling
6	Location of Monitoring	: Core zone area (A1)
11	Report Number	: ULR-TC532323000001445F

Results

Date of	PM10 [µg/m ³]	PM2.5 [µg/m ³]	SO ₂ [μg/m ³]	NO ₂ [μg/m ³]	
Monitoring IS : 5182: (Part 23) 2006 (RA 2012)		USEPA 2001	IS : 5182: (Part 2) 2001 (RF 2014)	IS : 5182: (Part 6) 2006 (RF 2014)	
16.05.2023	57.9	21.7	12.8	14.9	
Standard	100	60	80	80	

INFERENCE

As per CPCB Standards,

Report Status: - Measured Values for the above parameters are within the limit.

End of Report

Analyzed By

J.M. Thippeswamy Chemist



Authorized Signatory K. Ramakrishna Reddy Technical Manager

Approved by NABL & Reception by Ministry of Environment, Porest and Clining Change for Laboratory Recognized by Government of Karnatalia, Maharashira, Goa for DGPS survey

- - Note:
- The result lineal refere only to the tested samples & applicable parameters. Endocument of produces to norther inferred nor implied. Water Samples will be destroyed after 15Days, Minerals 1 Months, Filter papers & Thinddas 7 Days and 8.0 samples from the date of issue of Marth test certificate unless otherwise. specified

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Website : www.globalmining.in

> GEMS-LD/TF/11/01 Date: 22.05.2023

Analysis Report of Ambient Air Quality Monitoring

Granite Building Stone Quarry of Shri. George Kochuparambil Extent: 12.2987Ha

- Name of the Customer/Address 1
- 350 & 352/1pt, Manakkad Village, Thodupuzha Taluk, Idukki District, Kerala.

- 2 Sample Description
- 3 Sample Collected By
- Particulars of Sample Collected 4
- Duration of the Monitoring 5
- 6 Name of the Station
- 7 Report Number

- : Ambient Air Quality Monitoring
 - GLOBAL Environment & Mining Services

Re-Sy.Nos: 354/4, 354/5, 355/1pt, 351/1pt,

- Combined Sampler (GTI-241)
- 24 Hour of Sampling 2
- Kolady ÷
 - : ULR-TC532323000001446F

Results

Date of	PM10	PM2.5	SO ₂	NO2	
	[μg/m ³]	[µg/m ³]	[μg/m ³]	[μg/m ³]	
Monitoring	IS: 5182: (Part 23)	USEPA	IS: 5182: (Part 2)	IS: 5182: (Part 6	
	2006 (RA 2012)	2001	2001 (RF 2014)	2006 (RF 2014)	
17.05.2023	50.1	18.4	10.9	12.8	
Standard	100	60	80	80	

INFERENCE

As per CPCB Standards, Report Status: - Measured Values for the above parameters are within the limit.

** End of Report**

Analysed By J.M. Thippeswamy

Chemist



2 61 Authorized Signatory K. Ramakrishna Reddy

Technical Manager

Approved by NABL & Recognized by Messary of Environment, Furnar and Climate Charge for Laboratory Recognized by Government of Karriataka, Mahariahma, Gaia far DGPS sarvay

Note:

The result inted refers only to the tened samples & applicable parameters. Endorsement of products is setting inforred row implied. Water Samples will be descoved after 15Date, Minerole 3 Months, Filter papers & Thinkles T Days and EC samples from the date of more of Month test servicing underso otherwise torified.

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- e-mail ; gems_hpt@yahoo.com,
- Website : www.globalmining.in

GEMS-LD/TF/11/01 Date: 22.05.2023

TEST REPORT OF AMBIENT NOISE LEVEL MONITORING

Granite Building Stone Quarry of Shri. George Kochuparambil Extent: 12.2987Ha

- 1 Name of the Customer/Address
- Re-Sy.Nos: 354/4, 354/5, 355/1pt, 351/1pt, 350 & 352/1pt, Manakkad Village, Thodupuzha Taluk,
 - Idukki District, Kerala.

- 2 Sample Description
- 3 Sample Collected By
- 4 Particulars of Sample Collected
- 5 Duration of the Monitoring
- 6 Date of Analysis Completion
- 7 Report No

- : Ambient Noise Level monitoring
- : GLOBAL Environment & Mining Services
- : Noise Level Meter (Equinox-107)
- : 24 Hours Sampling
- : 17.05.2023
- : ULR-TC532322000001447F

Results

Date	16.05.2023	17.05.2023		
lame of the Location	Core Zone	Kolady N2		
Time (hrs)	N1			
6.00	38.4	35.2		
7.00	48.2	44.8		
8.00	47.2	48.4		
9.00	51.4	46.2		
10.00	53.4	52.6		
11.00	54.2	51.4		
12.00	54.8	51.2		
13.00	55.8	52.4		
14.00	53.4	50.8		
15.00	55.8	53.4		
16.00	58.4	50.2		
17.00	56.2	51.2		
18.00	51.2	48.8		
19.00	50.4	49.6		
28.00	42.8	48.4		
21.00	40.2	46.4		
Z2.00	40.6	47.2		
23.00	41.2	47.4		
00.00	36.8	44.4		
01.00	37.4	40.8		
02.00	36.2	40.2		
03.00	36.4	39.6		
04.00	36.8	37.4		
05.00	37.2	39.2		



Approved by NABL & Recognized by Ministry of Environment Forest and Climate Change for Laboratory

- Recognized by Government of Karnatuka, Maharashna, Gon for DGPS narvey
 - Note:
- The residt listed refers only to the tested samples it, applicable parameters. Endorsensers of products is neither informations implied
- Water Samples will be destoared after 15Days, Minorals 3 Months, Filtur papers & Thintfiles 7 Days and ILC samples from the date of issue of Month test certificate unless otherwise specified.
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: +918394 229433, 295018 Ph

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	ULR-TC53232300000144					
L max	58.4	53.4				
Lmin	36.2	35.2				
Ld	53.5	50.3				
Ln	38.2	43.1				
Leq	51.5	48.7				

		Limit in dB(A) Leq			
Area Code	Category of Area	Day Time	Nighttime		
A	Industrial Area	25	70		
8	Commercial Area	65	55		
C	Residential Area	55	45		
Ð	Silence Area	50	40		

	Day time shall mean from 6:00 am and 10:00 pm
	Night time shall mean from in between 10.00 pm and 5.00 am
	Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority
Note	Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority
	*dB(A) Leq denotes the time weighted average of the level of sound in desibels on scale A which relatable to human being
	A "decibel" is a unit in which noise is measured
	"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
.eq: It	is energy mean of the noise level over a specified period.



L. K.P Authorized Signatory Technical Manager

Approved by NABL & Recognized by Ministry of Environment, Forest and Climate Change for Laboratory Recognized by Coverement of Karnataka, Maharashim, Gos for DGPS sarvey . +

Note:

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The result listed refers only to the tested samples & applicable parameters. Endorsement of products to retifient inforced our implied. Water Samples will be datatoped after 15Days, Minarda 3 Mooths, Filter papers & Thirobles 7 Days and ILC samples from the date of issue of Month test certificate selects otherwise 4 specified.

This separat is not to be reproduced whelly or in part & cannot be used as evidence in the Coart of law & denied not use any advertising mettin without special permission in writing. Total liability of our laboratory is limited to the invoice amount. Any dispare attaing out of this separa is subject to Hosapete jurndiction only. •





(Consulting Engineers, Mine designers, Geologist & Surveyors) NABL & MOEFCC RECOGNIZED LABORATORY 3 nl Main Road, Basaveswara Badavane, HOSPETE - 583201, Dist., Vijayanagara (Karnataka) : +918394 229433, 295018 Ph : gems hpt@yahoo.com, e-mail

Website : www.globalmining.in

GEMS-LD/TF/11/01 Date: 22.05.2023

ANALYSIS REPORT OF WATER QUALITY DATA

Granite Building Stone Quarry of Shri. George Kochuparambil

Name of the Customer/Address

Extent: 12.2987Ha : Re-Sy.Nos: 354/4, 354/5, 355/1pt, 351/1pt, 350 & 352/1pt, Manakkad Village, Thodupuzha Taluk, Idukki District, Kerala.

GLOBAL Environment & Mining Services

- 2 Sample Collected By
- 5 Date of sample collection
- 6 Date of sample Received
- 7 Date of sample Analyzed
- 8 Report Number

- : 16.05.2023 : 19.05.2023
- 20.05.2023 1
- : ULR-TC532323000001448F

SI.	Parameters	Unit	Result	Test Protocol	Requirem IS : 105	sent/Limit 00 : 2012	
		41 - 6.73 AP(1A, 22 st) Edition 2012 4500 B (Pg No. 4-92 to 4-96)			Acceptable	Permissible	
i.	pêl			6.5	8.5		
2	Colour*	Hater	<\$	15: 3025 (PART 14)- 1984, RA- 2012 Platimm cobait Method	10 E	15	
3	Taste*	- 25	Λg	15 3025 Part 8 1984	Ag	Ap	
4	Odour*		Ag	IS: 3025 (Part 5) - 1983, Ra-2012, True Odour	Ag	Ag	
3	Turbidity	яш	0.45	APHA 22 ⁴⁰ Edition 2012 2130 B (Pg No. 2-14)	1	5	
6	Conductivity	pS/cm	170	APIEA 22 ^{a1} Edition 2012 2510 B (Pg No. 2-54)	- +2	5	
2	Total Dissolved Solids	mg4.	191	APHA 22 ⁴³ Edition 2012 2540 B (Pg No. 2-65)	500	3000	
8.	Total Alkalisity as CaCOs	mg/L	81	APHA 22 ⁴¹ Edition 2320 B (Pg No. 2-35)	200	600	
ġ.	Total Hantness as CaCO ₂	mg4.	113	APHA 22 nd Edition 2012 2340 C (Pg No. 246)	200	600	
10,	Calcium as Ca	mg/L	35	APHA 22 ^{e9} Educes 2012 3500 Ca B (Pg No. 3-84)	75	200	
11.	Magnesium as Mg	møt.	7.1	APHA 23 ^{ad} Edition 2013 3500 B-Mg By Calculation	30	100	
12.	Chloride in Cl	mg/l.	18.2	APHA 22 nd Edition 2013 4500 Cl. (Pg No. 6-72)	250	1010	
13.	Sulphane as SO ₈	eµt.	19	APHA, 22 nd Edition 2012 4300 SO42 - E (Pg No. 4-190)	200	400	
14,	Nimites as NO1	ngt	9.1	APHA 23 rd Edition - 4300 NO ₅ - E (Pg No, 4-13) to 4-132)	45	NR	
14	Nitrate Nitrogen as NO ₂	mg/f.	11.7	APHA 22 ⁴⁴ Edision 2012 4500 NO3 E (Pg No. 4-125 to 4-127)	45	No setucate	



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Note:

The result listed refers only to the total samples & applicable parameters. Endersoment of graduats is neither inferred not original

Water Samples will be demoved after 19Days, Minerals 3 Months, Fiber papers & Thimbles 7 Days and ILC samples from the date of issue of Month test certificate axiess otherwise specified

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- : +918394 229433, 295018 Ph
- : gems hpt@yahoo.com, e-mail
- Website : www.globalmining.in

					U	LR-TC532323000001448F
ĸ	Flaoride as F	mg1.	0.62	APHA 23 rd Edition 2017 4500 F-D (Pg No. 4-90 to 4-91)	1.0	1.5
16	him in Fe	ing1.	0.25	APHA 23 ^{ad} Edition - 3500 Fe-B (Pg No. 3-80 (0:3-82)	0.3	NR
17.	Sodium as Na	mg1.	87	APHA 23 ^{sd} Edition 2017 Na 3500 B (Pg No. 3-99 to 3-100)	-	
18	Potassium as K.	mpt.	0.43	APITA 23rd Edition 3500 K B (Pg No. 3-89 to 3-90)	53	2
19	BOD 3 days at 27° C	mp/L	NIL	19:3025 (P-64) 1993 , RA-2014,	*	<u>i</u>
20	COD at 02	mpt.	NEL	APHA 23 ^{ad} Edition 5220 C (Pg No. 5-18 to 5-19)		150
20.	Oil & Grease	ing1.	NIL	APHA 23 ^{ee} Edition 5520 B . (Pg No.5-41 to 5-42)	0.5	NR
22	Cadminum as Cd*	ng1.	<0.001	APHA 23 ⁹⁰³ Edition-3111 - B (Pg No. 3-20 to 3-21)	6.003	NR
25.	Copperias Co	mg1.	<0.001	APHA-23 ⁽¹⁾ Edition 3111-B (Pg No.3-20 to 3-21)	0.02	13
24.	Nickel as Ni	mp1_	<0.001	APHA-23 ⁴³³ Edition-3111 -B (Pg No. 3-20 to 3-21)	0.62	NR
28	Zinc as Zn	upl.	<0.1	APHA-23 th Edition-3111-8 (Pg No. 3-20 to 3-21)	5	15
26	Salirity*	PPT	NIL	APHA-23 ⁸¹⁷ Edition-3111-8 (Pg No. 3-20 to 3-21)		2.57
27.	Total Phosphorous	ingl.	<0.01	APHA-33 ^{rt1} Edition 4500-D (Pg No. 4-154)	-	
28	Total Coliforms*	MPN/ 100ml	Ab	APHA 22 ^{ad} Edition 9222 B (Pg No:9-78)	7	1.52
29.	Feacal Coliforns	MPN/ 100ml	Ab	APHA 22 nd Edition 9222 D (Pg No.9-85)		
30.	Physic Plankton*	Unit1.	Ab	APHA 23 rd Edition 10209 F (Pg No 10-17)		1.02

Note: BDL Below Detectable Limit

- Ag: Agreeable NR: No Relaxation
 - RA: reaffirmed
 - Ab: Absent

Location: Kolady

End of report

Analyzed By Chemist



.K.P Authorized Signatory Technical Manager

Approved by NABL & Recognized by Ministry of Environment, Forest and Climate Change for Libratory Recognized by Government of Kamutalia, Maharashira, Goa for DGPS survey .

Note:

The result listed reflex only to the sected simplex & applicable parameters. Endersement of products to settler inferred non-implied. Water Samples will be destroyed after (SOays, Minarals) Months, Filter papers & Thirebles 7 Days and ILC samples from the date of issue of Month test certificate unless otherwise. specified.

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Annexure- 21

NURSERY RECEIPTS

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Annexure- 22

HEALTH INSURANCE OF EMPLOYEES

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Annexure- 23

DATE	NAME	PURPOSE	AMOUNT
09/05/2023	MARY THOMAS	MEDICAL HELP (6 MONTHS x 30000	18000
05/04/2022	HM & PTA PRESIDENT ST SEBASTIANS HSS VAZHITHALA	STUDENTS BUS FARE	41500
05/04/2023	ST THOMAS LP SCHOOL KOLADY	AUTO CASH	6070
09/05/2023	YUVA ART'S & SPORTS CLUB	VOLLEYBALL COURT	5000
13/05/2023	KANIV	PALIYETIVE CARE	48000
13/05/2023	KIDNEY PATIENTS	DIALYSIS	5000
17/05/2023	ALBERT TOMY	EDUCATION FEES	33025
18/05/2023	AMMINI GOPALAN, ASANAPALLI	MEDICAL HELP	5000
25/05/2023	GOV, L P SCHOOL PURAPUZHA	STUDENTS UNIFORM, BAG, ETC	60000
06/06/2023	KANIV	PALIYETIVE CARE	48000
17/06/2023	KANIV	PALIVETIVE CARE	47000
17/06/2023	KIDNEY PATIENTS	DIALYSIS	5000
09/06/2023	RAJU NELLIKAPILLIL	MEDICAL HELP	1000
21/06/2023	MINL KALLINKAL	MEDICAL HELP	1000
24/06/2023	PRASAD K P, KOLLAMPARAMBIL	MEDICAL HELP	5000
05/07/2023	HM & PTA PRESIDENT ST SEBASTIANS HSS VAZHITHALA	STUDENTS BUS FARE	58100
08/07/2023	ST THOMAS LP SCHOOL KOLADY	AUTO CASH	6400
11/07/2023	KANIV	PALIVETIVE CARE	51000
02/08/2023	ST THOMAS LP SCHOOL KOLADY	AUTO CASH	7200
02/08/2023	HM & PTA PRESIDENT ST SEBASTIANS HSS VAZHITHALA	STUDENTS BUS FARE	50300
05/08/2023	KUNJIKUTTAN MUDAKOLLIL	METERIAL SUPPLY HOUSE WORK	14700
05/08/2023	KIDNEY PATIENTS	DIALYSIS(JULY PAYMENT)	5000
09/08/2023	KANIV	PALIYETIVE CARE	49000
21/08/2023	KIDNEY PATIENTS	DIALYSIS	5000
26/08/2023	ST THOMAS LP SCHOOL KOLADY	AUTO CASH	7600
26/08/2023	ONAM KIT	1455 FAMILIES	2107248
08/09/2023	HM & PTA PRESIDENT ST SEBASTIANS HSS VAZHITHALA	STUDENTS BUS FARE	52900
08/09/2023	KANIV	PALIYETIVE CARE	49000
23/09/2023	HASEETHA R, THOTTIPARAMBIL	MEDICAL HELP	2000

CSR EXPENDITURES & RECEIPTS

CSR EXPECITURES SNDF RECEIPTS

29/09/2023	KIDNEY PATIENTS	DIALYSIS	5000
30/09/2023	HM & PTA PRESIDENT ST SEBASTIANS HSS VAZHITHALA	STUDENTS BUS FARE	55500
30/09/2023	ST THOMAS LP SCHOOL KOLADY	AUTO CASH	7600
		TOTAL	2862143

EC Compliance Report for the period of April 2023 to September 2023 Granite building stone guarry of Shri. George Kochuparambil GOVT. L. P. SCHOOL PURAPUZHA PURAPUZHA P.O., THODUPUZHA, IDUKKI (DIST) -685583 Ph: 04862-273779, Email: glppurapuzha@gmail.com SCHOOL CODE - 29318 UDISE CODE - 320 907 00 902 agazulgzib. Date 25.05-2008 Demograndist Agronomani Dagonit & ado alion പ്രിതാല-തതായും 2023-24 അദ്യായനവായിക്കിക്കി സ്ക്ലാംകല netb. Cabaonasio Bob 1 Del Geneensava-ള്ക്കാക്കട ഭക്കരംഭിക്കുകയാണ്. නි-හතලියකි යුතුණ ආශ්යාන හිංහුකම්ලාංකි പ്പെട്ടിൽ എന്നാലതോളം പില്ലാഗത്തിക്ക മാഹിത്ത ചിത്തുന്നതണ്ട്. സാഹ്മത്തിന്റെ അമ്മാക്ക മുട്ടാതിങ്ങളിലെ aspesson solutional മാ സാമായകൃഷ്ടിൽ ടി ജ്ലിജംഗൽ അവശ്യയാ 2 O Grossel Que and Beb [ados gs, Grossed gab ഭക്കാക്സ്.....] ലഭ്യമാജ്യനാന്തിന് ഭാഷം സഹാജിസഹങ്കരംഗങ്ങൾ അങ്ങളുടെ ഭാഗങ്ങ നിന്നാ കണ്ടാരുന്നെയെന്ന് അട്ടർക്കിന്തേന്നു. and como amooralando apaisy nato Boganabro ala rosano "Beravernord" ക്കിൽ താക്കുടെ സാഹിഡ്യാ കുണ്ടാവത്തത്തിനും A.S.A Coosto Barno. Balansquegare and CSR acaded almos അന്മാരിത്തെയാണ് അത്രത്തിരുന്നം. തിള്ളങ്ങളായായു . alpager. 25-03-2008. REMESH KUMAR E. T. L. P. SCAL PEN. 698535 Headmaster Govt. L.P. School Purapuzha (I) A PUZHA 60000 LB 9495692103 Ramera

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MA 6	Atmini Appu	338002010014446	Union Bank of India	Thodupuzha	UBIN0533807	1000
MA 14	Baiju A K	33254532282	State Bank of India	Nediyasala	SBIN0006457	1000
MA 16	Jagadamma	338002010021202	Union Bank of India	Thodupuzha	UBIN0533807	1000
MA 18	Gauriamma Kunjikuttan	40328101066623	Kerala Gramin Bank	Thodupuzha	KLGB0040328	1000
MA 23	Kumari Sreekumar	4355001702005679	Punjab National Bank	Thodupuzha	PUNB0435500	1000
MA 26	Parukutty K O	0722108030732	Canara Bank	Thodupuzha	CNRB0000722	1000
MA 30	Mathai Pathrose	67323931639	State Bank of India	Vazhithala	SBIN0070962	1000
MA 31	Mercy	11210100258690	Federal Bank	Thodupuzha	FDRL0001121	1000
MA 37	Sali Louis	30188238651	State Bank of India	Nediyasala	SBIN0006457	1000
MA 39	Sarojini Sukumaran	32865143845	State Bank of India	Nediyasala	SBIN0006457	1000
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MA 41	Shibu Thomas	32668155787	State Bank of India	Ncdiyasala	SBIN0006457	1000
MA 42	Syjan Thomas	33055429907	State Bank of India	Nediyasala	SBIN 0006457	1000
MA 43	Thankamma Ayyappan	33452841784	State Bank of India	Thodupuzha	SBIN0008674	1000
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MA 46	Aravindakshan Nair	33438304010	State Bank of India	Thodupuzha	SBIN0008674	1000
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MA 55	Valsala Kunjappan	32951554314	State Bank of India	Thodupuzha	SBIN0008674	1000
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MA 71	Armini Ayyappan	32954131340 State Bank of India	Thodupuzha	SBIN00068674	1000
MA 72	Subhashini Divakaran	39683230052 State Bank of India	Vazhithala	SBIN0070962	1000
MA 73	Thankamani Prabhakaran	67226875505 State Bank of India	Vazhithala	SBIN 0070962	1000
MA 75	Annakutty Pathrose	67201841483 State Bank of India	Vazhithala	SBIN 0070962	1000
MA 76	Ammini Johny	67206434799 State Bank of India	Peniva	SBIN 0070869	1000
MA 77	Jomesh Raju	20395607378 State Bank of India	Nediasala	SBIN0006457	1000
MA 78	Thankamma Gopalan	32664273964 State Bank of India	Thodupuzha	SBIN0008674	1000
MA 79	Sreeja Sajeevan	67354156196 State Bank of India	Thodupuzha Town	SBIN0070155	1000
MA 82	Rajan	121710100045772 Union Bank of Indi	a Thodupuzha	UBIN0812170	1000
MA 83	Bhavani	32993597881 State Bank of India	Thodupuzha	SBIN0008674	1000
MA 84	Geetha Devi	67242878415 State Bank of India	Thodupuzha Town	SBIN0070155	1000
MA 85	Kamaladas Krishnan	40328101056538 Kerala Gramin Ban	k Thodupuzha	KLGB0040328	1000
MA 89	Mariyam Augusthy	67202375316 State Bank of India	Vazhithala	SBIN0070962	1000
MA 90	Indira	20176945205 State Bank of India	Thodupuzha	SBIN0008674	1000
MA 91	Narayanan Nair	20263068754 State Bank of India	Thodupuzha	SBIN0008674	1000
MA 92	Raji Gopi	338002010020072 Union Bank of Indi	a Thodupuzha	UBIN0533807	1000
MA 93	Pankajam P P	20213775682 State Bank of India	Thodupuzha	SBIN0008674	1000
MA 94	Manikandan	67179632202 State Bank of India	Karikode	SBIN0070886	1000
MA 95	Padmavathy	338002010020337 Union Bank of Indi	a Thodupuzha	UBIN0533807	1000
MA 96	Sumathy Narayanan	33070117014 State Bank of India	Thodupuzha	SBIN0008674	1000
MA 97	Theyan	30145807801 State Bank of India	Nediasala	SBIN0006457	1000
MA 98	Thresiamma	10458150881 State Bank of India	Nediasala	SBIN0006457	1000

MA 100 Thressiamma 32994541882 State Bank of India Thodupuzha SBIN0008674 1000 MA 101 Saramma John 67229254891 State Bank of India Vazhithala SBIN0070962 1000	MA 100 Thressiamma 32994541882 State Bank of India Thodupuzha SBIN0008674 MA 101 Saramma John 67229254891 State Bank of India Vazhithala SBIN0070962	MA 99	Valsa	32679818585 State Bank of India	Nediasala	SBIN0006458	1000
MA 101 Saramma John 67229254891 State Bank of India Vazhithala SBIN0070962 1000	MA 101 Saramma John 67229254891 State Bank of India Vazhithala SBIN0070962	MA 100	Thressiamma	32994541882 State Bank of India	Thodupuzha	581N0008674	1000
		MA 101	Saramma John	67229254891 State Bank of India	Vazhithala	SBIN0070962	1000

Please avoid MA 25 Madhavi & add MA 101 Saramma John

FEDERAL BANK

Data	Value Date	Particulars	Таан Туре	Tran D	Cheque Details	Withdrawala	Deposits	Balance	Di/Or
6505-40-80	05-09-2020	EBIZ TPINJT FINANCE PRIVATE LI	TFR.	PB32672		7,20,515.00		7.93,143.06	CR
09-09-2023	09-09-2020	EBIZ TIP DEKSP GEORGE ALIAS CIS	TFR	PB32876		2,00,000.00		5,93,143.00	ÓR
C\$25-ED-80	09-09-2023	WFT/FB872525113 01109LOGAN SECURIT/UBI/VSE CURIT/UBI/VSE	TFR	814931225		1,05.996.00		4.92.068.00	CR
06-06-2023	06-09-2023	NFT/FBBT2325113 E1174/OMEGA TRAIDIN/BARD/UN /TED:328	TFR	814531283		1,52,820.00		3.39.748.00	CR
04-09-2023	06-08-2023	EBIZ TP MODERN FLOUR MILL AND	TFR	F648119		2.09,516.00		30.292.99	CR
09-09-2023	08-59-2023	60/2 5/ X008X1055550000 4370 U	TFR.	F884320			1.00.000.00	(.30.232.00	CR
08-09-2073	05-06-2023	EDIZ TP ANIL M.N. UNITED	TEB.	F864832		1.000.00		1.29.232.00	CR
08-09-2003	08-09-2003	ENIZ TPIMERCY - UNITED	368	F884840		1,088.00		1,26,252.00	ĊR
ce-09-7423	08-09-2020	EBR TP NALINI VASU UNITED	264	F884850		1,000.00		1,27,232,00	CR
58-09-2023	08-09-2023	68/2 NEPT C76706092312572 6/CSR	TFR	FB85656		48,000.00		81,232,00	CR
36-49-2023	08-09-2023	NET/F08 1/3251 12. 75795/AMMINI AYYAPPISBINIUNI TED 329	TFR	\$16799670		1,000.00		80,222,00	CR
N (99-702)	08-69-9023	NETAUT2509584(*) 86756Uoses1 Nethal/141002000 06064	TFR	\$16802547			1.000.00	81,232,00	CR
8-09-3023	08-09-2023	UPI IN 3351496581082 altebruhenmed10 8610860gos/5051	TER	\$17082336			8.500 m	90,732.00	CR
8-03-2223	09-09-2023	CASHISELF	CASH	FB105314			5,00,000.00	5,90,732.09	CR.

Fage 2 of 3

The Federal Bank Ltd. Corporate Office: Federal Towers, Market Rd. Periyar Nagat, Aluka, Kerala 610101, Ph 0454-2030599 Websiterwww.leteralbank.co.in



Reg. No. IDK/TC/152/2015 Fourtine Byepass Road, Mangattukavala, Thodupuzha East P.O. Idukki, Kerala - 685 585

President Leelamma Jose Thazbathuveettil Mob: 9447157265

General Secretary Joseph Moolasery Mob: 9446479408 James Chacko Vazhuthalakkattu Mob: 9446290992

No.

Date 23 43 2423

To,

അനീഷ്

കൊച്ചുപറമ്പിൽ

വഴിത്തല

സാർ,

തൊടുപുഴ ബ്ലോക്ക് പഞ്ചായത്ത് കിഡ്നി പേഷ്യന്റ്സ് വെൽഫയർ സൊസൈറ്റിയിൽ 150 ഓളം രജിസ്റ്റർ ചെയ്ത രോഗികൾ ഉണ്ട്. ഇവരിൽ ഭൂരിഭാഗം പേരും ആഴ്ചയിൽ 3 പ്രാവശ്യം ഡയാലീസിസ് ചെയ്യുന്നവരും ക്യാൻസർ രോഗികളുമാണ്. നിർദ്ദനരായ ഇവരെ സഹായിക്കുന്നതിനു വേണ്ടിയാണ് ഈ കത്ത് എഴുതുന്നത്. നാളിതുവരെ സഹായിച്ചതിന് ഞങ്ങ ളുടെ നന്ദി രേഖപ്പെടുത്തുന്നു. മേലിലും നിങ്ങളുടെ ഭാഗത്തുനിന്നുള്ള സഹായസഹകരണങ്ങൾ പ്രതീക്ഷിക്കുന്നു.

വിശ്വസ്തതയോടെ,

effeiten ressont frei er sonen Konop Patiente tromas Decinta Discontrate beit p.3 - der son Seg sis 1000 Conserval President Gandecarde Tongerte







View Transaction Details

Transaction Date: Amount Type: Amount: Nature Of Transaction: 13-05-2023 Dr.

INR 5,000.00 EBIZ A&A C769130523163221 CSR