

HANNA ROCK PRODUCTS (PVT.) LIMITED
Meenkunnam, South Marady P.O Muvattupuzha Taluk, Ernakulam Dist. Kerala State 686 673
Ph. 09544505901, 02, 03 (0485-2877430, 2877432)

HRP/ENV/Compliance/20-21/49

Date: 29.12.2021

To

1. The Director, State Environment Impact Assessment Authority (SEIAA)
K.S.R.T.C Bus Terminal Complex, 4th Floor, Thampanoor,
Thiruvananthapuram - 695 001 Kerala 695024

2, The Additional Principal Chief Conservator of Forests (C) Ministry of Environment, Forests & Climate Change,
4th Floor, E & bF Wing, Kendriya Sadan, Koramangala, Bangalore -560 034 Karnataka State

Sir,

Sub: Environment Compliance report

Please find enclosed the Six Monthly Compliance report in respect of Hanna Rock Products (Pvt.) Limited (Ref.Environmental Clearance No. 62 of 2018 (No. 1168/EC/SEIAA/KL/2017 dated 17.03.2018) for the period from April 2021 to September 2021 for your ready reference. It may kindly be noted that the above report have already been sent by email (seacseiaakerala@gmail.com environmentdirectorategmail.com and rosz.bng-mefcc@gov.in) to your respective offices for record.

Thanking you,

Yours faithfully,

For Hanna Rock Products (Pvt.) Limited,

(S A Dwarakanatha
Mines Manager
Encl: as above

REPORT OF COMPLIANCE of M/s HANNA ROCK (Pvt) Limited

B.GENERAL CONDITIONS

(Ref: Environmental Clearance No. 62 of 2018} Compliance Report for the period from 01.04.2021 to 30.09.2021

Item No.	Stipulations in EC	Status of Compliance	Remarks
G-1	Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR/KPBR,	In quarrying area Rain Harvesting is implemented as all the rain water is collected at the bottom of the pit and being utilized for Dust Suppression and other purposes	
G-2	Environment Monitoring Cell as Agreed under the affidavit filed by the proponent should be formed and made functional.	Environment Monitoring Cell is constituted as below: 1. Mr. S A Dwarakanatha Mines Manager 2. Mr. K. Kabilan Mine Foreman 3. Mr. Harish G Nair as members	
G-3	Suitable avenue trees should be planted along either side of tarred road and open parking areas, if any, inclusive of approach road and internal roads.	As the quarry being worked for the past 7 years all the approach roads and open areas are planted with thick plantation	
G-4	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	Solar energy is presently utilized in office/canteen premises as quarry operations are limited to day light	
G-5	Sprinklers shall be installed and used in the project site to contain dust emissions.	Part of haulage roads are provided with automatic sprinklers and are working continuously	
G-6	Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.	Eco-restoration shall be done at our cost as and when necessary and also during the course of Mine Closure	
G-7	At least 10 percent out of the total excavated pit area should be retained as water storage areas and the Remaining area should be reclaimed with and overburden and planted with indigenous plant species that are eco-friendly. If, no other specific condition on reclamation of pit is stipulated in the E.C	The bottom portion of the pit adjoining to present working is kept open for rainwater and storm water collection. The water thus collected is utilized for spraying on haulage roads.	

Item No.	Stipulations in EC	Status of Compliance	Remarks
G-8	Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented in tune with the conditions specified in the Companies Act, 2013.	CSR as agreed is being implemented and the details of amount spent during this six months (April 2021 to September 2021) is enclosed as Annexure I for reference	
G-9	The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mining. All the boundary indicators boards, stores, markings, etc) shall be protected at all times and shall be conspicuous.	The entire lease boundary is properly fenced with Barbed wire with concrete pillars. All necessary sign boards are erected at suitable places.	
G-10	Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per Stipulations of Explosive Department	Blasting operations are always preceded by warning alarms besides persons keeping vigil at vital areas to avoid persons/animals entering the blasting zone.	
G-11	Control measures on noise and vibration prescribed by KSPCB should be implemented.	Regular monitoring of Noise level is being conducted and overall noise level is kept under permitted level.	
G-12	Quarrying activities should be limited to day time as per KSPCB guidelines.	Quarrying operations is restricted to day light	
G-13	Blasting should be done in a controlled manner as specified by the regulation of explosives Department or any other concerned agency.	Controlled blasting is being carried out by using Electronic delay detonators/Nonel and also by restricting the number of holes blasted in a round	
G-14	A licensed person should supervise/control the blasting operations.	Mine Foreman/Mine Mate/Blaster (Certified by the Director General of Mines Safety) will supervise the blasting operations in the quarry	
G-15	Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials	Access roads are of concrete pavers road and are properly maintained besides regular watering to avoid dust generation during transport of vehicles	
G-16	Overburden materials should be managed within the site and used for reclamation of mine pit as per mined closure plan/ specific conditions.	Overburden material is kept inside the quarry with proper care to avoid erosion during monsoon and shall be utilized as proposed	

Item No.	Stipulations in EC	Status of Compliance	Status of Compliance
G-17	Height of benches should not exceed 5 m and width should not be less than 5 m.	Height and width of the benches are maintained as stipulated in EC document	
G-18	Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.	Blasting mats are provided wherever necessary to avoid fly rocks	
G-19	Maximum depth of mining from general ground level at site shall not exceed 10m.	Shall be restricted within the stipulated depth	
G-20	No mining operations should be carried out at places having a slope greater than 45°.	Our quarry area being generally flat the benches are maintained so that the slope angle shall not increase more than 45 degrees	
G-21	Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.	Thick vegetation of trees and total covering of the crusher is done to suppress sound amplifications.	
G-22	The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.	All workers are provided with personal protective equipments such as Helmet, ear muffs, safety shoes and other items as prescribed by DGMS	
G-23	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.	Quarry area is provided with garland drains so that all storm water is diverted to the pit bottom and collected. Other areas are provided with drains to divert the water to the main/natural drainage.	
G-24	The transportation of minerals should be done in covered trucks to contain dust emissions.	Transportation trucks are provided with thick tarpaulin covers.	
G-25	The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.	All the areas other than the quarry operational are provided with thick plantation.	

Item No.	Stipulations in EC	Status of Compliance	Remarks
G-26	Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations.	Spent/burnt oil released from machinery/vehicles are disposed in a specified manner of State Pollution Control Board	
G-27	Explosives should be stored in magazines in isolated place specified and approved by Explosive Dept.	Approved Explosive Magazine is located in the isolated place and all explosive material is kept in Magazine.	
G-28	A Minimum buffer distance of 100 m from the boundary of the quarry to the nearest dwelling unit or other structure , not being any facility for mining shall be provided	A clear 100 meters buffer zone is maintained all along the lease boundary	
G-29	100 m buffer distance should be maintained from forest boundaries.	-Not applicable-	
G-30	Consent from Kerala State Pollution, Control Board under Water and Air (Acts) should have been obtained before initiating mining activity.	Consent from Kerala State Pollution Control Board under Air and Water Act is obtained and is valid till 16.03.2023	
G-31	All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.	Directorate General of Mines Safety has given permission to deploy Heavy Earth Moving Machinery for quarrying under Regulation 106(2)(b) of Metalliferous Mines Regulations 1961	

Item No.	Stipulations in EC	Status of Compliance	Remarks
G-32	In the case of any change in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/ impacts as assessed, based on which only the E.C is issued. The projects would require a fresh appraisal by this authority, for which the proponent shall apply and get the approval of the Authority	Will approach the Authority when applicable	
G-33	The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act,1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Any additional safeguard measures issued shall be followed and implemented	
G-34	The stipulations by Statutory Authorities under different Acts and Notifications should be complied with including the provisions of Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986,the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	All stipulations are being complied with	

Item No.	Stipulations in EC	Status of Compliance	Remarks
G-35	<p>The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.</p>	- Complied with -	
G-36	<p>A copy of the clearance letter shall be sent by the proponent to concerned GramaPanchayat/District Panchayat/Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental clearance shall also be put on the website of the company by the proponent.</p>	<p>Environment Clearance letter along with the conditions stipulated is submitted to Village panchayat and other concerned agencies</p>	

Item No.	Stipulations in EC	Status of Compliance	Remark
G-37	The proponent shall submit half yearly reports on the status of compliance of the stipulated EC Conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the Status of compliance of the stipulated EC conditions, including results of monitored data on their website. It shall Sent to the Regional office of MoEF., Govt. of India and also to the STATE Environment Impact Assessment Authority (SEIAA) Office	Compliance reports (April to September and from October to March of every year) shall be sent to SEIAA –Kerala Office and Regional office of MoEF –Bangalore regularly and uploaded on our Company website	
G-38	The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ftx 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40.	Details are displayed in front of Office	
G-39	The proponent should provide notarized affidavit (indicating number and date of environmental clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously fallowed	-Complied-	
G-40	No change in mining technology and scope of working should be made without prior approval of the SIEAA, No further expansion or modification in the mine shall be carried out without prior approval of the SIEAA, as applicable.	-Shall be complied-	
G-41	The project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	There is no natural water source within the lease area.	

Item No.	Stipulations in EC	Status of Compliance	Remark
G-42	Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended places loading and unloading points & transfer point to reduce fugitive emissions.	Monitoring of Ambient Air Quality for fugitive emissions is being carried out regularly.	
G-43	The Top soil, if any, shall temporarily to be stored at earmarked sites, only. For the topsoil shall be used for land reclamation and plantation. The over burden generated during the mining operations shall be stacked at earmarked dump site only. the maximum height of the dumps shall not exceed 8 m and width 20m and overall slope of the dumps shall be maintained to 45°. the OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.	-No top soil will be removed during the first five years of development and production program however whenever top soil is removed shall be kept separately and utilized as specified	
G-44	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilizing for watering the mine area. Roads, green belt development t etc. the drains shall be regularly desilted particularly after monsoon and maintained properly.	Catch drains are provided to arrest the eroded material and are being de-silted before the onset of monsoon are as end when they are filled	

Item No.	Stipulations in EC	Status of Compliance	Remark
G-45	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM ₁₀ and PM _{2.5} such as haul road, Loading and unloading points and transfer points-it shall be ensured that the ambient air quality parameters conform to the norms prescribed by the central pollution control board in this regard.	One water tanker of 10 K capacity is kept in quarry area and water is sprinkled on regular basis besides the automated sprinklers to keep the haulage road wet to contain production/propagation of dust during vehicle movement	
G-46	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained	Dust extractors are provided to contain dust during drilling operations and haul roads are regularly watered to avoid dust generation	
G-47	Measures should be taken for control of noise levels below 85 dBA in work environment.	Proper maintenance of machineries/vehicles are practiced to minimize the noise levels. Latest Noise level monitoring results are enclosed as Annexure II	
G-48	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a senior Executive, who will report directly to the head of the organization .	Environmental Management cell is constituted under the Mines Manager who will report directly to the Managing Director (Owner)	
G-49	The funds earmarked for environmental protection measures and CSR activities should be kept in separate account and should be reported to the state environment authority(SEIAA) office	The funds are provided as and when required for CSR activities maintaining of separate account shall be done in due course	
G-50	The Regional Office of MOEF&CC Located at Bangalore shall extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data /information /monitoring reports	-Shall be complied-	
G-51	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal , if preferred ,within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act ,2010	-Will comply with any outcome of NGT	

Item No.	Stipulations in EC	Status of Compliance	Remark
G-52	Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of the this clearance and attract action under the provisions of Environment (protection)Act,1986	No data is concealed and no false/fabricated data is furnished to the authority as per our knowledge and belief	
G-53	The SEIAA may revoke or suspend the order, for on implementation of any of the specific or this implementation of any of the above conditions is not satisfactory .The SEIAA reserves the right to alter /modify the above conditions or stipulate any further conditions in the interest of environment protection.	Will accept in case of any such violations of the provision of EC	
G-54	The above conditions shall prevail notwithstanding anything to the contrary in consistent ,or simplified, contained in any other permit, license on consent given by other authority for the same project .	-Not applicable-	
G-55	This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala whichever is earlier.	-Accepted-	
G-56	The Environmental Clearance will be subject to the final Order of the courts of the in any pending litigation related to the land or project, in any court of law.	-Will abide by the verdict -	
G-57	The mining operation shall be restricted to above ground water table and it should not intersect ground water table.	The mining activities are restricted to the area of above general ground water table and will not intersect Ground water table	

G-58	All vehicles used for transportation and within the mines shall have PUC certificate from authorized pollution talking Centre .washing of all vehicles shall be inside the lease area ‘	This is strictly being implemented	
G-59	Project proponent should obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project.	Shall be obtained whenever necessary	
G-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.	Water quality is regularly monitored and samples are analyzed in NABL approved laboratory. The results are enclosed for reference.	
G-61	Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and corrective measures, if needed.	Occupational health surveillance is being carried out.	

HANNA ROCK PRODUCTS (Pvt.) LIMITED
 Meenkunnam, South Marady,
 Muvattupuzha Taluka,
 Ernakulam District
 Tel. No. +91 9544505901, 03 & 04

DETAILS OF EXPENDITURE UNDER CORPORATE SOCIAL RESPONSIBILITY FROM APRIL 2021 TO SEPTEMBER 2021

1.	01.04.2021	Road concrete work	56,800	
2.	07.04.2021	Providing masks & sanitizer for villagers	18,800	
3.	15.04.2021	Paristhiti Samrakashana Vedi	2,000	
4.	01.05.2021	Ashraya Charity , Koothattukulam	3,000	
5.	07.05.2021	Medical c/o P.R.Ramachandran	50,000	
6.	08.05.2021	Medical , Kottayam Medical College c/o Jimmy Peringazha	30,000	
7.	14.05.2021	Covid 19 Medical care centre , Arakuzha Grama Panchayath c/o Sabu Puthoor	50,000	
8.	23.05.2021	Ammavan Jose, Maniyankallu, S. Marady P.o Medical	10,000	
9.	24.05.2021	COVID 19 MEDICINE KIT SUPPLY	12,000	
10.	27.05.2021	Covid 19-Kit supply	15,000	

		c/o Amal Thirumeni, S.Marady		
11.	18.05.2021	Chief Ministers Relief Fund for Covid Vaccine Challenge	2,50,000	
12.	31.05.2021	Rain Coats supply	35,000	
13.	02.06.2021	Study Materials - T.V ,Smart Phone, Tab etc for Online classes c/o Sabu Puthoor Arakuzha Grama Panchayath	1,00,000	
14.	02.06.2021	Study Materials - T.V ,Smart Phone etc for Online classes c/o Arun .N Jilla Panchayath	50,000	
15.	19.06.2021	Medical support for Dialysis Patients c/o Mathrusamithi Erattayanikunnu	25,000	
16.	21.06.2021	Marykutty ,Mayladumpara, JC, Meenkunnam	7,000	
17.	22.06.2021	Study Materials - for Online classes c/o Aji Anikkadu	3,500	
18.	30.06.2021	Study Materials -Smart Phone, for Online	7,000	
19.	31.07.2021	Saleem Karukapilly , Medical	3,000	
20.	08.07.2021	Study Materials -Smart Phone, for Online	15,000	
21.	14.07.2021	Aliayamma , Nirappel S.Marady Medical	7,000	
22.	15.07.2021	Reshma mol, S.Marady college fee for Nursing Study	10,000	

23.	16.07.2021	Kochutty Baiju, Jawahar Colony, Meenkunnam Medical	25,000	
24.	17.07.2021	Aashrayam Charitable Society Providing food for cancer patient Med. Col, Kottayam	7,000	
25.	19.07.2021	Medical –Al –Azhar Medical Centre Jose Marady	10,000	
26.	21.07.2021	Sebastain , Maniyankallil, Jawahar Colony, Meenkunnam	25,000	
27.	22.07.2021	Paristhithi Samrakshana Vedi	2,000	
28.	29.07.2021	Covid Care centre C/o Jikku	5,000	
29.	29.07.2021	Covid Care Centre & Community Kitchen C/o Marady Garma Panchayath	1,00,000	
30.	30.07.2021	College fee for Nursing Student Durga Murali S.Marady	7,500	
31.	30.07.2021	Sudheesan P Medical- Med. Collge ,Eranakulam	14,000	
32.	02.08.2021	Collage fee for Nithin Jeev	20,000	
33.	06.08.2021	Saju Kallungal, S. Marady P.O	5,000	
34.	09.08.2021	Sneha Varghese, Medical	3,000	
35.	10.08.2021	Mask , Sanitizer etc to Villagers	10,000	
36.	17.08.2021	Marriage , Sneha , c/o Aji Anikkadu	10,000	

37.	17.08.2021	Onam Celebrations village club	30,000	
38.	19.08.2021	Medical-Rathnamma , Maniyankkallu	5,000	
39.	27.08.2021	Medical – MC Kottayam , Siju rpm	50,000	
40.	28.08.2021	Covid kit suuply , Biju Mnkl/	3,000	
41.	03.09.2021	Study Materials –Kochutty Mnkl	15,000	
42.	03.09.2021	Medical – Kidney patient c/o Prasad Kunjumon	15,000	
43.	10.09.2021	Study Materials for Online class T.V	10,000	
44.	11.09.2021	Aashrayam Charitable – Providing food cancer ward Medical College Kottayam	8,000	
45.	16.04.2021	Sneha Varghese, Medical	4,000	
46.	17.09.2021	Snehakood Charitable , Rajan	2,000	
47.	18.09.2021	CSR Fund –Arakuzha Grama Panchayath	75,000	
48.	20.09.2021	Aashraya Charity , Koothattukulam	3,000	
49.	25.09.2021	Binishlal , Medical / SBI /PKD	10,000	
50.	29.09.2021	Biju , E. Marady- New house 800sqft	2,33,300	
		Total A	14,66,900.00	

Financial assistance extended to the house owners for repair & renovation of their houses around quarry area			
1.	Jose , Aryachalil , Meenkunnam	25000	ARAKUZHA VILLAGE
2.	K.K.Ravi, Kapilamkuzhiyil , Meenkunnam	25000	ARAKUZHA VILLAGE
3.	Binu James , Maniyankallil, Meenkunnam	25000	ARAKUZHA VILLAGE
4	K.N.Baiju, Kappilamkuzhiyil, Meenkunnam	25000	ARAKUZHA VILLAGE
5	M.J.Sebastain, Maniyankallil , Meenkunnam	25000	ARAKUZHA VILLAGE
6	K.K.Biju,Kapilamkuzhiyil Meenkunnam	25000	ARAKUZHA VILLAGE
7	Saju Devasya, Kannamkallel	25000	ARAKUZHA VILLAGE
8	Eldhose. A , Jawahar col, Meenkunnam	25000	ARAKUZHA VILLAGE
	Total (B)	2,00,000.00	
	GRAND TOTAL (A+B)	16,66,900.00	



POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY

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ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/AMB/RT/9308/2021
Mr. Shans Paul Managing Director M/s Hanna Rock Product Pvt.Ltd, Sattalite Parathittal Road South Marady P.O. Muvattupuzha.	Date of issue:	18/12/2021
	Date of monitoring	13/12/2021
	Date of sample received:	14/12/2021
	Date of analysis	14/12/2021
	Monitoring Location	Quarry Owned by M/s Hanna Rock Product Pvt.Ltd, Survey No:s.80/1A,2,3,4,5,6,7,8,9 ,10,11,12,13,14,15,16, 17,18,19,20,21,79/2 Panchayath :Arakuzha Taluk : Muvattupuzha Village : Arakuzha District :Ernakulam, Kerala
	Sample description	Ambient air – Near East side boundary
	Sample code given by client	Nil

SL NO	PARAMETERS	TEST METHOD	RESULTS	Limit as per NAAQS
01	Particulate Matter (PM ₁₀)	IS 5182 Part 23 2006 RA 2012	58.4 µg/m ³	100 µg/m ³
02	Particulate Matter (PM _{2.5})	CPCB	23.8 µg/m ³	60 µg/m ³
03	Sulphur dioxide	IS 5182 Part 2 2001 RA 2017	4.3 µg/m ³	80 µg/m ³
04	Nitrogen dioxide	IS 5182 Part 06 2006 RA2017	2.8 µg/m ³	80 µg/m ³

Note: NAAQS-National Ambient Air Quality Standards

* End of the Report*

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

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TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/9310/2021	
Mr.Shans Paul Manging Director M/s Hanna Rock Product Pvt.Ltd, Sattalite Parathittal Road South Marady P.O. Muvattupuzha	Date of issue:	18/12/2021	
	Date of monitoring	13/12/2021	
	Monitoring Location	Quarry Owned by M/s Hanna Rock Product Pvt.Ltd, Survey No:s.80/1A,2,3,4,5,6,7,8,9 ,10,11,12,13,14,15,16, 17,18,19,20,21,79/2 Panchayath :Arakuzha Taluk : Muvattupuzha Village : Arakuzha District :Ernakulam, Kerala	
	Sample Description	Ambient Sound Level -East Side	
HOURLY INTERVAL	RESULT	HOURLY INTERVAL	RESULT
06.00 AM-07.00 AM	43.5 dB (A)	11.00 PM-12.00AM	36.5 dB (A)
07.00 AM- 08.00 AM	45.2 dB (A)	12.00 AM-01.00 AM	36.1 dB (A)
08.00 AM- 09.00 AM	46.7 dB (A)	01.00 AM- 02.00 AM	37.2 dB (A)
09.00 AM -10.00 AM	48.8 dB (A)	02.00 AM-03.00 AM	36.4 dB (A)
10.00 AM-11.00 AM	50.3 dB (A)	03.00 AM-04.00 AM	36.9 dB (A)
11.00 AM-12.00 PM	52.4 dB (A)	04.00 AM -05.00 AM	37.2 dB (A)
12.00 PM-01.00 PM	52.8 dB (A)	05.00 AM-06.00AM	37.8 dB (A)
01.00 PM-02.00 PM	54.6 dB (A)		
02.00 PM-03.00 PM	52.2 dB (A)		
03.00 PM-04.00 PM	51.8 dB (A)		
04.00 PM-05.00 PM	50.4 dB (A)		
05.00 PM-06.00 PM	49.6 dB (A)		
06.00 PM-07.00 PM	47.7 dB (A)		
07.00 PM-08.00 PM	45.6 dB (A)		
08.00 PM-09.00 PM	43.2 dB (A)		
09.00 PM-10.00 PM	39.8 dB (A)	LDay	52.1 dB (A)
10.00 PM-11.00 PM	38.4 dB (A)	LNight	38.4 dB (A)

Limits: Industrial Area Day Time-75dB(A),Night Time- 70dB(A),Commercial area Day Time -65 dB(A),Night Time 55dB(A),
Residential area Day Time -55 dB(A),Night Time -45dB(A),Silence zone day time-50dB(A),Night time-40dB(A)
Day Time from 06.00 am to 10.00 pm & Night Time from 10.00 pm to 06.00 am

*End of the Report *

For Poluchem Laboratories (P) Ltd.



POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com

ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Page 01 of 01

Ref.No. PL/RT/OW/9311/2021
Name & address of customer

Date of Issue: 18/12/2021
: M/s Hanna Rock Product Pvt.Ltd,
Survey No:s.80/1A,2,3,4,5,6,7,8,9,
10,11,12,13,14,15,16,
17,18,19,20,21,79/2
Panchayath: Arakuzha
Taluk: Muvattupuzha
Village: Arakuzha
District: Ernakulam, Kerala

Sample drawn by
Sample description
Location of sampling
Date of sample collected
Date of analysis started
Date of completion of analysis

: Poluchem Laboratory Sample Collector
: Drinking Water
: Open Well-Out Side-North West Side
: 13/12/2021
: 14/12/2021
: 17/12/2021

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983 RA2017	5 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	BDL	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	6.62	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	98 mg/l	500 mg/l
Total Hardness as CaCO ₃	IS 3025 (P) 21 – 1983 RA2014	36.2 mg/l	200 mg/l
Total Alkalinity as CaCO ₃	IS 3025 (P) 23 – 1986 RA2014	27.8 mg/l	200 mg/l
Residual Chlorine	IS 3025 (P) 26 – 1986 RA2014	BDL	0.2 mg/l
Chloride as Cl ⁻	IS 3025 (P) 32 – 1988 RA2014	22.8 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	8.82 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	3.4 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.32 mg/l	0.3 mg/l
Sulphate as SO ₄	IS 3025 (P) 24 – 1986 RA2009	5.8 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA 2013	BDL	1.0 mg/l
Zinc as Zn	IS 3025 (P)49 – 1994 RA2014	BDL	5 mg/l
Manganese as Mn	IS 3025(P) 59– 2006 RA2017	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41– 1992 RA2014	BDL	0.003 mg/l
Lead as Pb	IS 3025(P) 47– 1994 RA2014	BDL	0.01 mg/l
Coliforms(MPN/100ml)	IS 1622: 1981 RA 2009	23	Absent
Ecoli (Present or Absent/100ml)	IS 1622: 1981 RA 2009	Absent	Absent

Note: BDL – Below Detection Level

For Poluchem Laboratories (P) Ltd.

* End of the report*

Authorized signatory

SREEJA PUNEON
QUALITY MANAGER

The above results are related only to the sample submitted for analysis. This test report shall not be used for any other purpose without the written approval of the laboratory.



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TEST REPORT

Client Name & Address	Certificate No:	PL/RT/SO/9309/2021
Mr. Shans Paul Manging Director M/s Hanna Rock Product Pvt.Ltd, Sattalite Parathittal Road South Marady P.O. Muvattupuzha	Date of issue:	18/12/2021
	Date of monitoring	13/12/2021
	Monitoring Location	Quarry Owned by M/s Hanna Rock Product Pvt.Ltd, Survey No:s.80/1A,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16, 17,18,19,20,21,79/2 Panchayath : Arakuzha Taluk : Muvattupuzha Village : Arakuzha District : Ernakulam, Kerala
	Sample Description	Soil
Parameter	Test Method	Results
pH	IS 2720(Part25)-1973	6.42
Electrical Conductivity	IS 14767:2000RA2016	110 μ S/cm
Potassium as K	EPA 3050 B	58 mg/kg
Phosphorus as P	IS 10158 :1982 RA 2014	32 mg/kg
Nitrogen as N	IS 14684: 1999 RA 2014	60 mg/kg
Organic Carbon	IS2720(Part 22)-1972	0.69 %
Calcium	EPA 3050 B	36 mg/kg
Magnesium	EPA 3050 B	24 mg/kg
Chloride	UEPA9212	78 mg/kg
Sulphate	IS 2720 Part27:1977	32 mg/kg

For Poluchem Laboratories (P) Ltd.

Authorized Signatory.

SREENIVAS
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD

End of the Report

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