

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: 08.09.2020

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 October 2019 to March 2020 for your ready reference. It may kindly be noted that the above report have already been sent by email (seacseiaakerala@gmail.com environmentdirector@gmail.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
1.10.2019 to 31.03.2020**

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 pit bottom 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.	This quarry is being worked for more than 6 years all the approach road are made with interlocking bricks and edges are tarred.	
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 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.	All 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	As the quarry work is being carried out from top to bottom, the present pit bottom is kept open for rain and garland drain are provided for 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 (October 19 to March 2020) as Annexure I	
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 Ref. Annexure II	
G-12	Quarrying activities should be limited to day time as per KSPCB guidelines.	Quarrying operations is restricted to day light Morning 8:00 AM to 5:00 PM	
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 and also by restricting the number of holes blasted in each 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 interlocking bricks 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 (particularly on top benches) 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 towards the pit bottom and collected. Other areas are provided with drains to divert the water to the main 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 working area 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	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.	- Complied with -	
G-36	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.	Environment Clearance letter along with the conditions stipulated is submitted to Village panchayat and other concerned agencies	

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 (www.hannarock.com)	
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. Latest results are enclosed as Annexure III	
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 desilted before the onset of monsoon also as and 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 is 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 checking 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 refer Annexure III	
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.	

ANNEXURE-1

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
OCTOBER 2019 TO MARCH 2020

1	03.10.2019	Sarana Old age Home , KCY	5,00.00	
2	03.10.2019	Suwarnamol P. (College Tuition fee	5,250.00	
3	05.10.2019	Road Maintenance (Ward 11- chettaipeedika) Yakkoob	10,000.00	
4	07.10.2019	Baby Parakkattil (LF Angamaly patien-t Medical help)	5,000.00	
5	12.10.2019	Environmental Club	2,000.00	
6	17.10.2019	Providing Dish TV & ace: to Buds school East Marady	3,800.00	
7	19.10..2019	Sneha Jimmy, Nursing Student (College Fee- c/o Dean Kuriakose M.P	10,000.00	
8.	19.10.2019	Aathira Sasi, Chirakkal Puthenpura (Financial help for marriage)	10,000.00	
9	25.10.2019	Honai	10,000.00	
10	28.10.2019	Aalfeena Tomy, Vellapillil , Meenkunnam(Medical -RCC)	10,000.00	
11	01.11.2019	Saji, Meenkunath, Aaroor, Meenkunnam P.O (House construction)	10,000.00	
12	05.11.2019	Suwarnamol P. South Marady (College Tuition fee	5,250.00	
13	09.11.2019	Aasrayam Charitable Trust (Providing food for Cancer patients at Med. Col. Ktm	8,000.00	
14	15.11.2019	Salim Karukapilliy(Medical	10,000.00	

15	15.11.2019	Soman , Maniyankllil, S.Mardy P.O (Agricultural)	20,000.00	
16	1.11.2019	Gov.U.P School, Parathitta (Food exp for KG students Sep/Oct/ Nov-2019	30,000.00	
17	19.11.2019	Libin Mathews , South MaradyP.O, (Medical)	25,000.00	
18	21.11.2019	Suwarnamol P. South Marady (College Tuition fee	5,400.00	
19	21.11.2019	MadhyaVirudha Samithi	5,000.00	
20.	22.11.2019	Thatwamasi , Ayyappa Seva Sangham, East Marady	10,000.00	
21.	29.11.2019	c/o Sonu , South Mardy P.O , Medical help for accident case/	5,000.00	
22..	04.12.2019	Kudumbasree	5,000.00	
23..	13.12.2019	St.Mary's HSS , Arakuzha (Sahapdikkoru Snehaveedu)	5,000.00	
24.	13.12.2019	Ravi, Kapiilamkuzhiyil, Meenkunnam P.O (Medical –Accident case /Son Shibu)	25,000.00	
25.	13.12.2019	Suwarnamol P. ,Kummaliyl,S.Marady P.O (College Tuition fee	5,250.00	
26.	14.12.2019	Street Light Maintenance , Ward 11 ARA	10,000.00	
27.	19.12.2019	Babu P, Menkunnam ,(House maintenance)	25,000.00	
28.	19.12.2019	Saju.T.K, Kallungal House, East Marady.P.O (Medical)	4,000.00	
29.	21.12.2019	Sini Jose, Ponkallungil House, Meenkunnam P.O (Medical)	10,000.00	
30.	21.12.2019	Murali.M.N, South Marady P.O, (Medical)	10,000.00	
31.	23.12.2019	Gov.VHSS, S.Marady (NSS Camp, Arur). Adv.Sameer	6,000.00	
32.	23.12.2019	X-Mas Celebrations Cake supply	1,54,000.00	

33.	24.12.2019	Paristhithi Samrakshana Vicharavedhi	2,000.00	
34.	28.12.2019	X-Mas celebrations GVHSS , E. Marady	25,200.00	
35	31.12.2019	X –Mas Cel . for 25 Students	33,600.00	
36.	03.01.2020	M.A.Faisal, S/o Abdhul Majeed, Mariyil Puthenpura , Muvattupuzha (Financial support for daughters marriage)	10,000.00	
37	04.01.2020	Rejukumar.C, (AKBSS) Geetha Sastra School	2000.00	
38.	04.01.2020	Suwarnamol P. (College Tution fee	5,250.00	
39.	04.01.2020	CSI Mission Church , Fund for Orphanage	25,000.00	
40.	11.01.2020	Aasrayam Charitable Trust (Providing food for Cancer patients at Med. Col. Ktm	8,000.00	
41.	11.01.2020	Sabu Joseph, Soth MaradyP.O (Medical Help for kidney patient)	10,000.00	
42.	13.01.2020	Medical help for RCC patients c/o Aji Kareem, East Marady P.O	25,000.00	
43.	14.01.2020	Sinu Kannan	50,000.00	
44.	14.01.2020	Rfeeq c/o Adv.Monai	10,000.00	
45.	18.01.2020	GVHSS East Marady (Providing food for KG students)	3,000.00	
46.	20.01.2020	Sneehakood Charitable Society	3,000.00	
47.	23.01.2020	Aashraya Charitable, Koothattukulam	5,000.00	
48.	27.01.2020	Aji , East Marady(Medical help AIMS)	5,000.00	
49.	27.01.2020	Kerala Koumudy (ssupply of dailt subscription to Village schools)	10,000.00	
50.	01.02.2020	Saji Alias, Aaroor Top, Meenkunnam	10,000.00	
51..	02.02.2020	Providing water connection arrangments c/o Marady Grama Panchayath	16,000.00	
52.	02.02.2020	Sree Subhramanya Swami Temple Palakuzha	5,000.00	

53.	03.02.2020	Sadhu Jana Seva Sangam	5,000.00	
54.	05.02.2020	Suwarnamol P. (College Tution fee	5,250.00	
55.	05.02.2020	S.N.D.P Arakuzha Branch	5,000.00	
56.	06.02.2020	Raju , Karkkunel (Medical)	5,000.00	
57.	06.02.2020	Shini Biju , Kuzhikottayil, South Marady (Medical)	3,000.00	
58.	06.02.2020	Gettaha Mohanan, Nirappel House, Piramadam P.O (Medical)	5,000.00	
59.	08.02.2020	Therasa Bhavan , Orphange & Old age	3,000.00	
60.	09.02.2020	Gov.U.P School, Parathitta (Food exp for KG students December 2019	10,000.00	
61.	07.02.2020	Ajitha Benny, Meenkunnam P.o (Medical) c/o Rani Jaison Member	10,000.00	
62.	11.02.2020	Paul (Medical /Treatment Fund) S.Marady	5,000.00	
63.	11.02.2020	Jasmine P.S., Puthenpallikunnel (Educational / collge Fee)	2,000.00	
64.	13.02.2020	Krishnankutty (Medical/Kidny Patient) (CPIML)	3,000.00	
65.	15.02.2020	Bhaskaran & Devasya (Medical) c/o Aji Kareem East Marady.P.O	10,000.00	
66.	15.02.2020	Women & Child care Police Staion , Mvpa Spon: chairs & table	10,000.00	
67.	18.02.2020	GVHSS East Marady (Providing food for KG students)	3,000.00	
68.	20.02.2020	Gov.Up School, Parathitta (Food exp - January 2020	10,000.00	
69.	22.02.2020	Providing Water connections for Muthukal Colony c/o Arakuzha Grama Panchayath	39,190.00	
70.	26.02.2020	Marady Sree Bhagavathy Temple	10,000.00	

71.	02.03.2020	Gov.Up School, Parathitta (Food exp - February 2020	10,000.00	
72.	03.03.2020	Aasrayam Charitable Society	6,000.00	
73.	03.03.2020	Suvarnamol.P Kummaliyl,S.Marady P.O (College Tuition fee	5,250.00	
74.	07.03.2020	Aruvikkal Devi Temple	25,000.00	
75.	08.03.2020	KSEB Workers welfare Fund	5,000.00	
76.	08.03.2020	Kerala Dhalith Samrakshana Samithi	3,000.00	
77.	09.03.2020	Gov.U.P.School , Soth Marady Annual day/ Endowment /prize Distri	10,000.00	
78.	27.03.2020	Covid care centre / Providing food / medicine etc	55,165.00	
		Total A	9,85,355.00	

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)	200000.00	
	GRAND TOTAL (A+B)	11,85,355.00	



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

Client Name & Address	Certificate No:	PL/AMB/RT/5247/2020
Mr.Shans Paul Manging Director M/s Hanna Rock Product Pvt.Ltd, Sattalite Parathittal Road South Marady P.O. Muvattupuzha.	Date of issue:	21/07/2020
	Date of monitoring	14/07/2020 10.00 Hrs to 15/07/2020 10.00 Hrs
	Date of sample received:	15/07/2020
	Date of analysis	16/07/2020
	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	42.3 µg/m ³	100 µg/m ³
02	Particulate Matter (PM _{2.5})	CPCB	19.4 µg/m ³	60 µg/m ³
03	Sulphur dioxide	IS 5182 Part 2 2001 RA 2017	1.6µg/m ³	80 µg/m ³
04	Nitrogen dioxide	IS 5182 Part 06 2006 RA2017	<1 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	<p>For and on behalf of POLUCHEM LABORATORIES (P) LTD.</p>  AUTHORIZED SIGNATORY
---	---

SREEJA RAMESH
Quality Manager
Poluchem Laboratories (P) Ltd



POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY

PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

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

ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/5248/2020
<p>Mr.Shans Paul Manging Director M/s Hanna Rock Product Pvt.Ltd, Sattalite Parathittal Road South Marady P.O. Muvattupuzha.</p>	Date of issue:	21/07/2020
	Date of monitoring	14/07/2020 10.00 Hrs to 15/07/2020 10.00 Hrs
	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 (Leq)
Monitoring Location	Monitoring Time	Results
Near East side boundary	12.00 Hrs	48.6 dB (A)
	13.00 Hrs	47.5 dB (A)
	14.00 Hrs	47.6 dB (A)
	15.00 Hrs	44.2 dB (A)
	16.00 Hrs	43.1 dB (A)
	17.00 Hrs	41.2 dB (A)
	18.00 Hrs	39.8 dB (A)
	19.00 Hrs	37.4 dB (A)
	20.00 Hrs	36.5 dB (A)
	21.00 Hrs	35.4 dB (A)
	22.00 Hrs	33.2 dB (A)
	23.00 Hrs	34.1 dB (A)
	00.00 Hrs	33.8 dB (A)
	01.00 Hrs	34.2 dB (A)
	02.00 Hrs	35.4 dB (A)
	03.00 Hrs	37.5 dB (A)
	04.00 Hrs	36.3 dB (A)
	05.00 Hrs	39.5 dB (A)
	06.00 Hrs	41.2 dB (A)
	07.00 Hrs	42.3 dB (A)
	08.00 Hrs	43.4 dB (A)
	09.00 Hrs	44.2 dB (A)
	10.00 Hrs	45.6 dB (A)
	11.00 Hrs	47.4 dB (A)
Leq (Day time)		47.4 dB (A)
Leq (Night time)		33.5 dB (A)

*End of the Report *

For Poluchem Laboratories (P) Ltd.

Authorized Signatory

SREEJA RAMESH

Quality Manager

Poluchem Laboratories (P) Ltd.



POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY

PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

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

ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

CERTIFICATE OF ANALYSIS

Ref No: PL/AMB/RT/5250/2020 Date of Issue: 20/07/2020

Client: M/s. Hanna Rock Products, Arakuzha, Muvattupuzha, Ernakulam

Test Certificate No. : 5250/2020 Date of monitoring: 14/07/2020

Description of Sample: Ambient Air & Sound Level Monitoring

Sl.No.	Parameters.	Unit.	Value Reported	Limit
01.	Suspended Particulate Matter	$\mu\text{g}/\text{m}^3$	98.6	600
02.	Particulate Matter (PM ₁₀)	$\mu\text{g}/\text{m}^3$	51.2	100
03.	Ambient Sound level at Day Time	dB (A)	50.2	55
04.	Ambient Sound level at Night Time	dB (A)	40.3	45

Note: 01 . SPM measured between 3m and 10 m from the Stone Crusher

02. PM₁₀ measured at the boundary.

03. Ambient sound level measured at a distance of 1 M away from the boundary.

For Poluchem Laboratories (P) Ltd.

Authorized Signatory.

SREEJA RAMESH
Quality Manager
Poluchem Laboratories (P) Ltd.



POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY

PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

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

ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Page 01 of 02

Ref.No. PL/RT/OW/5249/2020

Date of Issue: 21/07/2020

Name & address of customer

: Mr.Shans Paul
Manging Director
M/s Hanna Rock Product Pvt.Ltd,
Sattalite Parathittal Road
South Marady P.O.
Muvattupuzha.

Project Site

: 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

Location of sampling

: Open Well-Out Side-North West Side

Date of sample collected

: 15/07/2020

Date of sample received

: 15/07/2020

Date of analysis started

: 16/07/2020

Date of completion of analysis

: 20/07/2020

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983 RA2017	5 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	1 NTU	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	5.68	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	63.5 mg/l	500 mg/l
Total Hardness as CaCO ₃	IS 3025 (P) 21 – 1983 RA2014	18.7 mg/l	200 mg/l
Total Alkalinity as CaCO ₃	IS 3025 (P) 23 – 1986 RA2014	13.5 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	19.4 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	5.12 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	1.36 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.24 mg/l	0.3 mg/l
Sulphate as SO ₄	IS 3025 (P) 24 – 1986 RA2009	4.25 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA 2013	BDL	1.0 mg/l

Note : BDL – Below Detection Level

For Poluchem Laboratories (P) Ltd.

Authorized signatory

SPECIAL RAMESH



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

Page 02 of 02

Continuation of Test Certificate No: 5249/2020

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

Note : BDL - Below Detection Level

MICROBIOLOGY ANALYSIS

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

For Poluchem Laboratories (P) Ltd.

Authorized signatory

* End of the report*

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