From: Rajesh Kumar Jha
To: rosz.bng-mefcc@gov.in

Cc: seacseiaakerala@qmail.com; Shalin Shah; Manoranian Tripathy; Harsh Yaday; Hebin Chenthamarakshan;

Jesse Benjamin Fullonton

Subject: EC No. 1200/EC2/2018/SEIAA dated 01.03.2019 - Half Yearly Compliance Report - Oct 2019 to Mar 2020 -

Reg.

Date: 14 May 2020 16:43:44
Attachments: pastedImagebase640.png

EC No.1200 EC2 2018 SEIAA dated 01.03.2019-Half Yealy Compliance Report-Oct19-Mar20.pdf

#### Dear Sir/Madam,

This has reference to the Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA issued on 3<sup>rd</sup> March 2019 by the State Environmental Impact Assessment Authority (SEIAA), Kerala for our Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.

The Half Yearly Compliance Report (HYCR) of the conditions stipulated in the EC for the period October 2019 to March 2020 is attached; for record and reference please.

You are requested to kindly acknowledge the receipt of the same.

Thanks & Regards,

Rajesh Jha MD & CEO Adani Vizhinjam Port Pvt. Ltd.

2<sup>nd</sup> Floor, Vipanchika Tower, PO-Thycaud, Trivandrum- 695014, Kerala, India Direct Line: 0471 277 2116 | <a href="https://www.adani.com">www.adani.com</a>





AVPPL/MoEF/2020-21/1117

Date: 07th May 2020

To.

Additional Principal Chief Conservator of Forests (C), Ministry of Environment Forest and Climate Change (MoEF&CC), Regional Office (Southern Zone), Kendriya Sadan, IVth Floor, E&F Wings, 17th Main Road, IInd Block, Koramangala, Bangalore-560034

rosz.bng-mefcc@gov.in

Ph: 080-25635901

Subject:

Submission of Half Yearly Compliance Report (HYCR) to Conditions of Environmental Clearance (EC) for the Period October 2019 to March

2020 - Reg.

Reference: EC for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala by Mr. Rajesh Jha, Chief Executive Officer, M/s Adani Vizhinjam Port Private Limited, No. 1200/EC2/2018/SEIAA dated 01.03.2019

Dear Sir,

(EC) Order This reference to the Environmental Clearance No. 1200/EC2/2018/SEIAA issued on 3rd March 2019 (vide reference cited) by the State Environmental Impact Assessment Authority (SEIAA), Kerala for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.

Adani Vizhinjam Port Private Limited 2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud Thiruvanathapuram Kerala-695014



The compliance report of the conditions stipulated in the cited reference for the half yearly period from October 2019 to March 2020 is enclosed herewith for record and reference.

You are requested to kindly acknowledge the receipt of the same.

Thanking you.

Yours Sincerely Rajesh Jha

CEO - Authorized Signature

Enclosed: As mentioned above

TRIVANDRUM

Copy to:

State Environment Impact Assessment Authority (SEIAA), K.S.R.T.C Bus

Terminal Complex, 4th Floor, Thampanoor, Thiruvananthapuram, Kerala

### **Building Stone Quarry Project**

Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019

Half Yearly Compliance Report (HYCR) for the Period October 2019 to March 2020

Project Proponent



Adani Vizhinjam Port Private Ltd. (AVPPL)

May 2020



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

120	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020	
S. No.	Conditions	Compliance Status as on March 31, 2020
	· · · · · · · · · · · · · · · · · · ·	fic Conditions
		·
		<ol> <li>The full capacity of Men and Machineries movements completed by 30.06.2019.</li> <li>The approach road work completed by 05.07.2109.</li> <li>The dispatches of boulders started by 07.07.2019.</li> <li>Due to heavy rain the Govt. had given stop memo to suspend the Mining Operation and the dispatches to Vizhinjam were affected up to end of October 2019.</li> <li>Several festivals had also slowed down the work such as Thiruvananthapuram Pongala; where employees would return to their hometowns</li> <li>The production had also been affected due to the situation arising due to COVID-19 pandemic by March 2020.</li> <li>The mining operations were affected and the approved quantity of extraction for 1st year was not achieved.</li> </ol>



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

Compliance Report on Conditions Stipulated in Environmental Clearance (EC) Order No.
1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020

120	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020	
S. No.	Conditions	Compliance Status as on March 31, 2020
		Further permissions will be applied for from SEIAA based on the requirement and environmental assessment.
3	The proponent shall file an affidavit that he will expend Rs. 15 lakhs as a part of CER in consultation with Local Self Government.	Complied  AVPPL have submitted to SEIAA an affidavit dated 08.11.2019 duly signed by the MD and CEO vide letter AVPPL/SEIAA/2019-20/945 dated 15.11.2019 that Rs. 15 Lakhs will be spent as a part of Corporate Environment Responsibility (CER) in consultation with the Local Self Government. A copy of the affidavit and the cover letter is enclosed as Annexure 1.
4	The proponent should follow the closure plans (progressive closure and final closure) as per KMMC Rules.	Will be Complied  AVPPL will follow the closure plans (progressive closure and final closures) as per Kerala Minor Minerals Concession (KMMC) Rules and Mine Closure Plan in the Approved Mining Plan. Approved Mining Plan was submitted along with Half Yearly EC Compliance Report (HYCR) for the period April 2019 to September 2019).  The closure procedure (progressive closure and final closures) shall be documented prior to and division the plantage of the prior.
	2000	during the closure of the mine.
1	A separate environmental	ral Conditions Complied
	management and monitoring cell with qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	A separate Environmental Management And Monitoring Cell (EMMC) with qualified personnel has been set up by AVPPL. The cell is under the control of the Head of Department (HoD), Environment who reports directly to the Chief Executive Officer (CEO), AVPPL. The details of the EMMC was submitted along with HYCR for the period April 2019 to September 2019.
2	Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.	Will be Complied There is already existing plantation along the tar road. AVPPL will plant suitable avenue trees along the safety zones, along the boundary of the quarry and on either side of the internal road. Avenue Planation work will be initiated prior to inception of the upcoming monsoon.
3	Sprinklers shall be installed and used in the project site to contain dust emissions.	Being Complied  Regular water sprinkling through water tankers on haul road and other dust prone areas such



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

Compliance Report on Conditions Stipulated in Environmental Clearance (EC) Order No.
1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020

	U/EC2/2018/SEIAA dated 01.03.20	19 for the Period October 2019 to March 2020
S. No.	Conditions	Compliance Status as on March 31, 2020
		as loading and unloading of minerals is being carried out.
		Water Sprinkling through Tankers
4	Eco-restoration including the	
	mine closure plan shall be done at the own cost of the project proponent	Eco-restoration including Mine Closure Plan is provided in the Approved Mining Plan. Approved Mining Plan was submitted along with HYCR for the period April 2019 to September 2019. The same shall be implemented during the closure procedure at the cost of AVPPL.
5	In view of the deep pits left after	
	the excavation, stacking at maximum top level should be carried out.	, ,
		As per the mine closure plan the pit will be utilized for storing of water as a rainwater harvesting method and will also be induced to sustain the groundwater table. As per the post mining land use, an area of 0.9540 Ha will be used for water pond for storage of water.
6	Corporate Environment Responsibility agreed upon by the proponent should be implemented.	Will be Complied



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

1200	200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020	
S. No.	Conditions	Compliance Status as on March 31, 2020
		activities in line with MoEF&CC Office Memorandum (OM) F.No.22-65/2017-IA.III dated 01.05.2018.
		AVPPL had prepared a plan for the budget of Rs. 15 lakhs and have submitted the same to the Nagaroor Gram Panchayat seeking their confirmation and go ahead for the proposed CER (Proposed plan is enclosed as <b>Annexure 2</b> ). Correspondence to the President of the Nagaroor Gram Panchayat was submitted along with HYCR for the period April 2019 to September 2019. Awaiting official communication from the office of the Gram Panchayat approving the CER activities plan.
		However, considering the requirement of the local people and on request from the local panchayat, AVPPL have taken a decision to supply drinking water to the local people in the vicinity of the project site as a part of CER activity. Work was awarded to a local contractor to supply water through tankers.
		Drinking Water Supply as a part of CER
7	The project proponent shall comply the conditions stipulated	Being Complied  AVPPL are complying with all applicable
	by the statutory authorities concerned	conditions stipulated by respective competent statutory authorities.
8	Tarring /multiple options on the	Complied



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

1200	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020	
S. No.	Conditions	Compliance Status as on March 31, 2020
	access roads shall be undertaken so as to reduce dust pollution during movement of vehicle.	AVPPL have developed a tar road of around 0.9 km from the quarry project site gate to Kadavilla Junction (which is connected to SH46 and onto NH66) for movement of vehicles; thereby reducing the dust pollution.
9	Overhusden materials should be	Tar Road at Project Site
9	Overburden materials should be managed within the site and	Not Applicable The quarry has been mined earlier by another
	used for reclamation of mine pit as per mine closure plan / specific conditions	party and is an already open mine. There is no top soil or overburden available in the quarry. The produced materials are all used for Breakwater Construction at Vizhinjam Port and therefore there is no requirement of dump sites.
10	Height of benches should not	Being Complied
	exceed 5 m, and width should not be less than 5 m, if there is no mention in the mining plan/specific condition.	As per the approved mining plan, bench height and width need to be maintained at maximum of 6.0 m also a 45° pit slope will be maintained; same is being adhered to.
11	Ground level should be fixed in individual cases separately	Complied For every bench, ground level is fixed in MSL as individual cases separately. Surface plan with MSL levels is provided in the Approved Mining Plan. Approved Mining Plan was submitted along with HYCR for the period April 2019 to September 2019.
12	No mining operations should be	Being Complied
	carried out at places having a slope greater than 45.	No Mining operations are being carried out at places having a slope greater than a 45 degrees angle.
13	Acoustic enclosures should have	Not Applicable
	been provided to reduce sound	There is no crusher adjacent to the quarry and



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

	J/EGZ/2016/SEIAA dated 01.03.20	19 for the Period October 2019 to March 2020
S. No.	Conditions	Compliance Status as on March 31, 2020
	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. This condition is applicable only in such cases if a crusher is adjacent to the quarry	the same is not proposed.
14	The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.	Being Complied  All employees are provided with relevant Personal Protective Equipment (PPEs) like Helmets, Shoes, Fluorescent Reflective Jackets, etc.
		The site also observed World Safety Week from 04.03.2020 to 10.03.2020 where awareness was imparted to all the employees about safety including personal safety and importance of PPEs.
		Employees with PPEs
15	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.	Will be Complied Mining operations are being carried out in the top level during the compliance period; garland drainage will be developed as the mining progresses in the lower slopes to channelize storm water.
16	The transportation of minerals should be done in covered trucks to contain dust emissions. The proponent should plant trees at least 5 'times of: the loss: that has been occurred while clearing the land for the project. SEAC	Being Complied The transportation of minerals in trucks is being undertaken covered with tarpaulin cover.



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

	5/202/2010/02://ii/ 00:00 01:05:20	19 for the Period October 2019 to March 2020
S. No.	Conditions	Compliance Status as on March 31, 2020
	should assess the number of trees in each project site before the issuance of EC so as to ensure the promptness in, planting.	Truck with Tarpaulin Cover
		Since this is an existing quarry which was already mined earlier, the quarry is in opened condition. There was no clearing of land for the project and no trees have been cut as there are no trees inside the lease area.
17	Explosives should be stored in magazines in isolated place specified and approved by Explosives Department	Will be Complied As on date, explosives are being procured directly from the approved dealer and not being stored at the project site. However, magazine has been constructed in an isolated area called Chappath; which is 50 km away from the quarry location. Awaiting approval from the Trivandrum District Collector for storage of explosives in the magazine.  AVPPL have obtained permission from Dy. Chief Controller of Explosives, Ernakulum to possess
18	A minimum buffer distance of	and use of the Explosives directly in our Quarry on the basis of Form 22 of Indian Explosives Act, 1884.  Complied



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

120	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020	
S. No.	Conditions	Compliance Status as on March 31, 2020
	100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.	As per the Government of Kerala (GoK) State Gazette Notification G.O. (P) No. 25/2017/ID dated 22.06.2017, permit holder shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 50 m from any residential buildings or from the nearest dwelling unit or other structures.
		Also as per the Consent to Operate (CTO) obtained from KSPCB, quarrying activities are restricted to a distance more than 50 m from the nearby residential buildings.
		Further, DMG had communicated to SEIAA vide its letter No. 9363/M3/2018 dated 23.03.2019 (Annexure 3) that as per Rule 40 1(i) of the KMMC Rules, the lessee is permitted to carry out mining at a distance of 50 m from the residential houses.
		As per the map prepared by the village officer, the nearest house is ~60 m from the boundary of the quarry.
19	50 m buffer distance should be maintained from forest boundaries.	Not Applicable There are no forests in the vicinity of the project site.
20	Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.	Complied CTO has been obtained from Kerala State Pollution Control Board (KSPCB) vide Consent No. PCB/TVM-DO/ICO/QRY/103/2019 dated 05.03.2019 valid up to 27.02.2021. A copy of the same was submitted along with HYCR for the period April 2019 to September 2019.
21	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.	Complied  AVPPL have obtained all applicable statutory clearances from the respective competent authorities. The following clearances have been obtained:



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

	5/102/2010/31/A dated 01:05:20	19 for the Period October 2019 to March 2020
S. No.	Conditions	Compliance Status as on March 31, 2020
		Consent No. PCB/TVM-DO/ICO/QRY/103/2019 dated 05.03.2019 valid up to 27.02.2021  Purchase and Use of Explosives Approval from Petroleum & Explosives Safety Organization (PESO), Ernakulam vide Letter No. E/Misc/Expl dated 27.03.2019  Dangerous and Offensive Trade (D&O) License from Nagaroor Gram Panchayat vide License Number A2.1836\2019 dated 01.04.2019  NoC for Use of Explosives from District Collector, Thiruvananthapuram vide File No.DCTVM/2436/2019-A17 dated 09.05.2019  Approved Mining Plan by District Geologist, Trivandrum vide Letter No. 1716/DOT/ML/18 dated 20.05.2019  Lease Order from DMG vide Letter No. 9363/M3/2018 dated 20.05.2019  Lease Execution from Additional Director of Mining and Geology vide Letter No. 79/2019-20/9363/M3/2018/DMG dated 20.05.2019  Quarrying Lease Registration Agreement in Form H at Chirayinkeezhu Register Office dated 22.05.2019  Copies of the above mentioned approvals were
		submitted along with HYCR for the period April
22	In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the E.C is issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority	Noted for Compliance
23	The Authority reserves the right	Noted



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

-		13 for the Period October 2013 to March 2020
S. No.	Conditions	Compliance Status as on March 31, 2020
	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.	
24	The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	Noted
25	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 State Environment Impact Assessment Authority (SEIAA) office 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	EC for the project was issued on 01.03.2019. Advertisements, that the project has been accorded EC were published within 10 (Ten) days in two widely circulated local newspapers: The Hindu (English) on 09.03.2019 and Mathrubhumi (Malayalam – vernacular language) on 10.03.2019. Also, copy of the EC is available with the SEIAA office and it is also available on the website of the Authority at <a href="https://www.seiaakerala.in">www.seiaakerala.in</a> . Screenshot of the website showing the details of the EC are given in Annexure 4.  Extracts of these newspaper clippings with the advertisements were submitted along with HYCR for the period April 2019 to September 2019.
	and a copy of the same signed in	1 ''



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

120	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020			
S. No.	Conditions	Compliance Status as on March 31, 2020		
	all pages should be forwarded to the office of this Authority as confirmation.	AVPPL/SEIAA/2019-20/731 dated 01.04.2019 was submitted along with HYCR for the period April 2019 to September 2019.		
		The copy of EC is uploaded to the company website: <a href="https://www.adaniports.com/ports-downloads?port=Vizhinjam-Port">https://www.adaniports.com/ports-downloads?port=Vizhinjam-Port</a> Screenshot of the same was submitted along with HYCR for the period April 2019 to September 2019.		
26	The Environmental Clearance shall be put on the website of the company by the proponent.	Complied The copy of EC is uploaded to the company website: <a href="https://www.adaniports.com/ports-downloads?port=Vizhinjam-Port">https://www.adaniports.com/ports-downloads?port=Vizhinjam-Port</a> Screenshot of the same was submitted along with HYCR for the period April 2019 to September 2019.		
27	Proponent shall submit half yearly reports in soft copy and SEIAA will upload it on the website.	Will be Complied Half Yearly Compliance Reports (HYCRs) on the status of compliance of the stipulated clearance conditions are being submitted to all the concerned agencies. As per the Notification of Ministry of Environment and Forests & Climate Change (MoEF&CC) dated 26.11.2018, wherein submission of HYCRs by email/soft copy is declared acceptable, soft copy of HYCR for the period April 2019 to September 2019 has been submitted vide email dated 27.11.2019 (a copy of the email is enclosed as Annexure 5).		
28	The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public	Complied  The details of EC have been displayed at the site next to the entrance of the quarry, visible to the public.		



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020			
S. No.	Conditions	Compliance Status as on March 31, 2020		
		Micaus National County RATES KUMA JAS SOMETIMES AND STREET TO COUNTY RATES		
29	The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.	Complied AVPPL have submitted Notarized Affidavit		
30	No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable	Noted for Compliance		
31	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,	Not Applicable There are no natural water courses and/or water resources of first order streams in and around the mine lease area.		



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

120	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020				
S. No.	Conditions	Compliance Status as on March 31, 2020			
	originating from the mine lease shall be taken.				
32	The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to. 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.	Not Applicable The quarry has been mined earlier by other parties and is an already open mine. There is no top soil or overburden available in the quarry. The produced materials are all used for Breakwater Construction at Vizhinjam Port and therefore there is no requirement of dump sites.			
33	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies: 'The water so-collected should be utilized for watering the mine area, roads, green belt development. etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	Will be Complied The quarry has been mined earlier by other parties and is an already open mine and hence there is no top soil or overburden available in the quarry. Also, there are no mineral dumps since all the produced materials are used for Breakwater Construction at Vizhinjam Port. Therefore, catch drains for prevention of runoff is not required at the project site.  However, siltation pond of appropriate size will be created by constructing a check dam (up to 10m X 1.5m size) at the bottom of the Quarry area to prevent run-off of water and flow of sediments. The water so collected will be utilized for watering the mine area, roads, greenbelt development, etc.			



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

120	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020					
S. No.	Conditions	Complian	Compliance Status as on March 31, 2020			
		The drains will be regularly desilted particularly			•	
		after monso		aintaine	g brobe	rly.
34	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	Being Complied Regular water sprinkling through water tankers on haul road and other dust prone areas such as loading and unloading of minerals is being carried out.  Environment Monitoring at the site has been carried out by NABL and MoEF&CC accredited laboratory; M/s. Metamorphosis laboratory Private Limited.  Summary of the Ambient Air Quality Monitoring (AAQM) during the compliance period at 5				
	in this regard	monitoring l				
		Parameter	Unit	Max	Min	Perm. Limit
		PM <sub>10</sub>	µg/m³	55.4	40.1	100
		PM <sub>2.5</sub>	μg/m <sup>3</sup>	29.9	21.0	60
		SO <sub>2</sub>	μg/m <sup>3</sup>	23.2	15.1	80
		NO <sub>2</sub>	μg/m <sup>3</sup>	13.4	11.4	80
		Ammonia	µg/m³	BDL	BDL	400
		The Ambient Air Quality Monitoring Released as <b>Annexure 6</b> . All the morparameters were found within the preslimits.		monitored		
35	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	Being Complied  AVPPL have developed a tar road of around 0.9 km from Kadavilla Junction to the quarry project site gate for movement of vehicles; thereby reducing the dust pollution.  However, regular water sprinkling through water tankers on haul road and other dust prone areas such as loading and unloading of minerals is being carried out.				
36	Measures should be taken for control of noise levels below 85 dBA in the work environment.	Being Complied The following measures are being taken for the control of noise levels:  • Drilling: The good captive silencers are being used in drilling equipment.  • Blasting: AVPPL is using NONEL method -				



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

S.	Conditions	Compliance Status as o	n March 3°	1, 2020
No.		bottom initiation to reduce the noise of blasting.  • Machineries & Tippers: It is ensured that equipment's are fitted with effective silencers, mufflers, acoustic linings, or shields, as necessary.  • It is ensured that vehicles transporting the materials follow the speed limit in order to maintain the noise level.  • Vehicles are serviced regularly and maintained properly to avoid any unwanted generation of noise or vibration from them  Ambient Noise is being monitored by NABL and MoEF&CC accredited laboratory; M/s. Metamorphosis laboratory Private Limited as per Noise Pollution (Regulation & Control) Rules, 2000 (Rules 3 (1) and 4(1)) at 5 locations. Summary of the Ambient Noise Monitoring during the compliance period at 5 monitoring locations is mentioned below:		
		Location		
		Quarry Area Near Kadavila bus stop @ 450 m >> SE	66.8 64.3	51.2 34.6
		Settlement @ 900 m >> W	57.8	38.2
		Settlement @ 330 m >> NNW	57.3	39.2
		Near Altharamudu bus stop @ 825 m >> NNE	59.4	39.8
		The results obtained were compared with Noise Pollution (Regulation & Control) Rule, 2000 (Rule 3(1) and 4(1)) and it is observed that the noise readings were within limits for industrial area at the quarry site. However, day time noise readings were above limits at the other four locations (residential areas) due to day to day activities by the local people in the vicinity and due the movement of vehicular traffic.  The Noise Monitoring report is enclosed as Annexure 7.		



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

120	00/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020			
S. No.	Conditions	Compliance Status as on March 31, 2020		
37	The funds earmarked for environmental protection measures and CER activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.	Being Complied  AVPPL has entered into a Concession  Agreement with GoK for the construction and operation of Vizhinjam Port whereby it is mandated under Article 32 (submitted along with HYCR for the period April 2019 to September 2019) that an Escrow Account has to be opened by AVPPL. All deposits have to be made into this account and all payments have to be routed through this account for the construction of the port. This account is directly under the monitoring of both the Central and State governments through the Senior Lenders.		
		Therefore, it is requested that the provision of opening of separate account be absolved as there will be a direct contradiction to the Concession Agreement. As the owner of the quarry, AVPPL guarantees that the amount of Rs. 15.00 Lakhs earmarked for CER will be kept as a balance in the current Escrow Account and a CA certificate will be provided annually declaring the expense against this fund. Furthermore, as provided above the account will be monitored by the government.		
		As mentioned above, AVPPL had prepared a plan for the budget of Rs. 15 lakhs and have submitted the same to the Nagaroor Gram Panchayat seeking their confirmation. AVPPL is awaiting approval of the CER plan from the office of the Gram Panchayat. However, considering the requirement of the Gram Panchayat, AVPPL have started to supply drinking water as a part of CER activity.		
		Till 31.03.2020, no expenditure has been booked in the account; primarily due to the present unforeseen COVID-19 circumstance.		
38	The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should	Will be Complied All necessary support will be extended to the Regional Office of MoEF&CC located at Bangalore for the monitoring of the compliance of the stipulated conditions Office by		



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020				
S. No.	Compliance Status as on March 31, 2020			
extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.	data/information/monitoring reports.			
Any appeal against thi Environmental Clearance shall lie with the National Green Tribuna if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	e I, f r			
Concealing the factual data of submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdraward of this clearance and attractaction under the provisions of Environment (Protection) Act 1986.	d n d l t f			
The SEIAA may revoke of suspend the order, for non implementation of any of the specific or this implementation of any of the above conditions in not satisfactory. The SEIAA reserves the right to alter/modification the above conditions or stipulate any further condition in the interest of environmental protection.	- e e e e e e e e e e e e e e e e e e e			
The above conditions shat prevail notwithstanding anything to the contrary, in consistent, of simplified, contained in any other permit, license on consensiven by any other authority for the same project.	g r y t			
The Environmental Clearance will be subject to the final orde of the courts in any pending litigation related to the land of project, in any court of law.	ι 3 ι			
44 The mining operation shall be	e   Complied			



From: October 2019 To: March 2020

Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

S.	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020			
No.	Conditions	Compliance Status as on March 31, 2020		
	restricted to above ground water table and it should not intersect ground water table	Based on observations made in and around the quarry area, it was found that the general ground level in the area is 32 m above MSL and the general groundwater table is 8 m below the general ground level i.e. 24 m above MSL. During monsoons the ground water table will rise by 2-3 m. The lease area is situated on an isolated hillock where the top most working level is about 106 m above MSL and the lowest working level is 70 m above MSL. The total depth will be 36 m. Therefore mining operations will be restricted to workings at a higher level at the quarry and will not touch the ground water table.		
	All vehicles used for	Complied		
	transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the	It is ensured that all vehicles used for transportation are having valid Pollution Under Control (PuC) certificate from authorized pollution taking center.		
	lease area	Registration No. Date of Testing  O1-Feb-2020  Engine No.  11467  Make  Class of Vehicle  Find Max.  Class of Vehicle  Find Max.  Fi		
	Project proponent should obtain	Not Applicable		
	necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project	AVPPL are not withdrawing the surface water or ground water for any purposes.		
	Regular monitoring of flow rates and water quality upstream and downstream of the springs and	<b>Not Applicable</b> There are no springs and perennial nallahs flowing upstream and downstream of the mine		



From: October 2019 To: March 2020

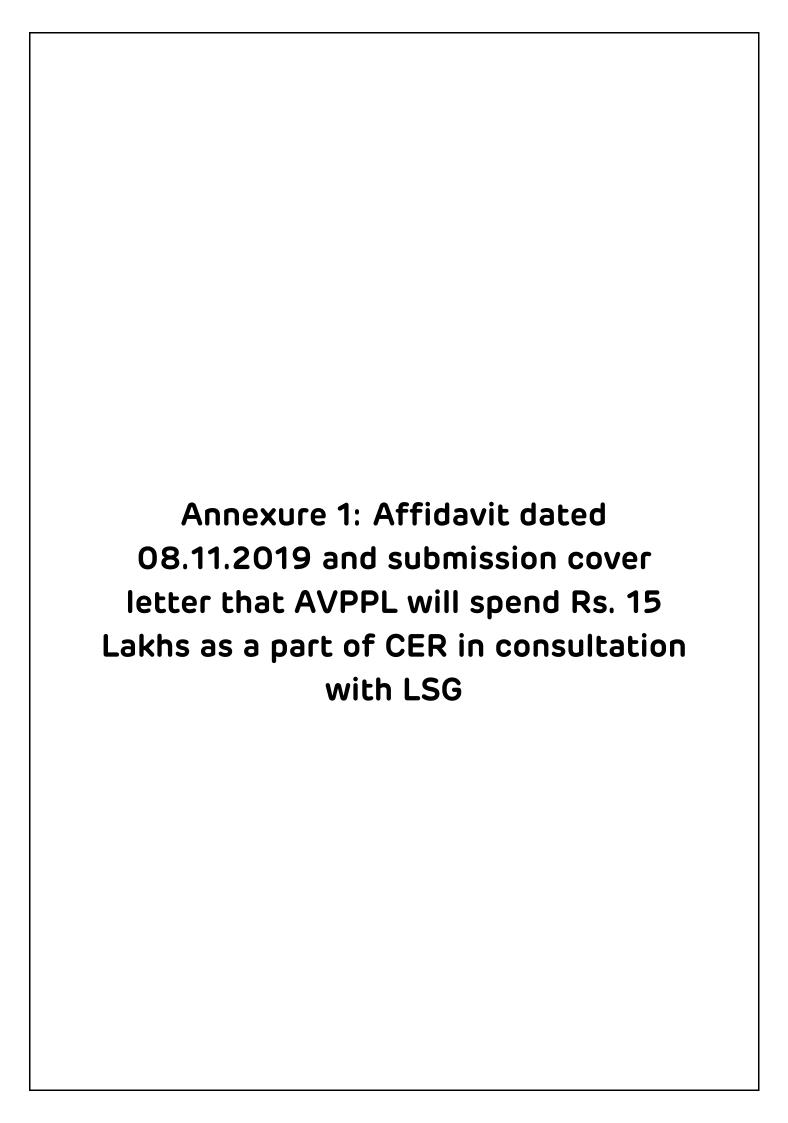
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

Compliance Report on Conditions Stipulated in Environmental Clearance (EC) Order No.
1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020

1200	1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2019 to March 2020			
S. No.	Conditions	Compliance Status as on March 31, 2020		
	perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA	lease area as there are no water courses and/or water resources of first order streams in and around the mine lease area.		
48	Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed	Being Complied  The medical health test checkup of the employees, workers and laborers as per Director General of Mines (DGM) prescribed statutory format are being taken up periodically by the contractor involved in the mining operations to observe any contractions due to exposure to dust and take corrective measures.  **HEDISAL SERVICATE OF THE PROPERTY OF THE PR		
		Medical Health Fitness Certificate		

#### **Enclosures:**

Annexure Number	Details of Annexure
Annexure 1:	Affidavit dated 08.11.2019 and submission cover letter that AVPPL will
Allilexule I.	spend Rs. 15 Lakhs as a part of CER in consultation with LSG
Annexure 2:	Proposed CER Plan
Annexure 3:	Letter from DMG to SEIAA dated 23.03.2019 regarding permission to
Affiliexure 5:	carry out mining at a distance of 50 m from the residential houses
Annexure 4:	Screenshot of the SEIAA, Kerala website showing the details of the EC
Annexure 5:	Email Submission of HYCR for the period April 2019 to September 2019
Annexure 6:	AAQM Report
Annexure 7:	Noise Monitoring Report





AVPPL/SEIAA/2019-20/945

Date: November 15, 2019

State Environment Impact Assessment Authority (SEIAA), K.S.R.T.C Bus Terminal Complex, 4th Floor, Thampanoor, Trivandrum

Subject:

Submission of Affidavit - Corporate Environment Responsibility (CER) -

Reference: Environmental Clearance for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvanathapuram District, Kerala by Mr. Rajesh Jha, Chief Executive Port Private M/s Adani Vizhinjam Limited.

1200/EC2/2018/SEIAA dated 01.03.2019

Dear Sir,

As per the Environment Clearance (referenced above), wherein specific condition point no. 3 states that: "The proponent shall file an affidavit that he will expend Rs. 15 lakhs as a part of CER in consultation with Local Self Government"

In this regard, we are herewith enclosing an affidavit duly signed by the MD and CEO of AVPPL that Rs. 15 Lakhs will be spent as a part of Corporate Environment Responsibility (CER) in consultation with the Local Self Government; in accordance with the Environmental Clearance issued for the project as referenced above.

You are requested to kindly acknowledge the receipt of the same.

Thanking you.

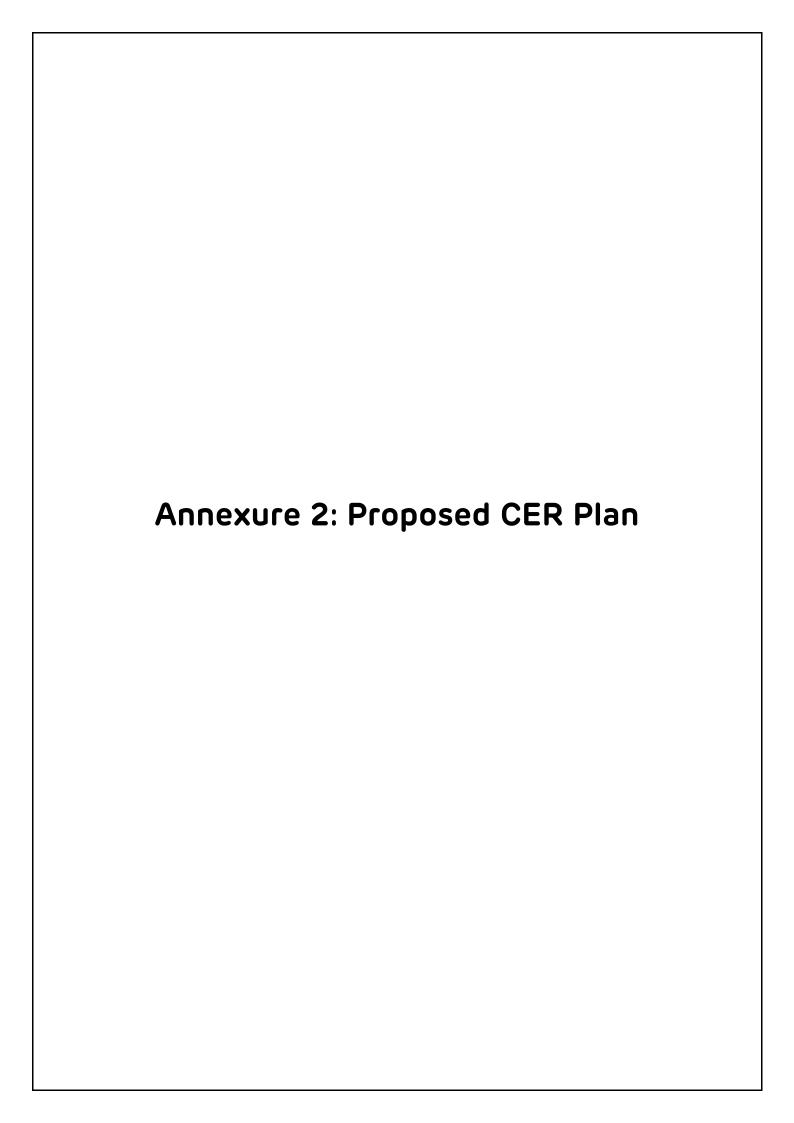
Yours Sincerely Manoranjan Tripathy

AGM - Projects

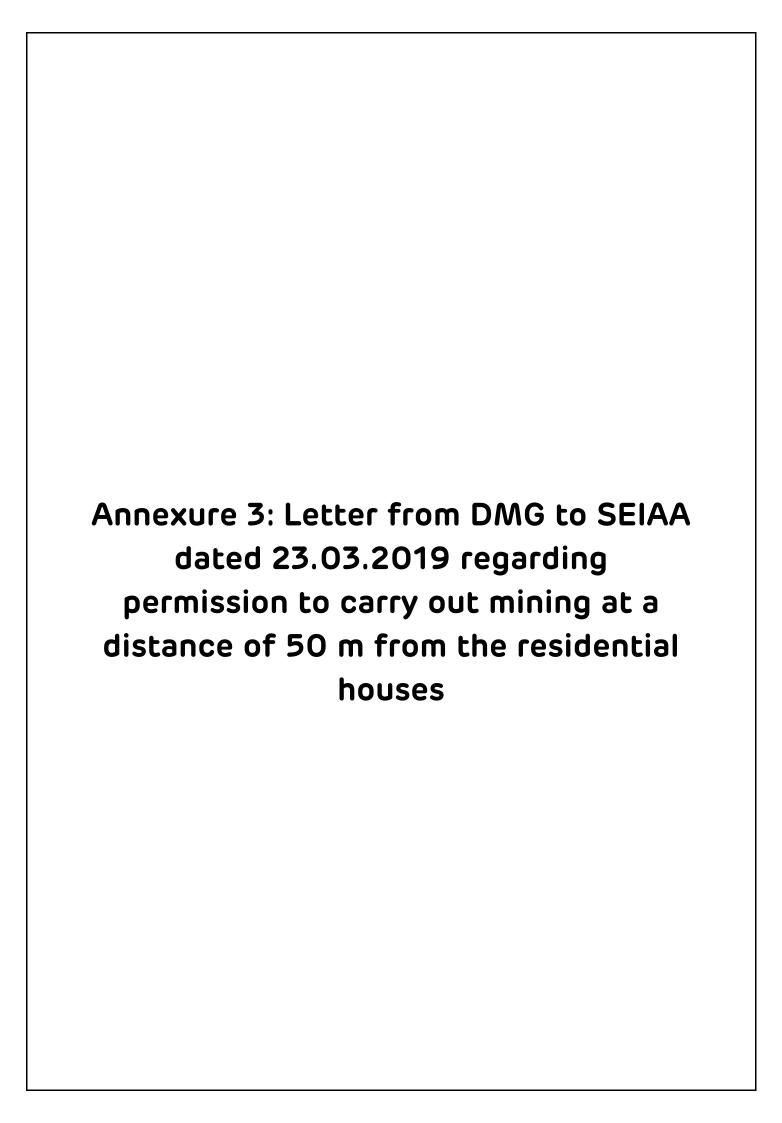
Encl: As Stated Above

Adani Vizhinjam Port Private Limited 2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud Thiruvanathapuram Kerala-695014

www.adani.com CIN -U61200GJ2015PTC083954



S. No.	Project Name	Project Cost Rs in Lakhs	CER @ 2% Rs in Lakhs
1	Kadavilla 1	750.00	15.00
S. No.	Nature of Work	Planned Activity (Description)	Approx. Cost Rs in Lakhs
1	Infrastructure creation for drinking water supply	-	-
2	Health	Medical Check-up Camps like eye check-up, cancer check-up in the nearby villages like Nagaroor, Kadavilla, Vanichoor	2.00
3	Education	Distribution of School Bags, Umbrella, text and note books for primary school children at Nagaroor, Kadavilla, Vanichoor Villages	2.00
4	Roads	Strengthening of roads in the local surrounding are	1.60
5	Rain water harvesting	Creating of rainwater harvesting pit near the project site	4.40
6	Avenue Plantation	Tree planting along the periphery of the boundary of the mine in an area of 0.663 Ha	3.30
7	Plantation in community area	Plantation of trees in nearby local community common area	1.70
		Total	15.00



Directorate of Mining & Geology, Kesavadasapuram, Pattom Palace.P.O., Thiruvananthapuram - 4.

Tel/Fax: 0471-2447429

e-mail: director.dir.dmg@kerala.gov.in

www.dmg.kerala.gov.in

Dated..23.03.2019

No.9363/M3/2018

From

The Director of Mining & Geology

To

The Administrator, SEIAA, KERALA

Sir,

Sub:- Grant of Environmental Clearance - Change in yearwise production of mineral stipulated in mining plan and conditions contrary to KMMC Rules, 1967 - reg.

Ref:- 1. EC No.02/2019 issued vide Order No.1200/EC2/2018/ SEIAA dt. 01.03.2018

2. Kerala Minor Mineral Concession Rules 2015

Please refer to the above. As per the reference 1st cited an Environmental Clearance was issued to M/s.Adani Vizhinjam Port Private Ltd. In order to grant EC, the company had submitted a mining plan approved by the Geologist concerned. When the EC was perused by this office and compared with the approved mining plan it is found that there is difference in the year wise (financial year) quantity of production allowed by the SEIAA. It is contrary to the provisions contained in the Kerala Minor Mineral Concession Rules 2015. As per Rule 68(1) of KMMC Rules, every lessee shall carry out quarrying operation in accordance with the approved mining plan. If quantity of yearwise production or any of the mode of production is altered, it is a deviation from the plan proposed by the proponent.

In the general condition of the EC granted, condition No.18 is that "A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided." This condition also is a deviation from the mining plan. If the

Geologist who approves the mining plan and inspects the site before sending the application to the Director finds that it is not safe to quarry within a distance of 100m from the dwelling houses, he directs the proponent to change the precise area. Based on the recommendations of the Geologist precise area is fixed and Letter of Intent is issued to the proponent. Mining Plan is prepared only after the issuance of LOI from this office. It may be noted that as per Rule 40 1(i), the lessee is permitted to carry out mining at a distance of 50m from residential houses. If the distance from the nearby dwelling houses is changed, deviating the conditions in the LOI or mining plan, the proponent cannot operate the mine as per the mining plan. This may even lead to the reduction in minable quantity of mineral. In these circumstances, I request to reconsider the entire matter as per the Kerala Minor Mineral Concession Rules and necessary changes may be made in the conditions in the EC granted. This is for information and necessary action.

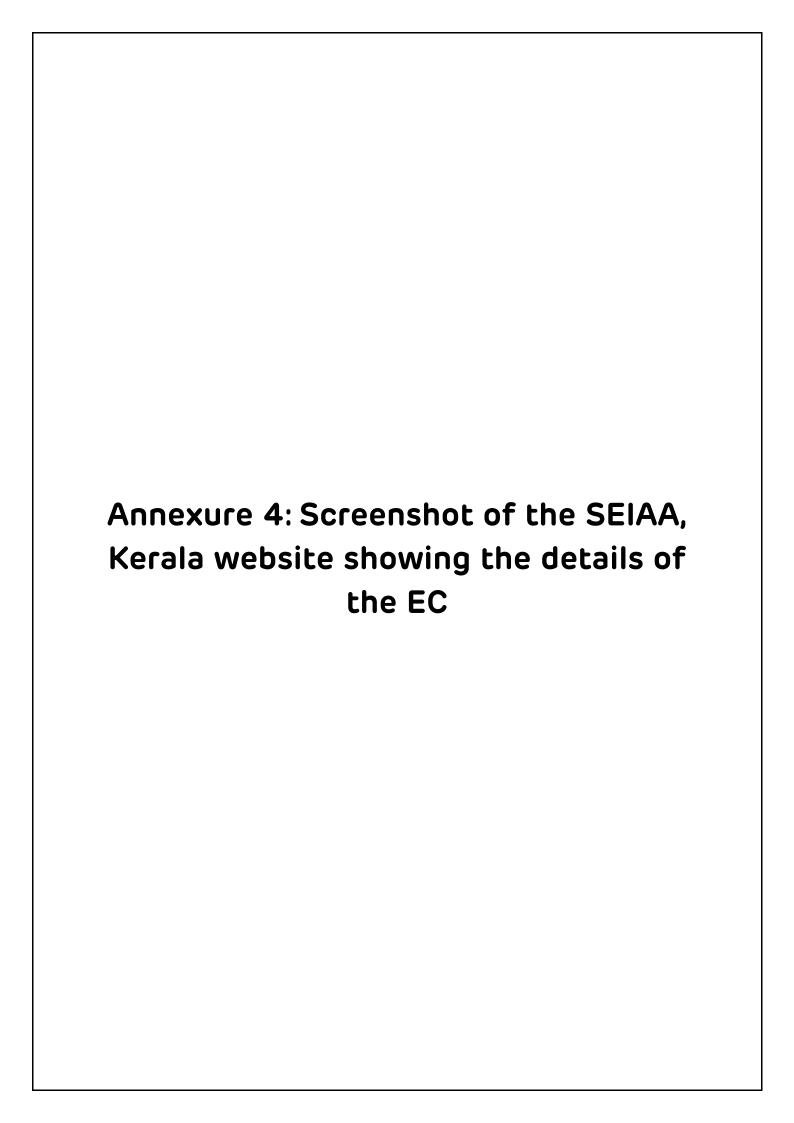
Yours faithfully,

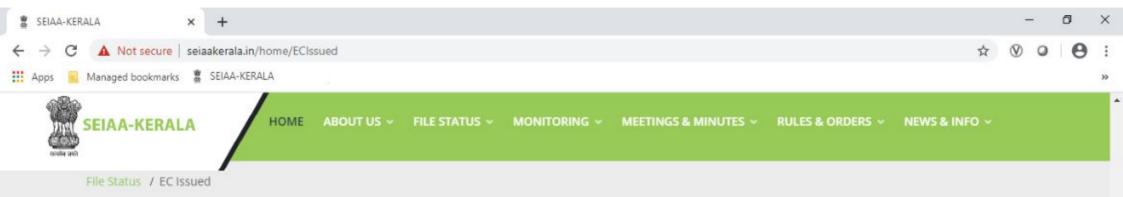
Copy to: M/s Adani Vizhinjam part private Ltd.

for Director of Mining & Geology

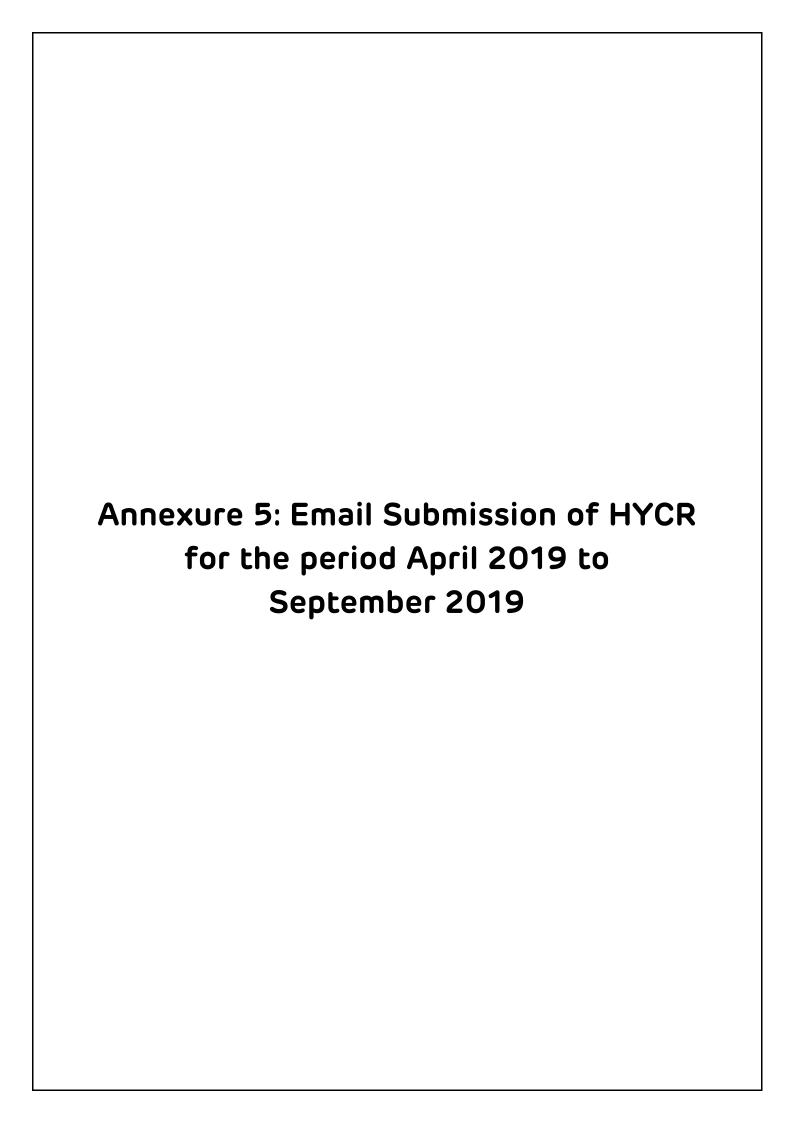
ks/23.3











#### **Jesse Benjamin Fullonton**

From: Rajesh Kumar Jha

Sent: Wednesday, 27 November, 2019 11:48 AM

To: rosz.bng-mefcc@gov.in

**Cc:** seacseiaakerala@gmail.com; Shalin Shah; Manoranjan Tripathy; Harsh Yadav; Hebin Chenthamarakshan; Jesse Benjamin Fullonton

Subject: EC No. 1200/EC2/2018/SEIAA dated 01.03.2019 - Half Yearly Compliance Report - Apr 2019 to Sep 2019 - Reg.

Dear Sir,

This has reference to the Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA issued on 3<sup>rd</sup> March 2019 by the State Environmental Impact Assessment Authority (SEIAA), Kerala for the Proposed Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.

The compliance report of the conditions stipulated in the cited reference for the half yearly period from **April 2019 to September 2019** can be downloaded from the below link; for record and reference please:

#### https://1drv.ms/u/s!Av4lh8R9arszg5QANYtqHBzdbO-oRA?e=NLBqiq

You are requested to kindly acknowledge the receipt of the same.

Thanks & regards,

Rajesh Jha MD & CEO

Adani Vizhinjam Port Pvt. Ltd.

2<sup>nd</sup> Floor, Vipanchika Tower, PO-Thycaud, Trivandrum- 695014, Kerala, India Direct Line: 0471 277 2116 | <a href="https://www.adani.com">www.adani.com</a>

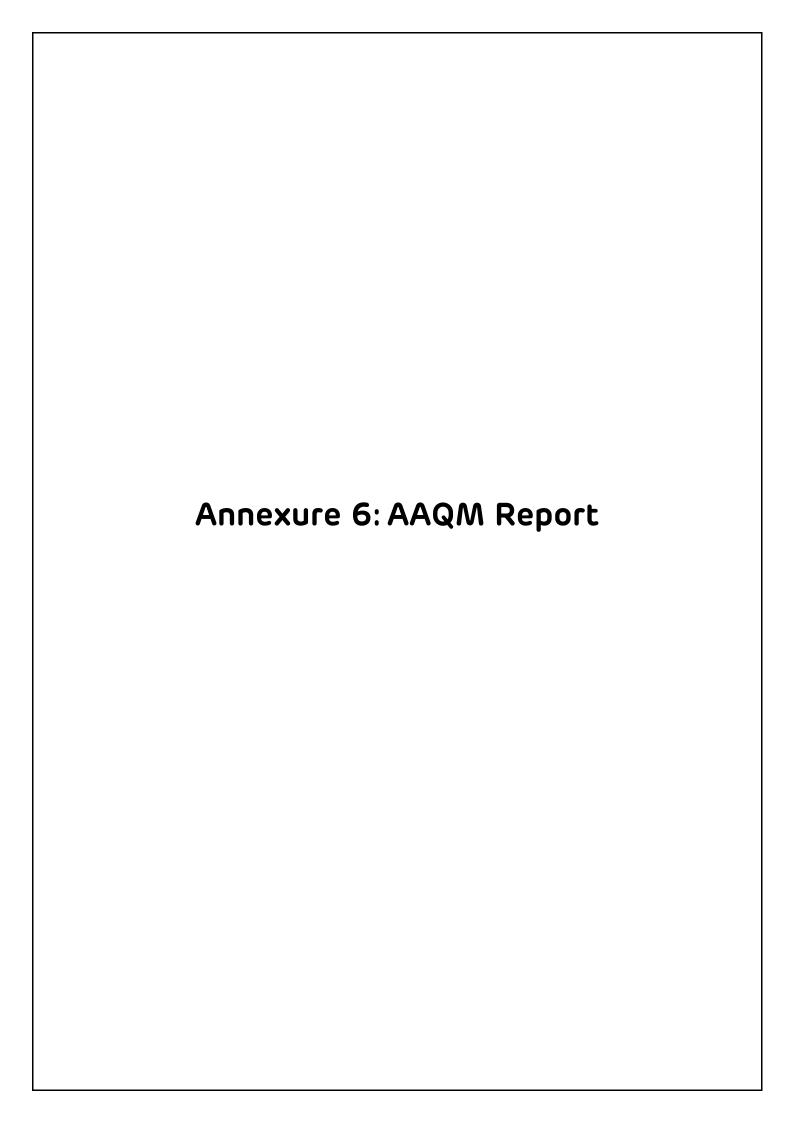




Our Values: Courage | Trust | Commitment



1





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#### **TEST REPORT**

#### **AMBIENT AIR QUALITY DATA**

1. Name of the Project : M/s. Adani Vizhinjam Port Pvt. Ltd.,

2. Location Name : Quarry Area

3. Name of the project Proponent : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.

4. Month of sampling : February 2020
5. Duration of sampling : 8 - Hours
6. Date of reporting : 17.03.2020

Parameter	$PM_{10}$ $\mu g / m^3$	$PM_{2.5}$ $\mu g / m^3$	$NO_2$ $\mu g / m^3$	SO <sub>2</sub> μg/m <sup>3</sup>	Ammonia μg /m³
Sample no.  Date of Sampling	MGF648853/03	PT0718729/03	04191146/03	04191147/03	
26.02.2020	55.4	29.9	18.4	11.4	
Protocol / Method	IS:5182 (Part 23) – Gravimetric method	MLPL/SOP/44 - Gravimetric method	IS:5182 (Part 6) – Jacob and Hochheiser method	IS:5182 (Part 2) – Improved West and Gaeke method	MLPL/SOP/41  – Indophenol blue method
NAAQ Standards	100	60	80	80	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

**Authorized Signatory** 





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#### TEST REPORT

#### **AMBIENT AIR QUALITY DATA**

1. Name of the Project : M/s. Adani Vizhinjam Port Pvt. Ltd.,

2. **Location Name** : Nearest settlement towards Near (Kadavila bus stop) @ 450 mts >> SE

3. Name of the project Proponent : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.

4. Month of sampling
5. Duration of sampling
6. Date of reporting
7.03.2020
17.03.2020

Parameter	PM <sub>10</sub> μg/m <sup>3</sup>	PM <sub>2.5</sub> μg /m <sup>3</sup>	NO <sub>2</sub> μg/m <sup>3</sup>	SO <sub>2</sub> μg/m <sup>3</sup>	Ammonia μg /m³
Sample no.  Date of Sampling	0419276B/03	0419277B/03	0419278B/03	0419279B/03	
26.02.2020	47.9	28.0	23.2	11.9	
Protocol / Method	IS:5182 (Part 23)  – Gravimetric method	MLPL/SOP/44 - Gravimetric method	IS:5182 (Part 6) – Jacob and Hochheiser method	IS:5182 (Part 2) – Improved West and Gaeke method	MLPL/SOP/41 – Indophenol blue method
NAAQ Standards	100	60	80	80	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

**Authorized Signatory** 





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#### **TEST REPORT**

#### **AMBIENT AIR QUALITY DATA**

Name of the Project
 M/s. Adani Vizhinjam Port Pvt. Ltd.,
 Location Name
 Nearest settlement @ 900 mts >> W

3. Name of the project Proponent : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.

4. Month of sampling : February 2020
5. Duration of sampling : 8 - Hours
6. Date of reporting : 17.03.2020

Parameter	PM <sub>10</sub> μg /m <sup>3</sup>	PM <sub>2.5</sub> μg /m <sup>3</sup>	NO <sub>2</sub> μg/m <sup>3</sup>	SO <sub>2</sub> μg/m <sup>3</sup>	Ammonia μg /m³
Sample no.  Date of Sampling	0419280B/03	0419281B/03	0419282B/03	0419283B/03	
26.02.2020	48.9	26.8	15.1	11.4	
Protocol / Method  IS:5182 (Part :		MLPL/SOP/44 - Gravimetric method	IS:5182 (Part 6) – Jacob and Hochheiser method	IS:5182 (Part 2) – Improved West and Gaeke method	MLPL/SOP/41 – Indophenol blue method
NAAQ Standards	100	60	80	80	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

**Authorized Signatory** 





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#### **TEST REPORT**

#### AMBIENT AIR QUALITY DATA

Name of the Project
 M/s. Adani Vizhinjam Port Pvt. Ltd.,
 Location Name
 Nearest settlement @ 330 mts >> NNW

3. Name of the project Proponent : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.

4. Month of sampling : February 2020
5. Duration of sampling : 8 - Hours
6. Date of reporting : 17.03.2020

Parameter	PM <sub>10</sub> μg /m <sup>3</sup>	$PM_{2.5}$ $\mu g / m^3$	$NO_2$ $\mu g / m^3$	SO <sub>2</sub> μg/m <sup>3</sup>	Ammonia μg /m³
Sample no.  Date of Sampling	0419284B/03	0419285B/03	0419286B/03	0419287B/03	
26.02.2020	40.1	21.0	16.7	12.1	
Protocol / Method	IS:5182 (Part 23)  - Gravimetric method	MLPL/SOP/44 - Gravimetric method	IS:5182 (Part 6) – Jacob and Hochheiser method	IS:5182 (Part 2) – Improved West and Gaeke method	MLPL/SOP/41 – Indophenol blue method
NAAQ Standards	100	60	80	80	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

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#### **TEST REPORT**

#### **AMBIENT AIR QUALITY DATA**

1. Name of the Project : M/s. Adani Vizhinjam Port Pvt. Ltd.,

Location Name
 Nearest settlement towards (near Altharamudu bus stop) @ 825 mts >> NNE

3. Name of the project Proponent : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.

4. Month of sampling
5. Duration of sampling
6. Date of reporting
17.03.2020

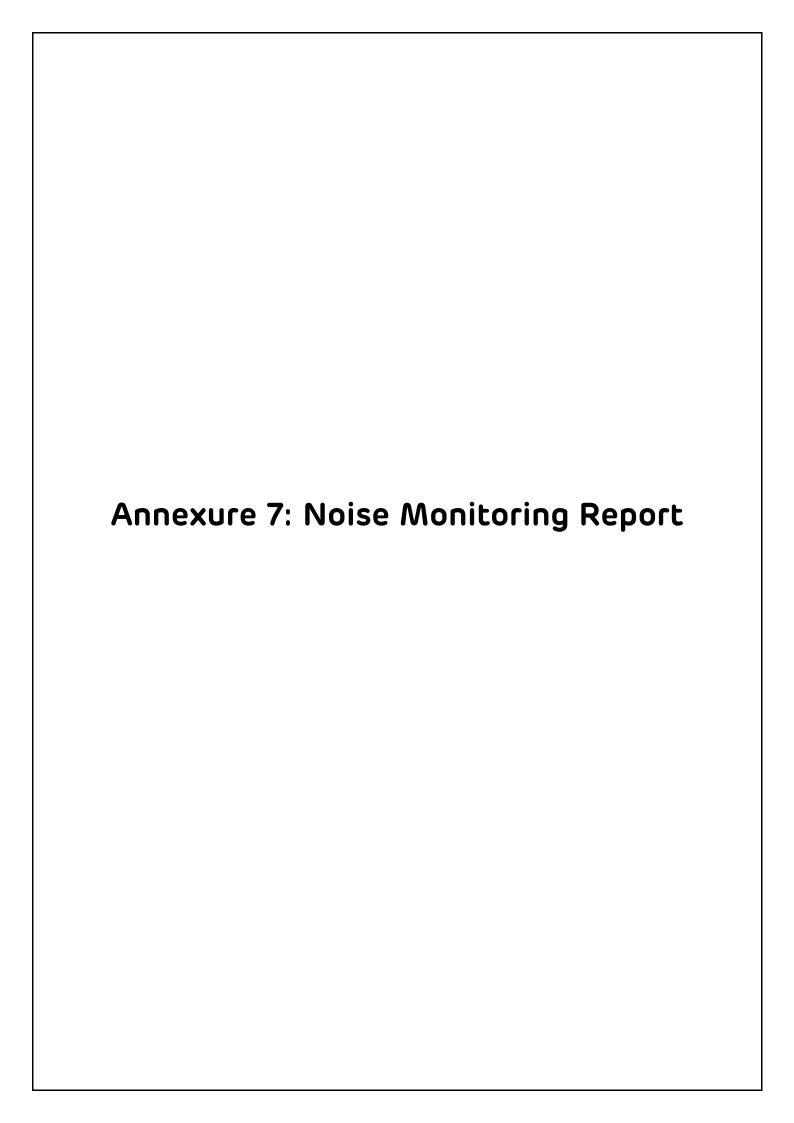
Parameter	$PM_{10}$ $\mu g / m^3$	PM <sub>2.5</sub> μg /m <sup>3</sup>	NO <sub>2</sub> μg/m <sup>3</sup>	SO <sub>2</sub> μg/m <sup>3</sup>	Ammonia μg /m³
Sample no.  Date of Sampling	0419360B/03	0419361B/03	0419362B/03	0419363B/03	
26.02.2020	46.8	25.4	18.4	13.4	
Protocol / Method	IS:5182 (Part 23) – Gravimetric method	MLPL/SOP/44 - Gravimetric method	IS:5182 (Part 6)  – Jacob and Hochheiser method	IS:5182 (Part 2) – Improved West and Gaeke method	MLPL/SOP/41  – Indophenol blue method
NAAQ Standards	100	60	80	80	400

INFERENCE	As per CPCB Standards Report Status: All values are within the prescribed standards.
Sample Collected By	M/s. METAMORPHOSIS Laboratory Private Limited, Bengaluru

\*\* End of Report \*\*

**Authorized Signatory** 







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#### **TEST REPORT**

#### **AMBIENT NOISE MEASUREMENT**

1. Name of the project : M/s. Adani Vizhinjam Port Pvt. Ltd.,

. Location name : Quarry Area

3. Name of the project Proponent : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District,

Kerala.

4. Date of Measurement : 26.02.2020

5. Name of instrument : Digital sound level meter Equinox & EQ-107

Date of reporting : 17.03.2020

		Result (dB (A))						
Sampling point	Sample no.	Protocol		Day			Night	
			LMin	LMax	Leq	LMin	LMax	Leq
Quarry Area	04191095/03	IS:9989 -1981	64.3	70.7	66.8	49.1	55.1	51.2

Limits in dB (A) Leq							
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)				
(A)	Industrial Area	75	70				
<b>(B)</b>	Commercial Area	65	55				
(C)	Residential Area	55	45				
( <b>D</b> )	Sensitive Zone	50	40				

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE	Report Status as per KSPCB Standards: - Values are found to be within the				
	permissible limits, applicable to industrial area.				
Sample Collected By	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.				

\*\*End of Report\*\*

**Authorized Signatory** 





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#### TEST REPORT

#### AMBIENT NOISE MEASUREMENT

Name of the project

Location name

Name of the project Proponent

**Date of Measurement** 

Name of instrument Date of reporting

- : M/s. Adani Vizhinjam Port Pvt. Ltd.,
- : Nearest settlement towards Near (Kadavila bus stop) @ 450 mts >> SE
- : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.

: 26.02.2020

: Digital sound level meter Equinox & EQ-107

: 17.03.2020

			Result (dB (A))						
Sampling point	Sample no.	Protocol		Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq	
Nearest settlement towards Near (Kadavila bus stop) @ 450 mts >> SE	04191096/03	IS:9989 -1981	55.2	64.4	64.3	32.2	37.9	34.6	

	Limits in dB (A) Leq							
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)					
(A)	Industrial Area	75	70					
<b>(B)</b>	Commercial Area	65	55					
(C)	Residential Area	55	45					
<b>(D)</b>	Sensitive Zone	50	40					

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE	Report Status as per KSPCB Standards: - Day time values are not within the			
	permissible limits, applicable to residential area. Since the location was near the bus			
	stop, the values are higher, due the movement of vehicular traffic.			
Sample Collected By	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.			

\*\*End of Report\*\*

**Authorized Signatory** 

**Laboratory Head** Dr. Shanth A. Thimmaiah



"PRAKRUTI BHAVAN", #200, 1st & 2nd Floor, 40th Main, 1st Cross, BTM Layout II Stage, Behind Central Silk Board, Bengaluru - 560068, Karnataka, India, Telefax: +91.80.26783006 Email: mail@metamorphosis-india.com.



### LABORATORY PRIVATE LIMITED

- thought.....process.....reality!!

Recognized by MoEF & CC and Accredited by NABL

#### TEST REPORT

#### **AMBIENT NOISE MEASUREMENT**

1. Name of the project

: M/s. Adani Vizhinjam Port Pvt. Ltd.,

2. Location name

: Nearest settlement towards @ 900 mts >> W

3. Name of the project Proponent

: Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District,

Kerala.

4. Date of Measurement

5. Name of instrument6. Date of reporting

26.02.2020Digital sound level meter Equinox & EQ-107

: 17.03.2020

			Result			(dB (A))			
Sampling point	Sample no.	Protocol		Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq	
Nearest settlement towards @ 900 mts >> W	04191097/03	IS:9989 -1981	55.1	62.9	57.8	32.2	36.7	38.2	

Limits in dB (A) Leq							
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)				
(A)	Industrial Area	75	70				
(B)	Commercial Area	65	55				
(C)	Residential Area	55	45				
<b>(D)</b>	Sensitive Zone	50	40				

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE Re					
pe	ermissible limits, applicable to residential area. Values are found to be higher as there				
Wa	was movement of vehicle in the nearby road.				
Sample Collected By M	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.				

\*\*End of Report\*\*

**Authorized Signatory** 

Laboratory Head Dr. Shanth A. Thimmaiah



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#### TEST REPORT

#### **AMBIENT NOISE MEASUREMENT**

1. Name of the project

: M/s. Adani Vizhinjam Port Pvt. Ltd.,

2. Location name

: Nearest settlement towards @ 330 mts >> NNW

3. Name of the project Proponent

: Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District,

Kerala.

4. Date of Measurement

: 26.02.2020

5. Name of instrument6. Date of reporting

: Digital sound level meter Equinox & EQ-107

: 17.03.2020

					Result (	dB (A))		
Sampling point	Sample no.	Protocol		Day			Night	
			LMin	LMax	Leq	LMin	LMax	Leq
Nearest settlement towards @ 330 mts >> NNW	04191098/03	IS:9989 -1981	56.7	65.1	57.3	34.7	40.0	39.2

Limits in dB (A) Leq							
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)				
(A)	Industrial Area	75	70				
<b>(B)</b>	Commercial Area	65	55				
(C)	Residential Area	55	45				
( <b>D</b> )	Sensitive Zone	50	40				

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE	Report Status as per KSPCB Standards: - Day time values are not within the
	permissible limits, applicable to residential area. Values are higher as there was couple of
	rubber making units and quarry operation nearby i.e, at a distance of 330 mts.
Sample Collected By	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.

\*\*End of Report\*\*

**Authorized Signatory** 

Laboratory Head Dr. Shanth A. Thimmaiah



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### LABORATORY PRIVATE LIMITED

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: Nearest settlement towards (near Altharamudu bus stop) @ 825 mts >> NNE

: Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,

#### **TEST REPORT**

#### AMBIENT NOISE MEASUREMENT

1. Name of the project

**Location name** 

Name of the project Proponent

**Date of Measurement** 

Name of instrument Date of reporting

Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District,

: 26.02.2020 : Digital sound level meter Equinox & EQ-107

: M/s. Adani Vizhinjam Port Pvt. Ltd.,

: 17.03.2020

Kerala.

					Result (dB (A))			
Sampling point	Sample no.	Protocol		Day			Night	
			LMin	LMax	Leq	LMin	LMax	Leq
Nearest settlement towards (near Altharamudu bus stop) @ 825 mts >> NNE	04191164/03	IS:9989 -1981	55.1	64.4	59.4	35.9	41.6	39.8

Limits in dB (A) Leq							
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)				
(A)	Industrial Area	75	70				
<b>(B)</b>	Commercial Area	65	55				
(C)	Residential Area	55	45				
( <b>D</b> )	Sensitive Zone	50	40				

Note: The result & inference pertains to the sample tested only and parameters as per the requisition of the client.

INFERENCE	Report Status as per KSPCB Standards: - Day time values are not within the
	permissible limits, applicable to residential area. Since the location was near the bus
	stop, so the values are higher, due the movement of vehicular traffic.
Sample Collected By	M/s. METAMORPHOSIS <sup>SM</sup> Laboratory Private Limited, Bengaluru.

\*\*End of Report\*\*

**Authorized Signatory** 

**Laboratory Head** Dr. Shanth A. Thimmaiah



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Half Yearly Compliance Report (HYCR) October 2019 to March 2020
Building Stone Quarry Project: Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District
adani
Adani Vizhinjam Port Private Ltd. (AVPPL)