

# **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 2022 to March 2023**

Project Proponent



**Adani Vizhinjam Port Private Ltd. (AVPPL)**

**May 2023**

Ref: AVPPL/MoEF/2023-24/2436

Date: 24<sup>th</sup> May 2023

To,  
Ministry of Environment Forest and Climate Change (MoEF&CC),  
Regional Office (Southern Zone), Kendriya Sadan,  
IV<sup>th</sup> Floor, E&F Wings, 17<sup>th</sup> Main Road, II<sup>nd</sup> Block,  
Koramangala, Bangalore-560034  
[rosz.bng-mefcc@gov.in](mailto:rosz.bng-mefcc@gov.in)

**Subject:** Submission of **Half Yearly Compliance Report (HYCR)** to Conditions of Environmental Clearance (EC) for the Period October 2022 to March 2023 - Reg.

**Reference:** EC for Building Stone Quarry in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala; by M/s. Adani Vizhinjam Port Pvt. Ltd. vide **No. 1200/EC2/2018/SEIAA dated 01.03.2019**

Dear Sir/Madam,

This has reference to the Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA issued on 1<sup>st</sup> March 2019 (vide reference cited) by the State Environmental Impact Assessment Authority (SEIAA), Kerala for the building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala; of M/s. Adani Vizhinjam Port Private Limited (AVPPL).

The Half Yearly EC Compliance Report (HYCR) of the conditions stipulated in the cited reference for the period from **October 2022 to March 2023** is enclosed herewith for record and reference. You are requested to kindly acknowledge the receipt of the same.

Thanking You.

Yours Sincerely,




Rajesh Jha  
MD & CEO – Authorized Signatory




Enclosed: As mentioned above


Copy to: State Environment Impact Assessment Authority (SEIAA), K.S.R.T.C Bus Terminal Complex, 4<sup>th</sup> Floor, Thampanoor, Thiruvananthapuram, Kerala

	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
<b>Specific Conditions</b>		
1	The mining should be conducted with Non-Electric Detonator (NONEL) Method thereby minimizing air blast, fly rock and ground vibration.	<p><b>Complied</b></p> <p>Mining is being conducted using Non-Electric Detonator (NONEL) method of controlled blasting only; to minimize the air blast, fly rock and ground vibration. To date no incident of fly rock has been recorded.</p> <p>Adani Vizhinjam Port Pvt. Ltd. (AVPPL) had engaged Anna University, Department of Mining Engineering, Chennai to conduct a scientific study on Blast Induced Ground Vibration for the Quarry. Altogether 10 experimental blast rounds were conducted, and comprehensive vibration monitoring was carried out during the blasting experiment. In all the 10 trial blasts, ground vibrations were monitored at 47 locations around the blasting sites and neighboring villages, which includes domestic houses and other prominent structures of the village.</p> <p>Based on the scientific study, it is concluded that the blast induced ground vibrations and noise levels generated by the controlled blasting carried out in the quarry are safe and well within the permissible limit as per recommendations of Directorate General of Mine Safety (DGMS) and therefore is not affecting the residential buildings and other structures. Further, it had been observed that no flying fragments or projectiles travelled beyond 10 m from the site of blast. Hence, it was inferred through the study report that controlled blasting can be carried out at the Quarry. The Anna University Study Report was submitted along with the HYCR for the period April 2021 to September 2021.</p>
2	Extract a maximum of 7 lakh tons of building stone within a period of two years. Further permission for mining may be considered based on the requirement then and environmental assessment.	<p><b>Will be Complied</b></p> <p>In view of the additional requirement of building stone for completion of phase 1 of the Vizhinjam project, State Environmental Impact Assessment Authority (SEIAA), Kerala decided to issue EC for the extraction of a further 10.79 Lakh Tons granite rock for the period from 2021-22 to 2023-24 subject original EC conditions vide their order</p>


	Adani Vizhinjam Port Private Limited (AVPPL)	From: October 2022 To: March 2023
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala		


Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023		
S. No.	Conditions	Compliance Status as on March 31, 2023
		<p>No. 1200/EC2/2018/SEIAA dated 16.11.2020 (A copy of the order was submitted along with the HYCR for the period October 2020 to March 2021). The Modified Approved Mining Plan was submitted along with the HYCR for the period April 2021 to September 2021). Therefore, permission is accorded for a total of 17.79 (7 + 10.79) Lakh Tons of building stones to be extracted from the quarry.</p> <p>During the compliance period (October 2022 to March 2023), a total of 2.002 Lakh Tons of building stones have been extracted and a total cumulative quantity of 15.113 Lakh Tons of building stones have been extracted from inception of mining on 02.07.2019 till 31.03.2023.</p>
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.	<p><b>Complied</b></p> <p>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 was submitted along with the HYCR for the period October 2019 to March 2020.</p> <p>As of March 31, 2023, AVPPL has spent Rs. 35.89 Lakhs towards CER Activities. Despite having exhausted the agreed-upon funds for CER activities, AVPPL remains committed to environmental responsibility and has exceeded the required expenditure of Rs. 15 Lakhs as stated in the affidavit.</p>
4	The proponent should follow the closure plans (progressive closure and final closure) as per KMMC Rules.	<p><b>Will be Complied</b></p> <p>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 Modified Approved Mining Plan (The Modified Approved Mining Plan was submitted along with the HYCR for the period April 2021 to September 2021).</p>

	Adani Vizhinjam Port Private Limited (AVPPL)	From: October 2022 To: March 2023
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala		


Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023		
S. No.	Conditions	Compliance Status as on March 31, 2023
		The closure procedure (progressive closure and final closures) shall be documented prior to and during the closure of the mine.
General Conditions		
1	A separate environmental 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.	<b>Complied</b> 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 constitution of EMMC were submitted along with HYCR for the period April 2019 to September 2019. EMMC meeting is being conducted frequently to monitor the environmental issues at the quarry.
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.	<b>Being Complied</b> There is already an existing plantation along the tar road. AVPPL have planted avenue trees at suitable locations, such as buffer zones for greenbelt development and the saplings planted are growing well and have started to bear fruits; as seen in the image below.




	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
		 <p style="text-align: center;"><b>Avenue Plantation</b></p>
<b>3</b>	Sprinklers shall be installed and used in the project site to contain dust emissions.	<b>Being Complied</b> Regular water sprinkling through water tankers is being carried out on haul roads and other dust prone areas such as loading and unloading of minerals.

<b>adani</b>	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
		 <p><b>Water Sprinkling through Tankers</b></p>
4	Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent	<p><b>Will be Complied</b></p> <p>Eco-restoration including Mine Closure Plan is provided in the Modified Approved Mining Plan (Submitted along with the HYCR for the period April 2021 to September 2021). The same shall be implemented during the closure at the cost of AVPPL.</p>
5	In view of the deep pits left after the excavation, stacking at maximum top level should be carried out.	<p><b>Not Applicable</b></p> <p>The Stacking of materials is not being carried out, as all the produced materials are used for Breakwater Construction at Vizhinjam Port. They are being transported directly to the Port site and not stacked at the quarry site.</p> <p>As per the mine closure plan the pit will be utilized for storing water as a rainwater harvesting method and will also be induced to sustain the groundwater table. As for the post mining land use, an area of 0.9540 Ha will be used for water pond for storage of water.</p>
6	Corporate Environment Responsibility agreed upon by the proponent should be implemented.	<p><b>Being Complied</b></p> <p>AVPPL is coordinating with the Local Self Government regarding approval of the proposed CER plan with expense heads under specific activities in line with MoEF&amp;CC Office Memorandum (OM) F.No.22-65/2017-IA.III dated 01.05.2018.</p>

	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		


<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
		<p>AVPPL had prepared a budget plan and had submitted the same to the Nagaroor Gram Panchayat seeking their confirmation and go ahead for the proposed CER (Proposed plan was submitted along with HYCR for the period October 2019 to March 2020). Correspondence to the President of the Nagaroor Gram Panchayat was submitted along with HYCR for the period April 2019 to September 2019.</p> <p>Considering the necessities of the community and discussions with the local panchayat, AVPPL has implemented CER activities in the surrounding areas of the quarry site (Details have been submitted along with earlier compliance reports). As per 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 CER, AVPPL have surpassed the required expenditure of Rs. 15 Lakhs and spent Rs. 35.89 Lakhs towards CER activities. Despite having exhausted the agreed upon funds for CER activities, AVPPL are committed towards Environmental responsibility.</p>
7	The project proponent shall comply the conditions stipulated by the statutory authorities concerned.	<p><b>Being Complied</b></p> <p>AVPPL is complying with all applicable conditions stipulated by respective competent statutory authorities.</p>
8	Tarring /multiple options on the access roads shall be undertaken so as to reduce dust pollution during movement of vehicle.	<p><b>Complied</b></p> <p>AVPPL has 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.</p>




<b>adani</b>	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
		 <p style="text-align: center;"><b>Tar Road at Project Site</b></p>
9	Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions	<p><b>Being Complied</b></p> <p>As such, the quarry had been mined earlier by another party and since this is already an open mine, there was no topsoil or overburden available in the quarry; all the produced materials are being used for Breakwater Construction at Vizhinjam Port.</p> <p>However, due to certain geological disturbances in the formation, some overburden has been found in between the rock formation after attaining 6 m on the western slope between p3 and p4 pillars. AVPPL have shifted the topsoil and overburden on the western slope to an area of land in the lower portions of the quarry along with 150 m gabion wall protection. The overburden materials will be managed in this area within the site as per mine closure plan.</p>

<b>adani</b>	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
		 <p style="text-align: center;"><b>Gabion Wall</b></p>
10	Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention in the mining plan/specific condition.	<b>Being Complied</b> As per the Modified Approved Mining Plan, the bench height and width need to be maintained at a maximum of 6.0 m. Also, a 45° pit slope will be maintained; which is currently being adhered to.
11	Ground level should be fixed in individual cases separately	<b>Being Complied</b> For every bench, ground level is fixed in MSL as individual cases separately. Surface plan with MSL levels is provided in the Modified Approved Mining Plan (Submitted along with the HYCR for the period April 2021 to September 2021).
12	No mining operations should be carried out at places having a slope greater than 45.	<b>Being Complied</b> No mining operations are being carried out at places having a slope greater than a 45 degrees angle.
13	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. This condition is applicable only in such cases if a crusher is adjacent to the quarry	<b>Not Applicable</b> There is no crusher adjacent to the quarry and the same is not proposed.
14	The workers on the site should	<b>Being Complied</b>

<b>adani</b>	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		


<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
	be provided with the required protective equipment such as ear muffs, helmet, etc.	<p>All employees are provided with relevant Personal Protective Equipment (PPEs) like Helmets, Shoes, Fluorescent Reflective Jackets, etc.</p>  <p><b>Employees with PPEs</b></p>
15	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.	<p><b>Being Complied</b></p> <p>Mining operations are being carried out at the top level during the compliance period. However, garland drainage/garland canals of 60 m have been developed in the lower slopes to channelize storm water.</p>




Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental  
Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019  
for the Period October 2022 to March 2023

S. No.	Conditions	Compliance Status as on March 31, 2023
		 <p><b>Garland Drain</b></p> <p>A siltation pond has been created by constructing a check dam, which is up to 10m X 1.5m in size, at the bottom of the quarry area to prevent the run-off of water and flow of sediments. The collected water is being utilized for watering the mine area, roads, greenbelt development, etc.</p>  <p><b>Check Dam</b></p>


<b>adani</b>	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
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 should assess the number of trees in each project site before the issuance of EC so as to ensure the promptness in, planting.	<p><b>Being Complied</b></p> <p>The transportation of minerals in trucks is being undertaken covered with tarpaulin cover. Since this is an existing quarry which was already mined earlier, the quarry is in open condition. There was no clearing of land for the project and no trees have been cut down as there are no trees inside the lease area.</p>  <p><b>Truck with Tarpaulin Cover</b></p>
17	Explosives should be stored in magazines in isolated place specified and approved by Explosives Department	<p><b>Being Complied</b></p> <p>AVPPL constructed 500 Kgs portable explosives magazine at an area called Chappath; which is 65 km away from the quarry location. AVPPL are transporting the explosives and detonators from Chappath to Kadavilla quarry through two authorized explosives vans for which following licenses were obtained from PESO:</p> <ul style="list-style-type: none"> <li>Explosives magazine license E/SE/KL/22/331(E121778) dated 13.09.2021</li> <li>Explosives van-1 (KL01CP2414) license E/SE/KL/25/99(E135886) dated 22.09.2021</li> <li>Explosives van-2 (KL01CP2472) license E/SE/KL/25/99(E135883) dated 22.09.2021</li> </ul> <p>Copies of the above mentioned licenses were submitted along with the HYCR for the period April 2021 to September 2021. Operations at Explosives Storage at Chappath began in October 2021.</p>
18	A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling	<p><b>Complied</b></p> <p>As per the Government of Kerala (GoK) State Gazette Notification G.O. (P) No. 25/2017/ID</p>




	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		


<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
	unit or other structures, not being any facility for mining shall be provided.	<p>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 50 m from any residential buildings or from the nearest dwelling unit or other structures.</p> <p>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.</p> <p>Further, DMG had communicated to SEIAA vide its letter No. 9363/M3/2018 dated 23.03.2019 (A copy of the letter was submitted along with the HYCR for the period October 2019 to March 2020) that as per Rule 40 1(i) of the KMMC Rules, the lessee is permitted to carry out mining at 50 m from the residential houses.</p> <p>As per the map prepared by the village officer, the nearest house is ~60 m from the boundary of the quarry.</p>
19	50 m buffer distance should be maintained from forest boundaries.	<p><b>Not Applicable</b></p> <p>There are no forests in the vicinity of the project site.</p>
20	Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.	<p><b>Complied</b></p> <p>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.</p> <p>Further, The CTO was renewed vide Consent No. PCB/TVM-DO/CHZ/ICO(R)/QRY/128/2020 dated 18.12.2020 valid up to 28.02.2024. Copy of the renewed CTO is was submitted along with HYCR for the period October 2020 to March 2021.</p>
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	<p><b>Complied</b></p> <p>AVPPL have obtained all applicable statutory clearances from the respective competent authorities. The following clearances have been obtained:</p> <ul style="list-style-type: none"> <li>• No Objection Certificate (NoC) from</li> </ul>

	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		


<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
	explosives.	<p>Trivandrum District Collector vide Letter No. B7-40269/2017 dated 30.04.2018 for Govt. land.</p> <ul style="list-style-type: none"> <li>Letter of Intent from DMG vide Letter No. 9363/M3/2018 dated 04.09.2018</li> <li>CTO has been obtained from KSPCB vide Consent No. PCB/TVM-DO/ICO/QRY/103/2019 dated 05.03.2019 valid up to 27.02.2021. Further, The CTO was renewed vide Consent No. PCB/TVM-DO/CHZ/ICO(R)/QRY/128/2020 dated 18.12.2020 valid up to 28.02.2024.</li> <li>Purchase and Use of Explosives Approval from Petroleum &amp; Explosives Safety Organization (PESO), Ernakulam vide Letter No. E/Misc/Expl dated 27.03.2019</li> <li>Dangerous and Offensive Trade (D&amp;O) License from Nagaroor Gram Panchayat vide License Number A2.1836\2019 dated 01.04.2019</li> <li>NoC for Use of Explosives from District Collector, Thiruvananthapuram vide File No. DCTVM/2436/2019-A17 dated 09.05.2019</li> <li>Approved Mining Plan by District Geologist, Trivandrum vide Letter No. 1716/DOT/ML/18 dated 20.05.2019</li> <li>Lease Order from DMG vide Letter No. 9363/M3/2018 dated 20.05.2019</li> <li>Lease Execution from Additional Director of Mining and Geology vide Letter No. 79/2019-20/9363/M3/2018/DMG dated 20.05.2019</li> <li>Quarrying Lease Registration Agreement in Form H at Chirayinkeezhu Register Office dated 22.05.2019</li> <li>Explosives magazine license E/SE/KL/22/331(E121778) dated 13.09.2021.</li> <li>Explosives van-1 (KL01CP2414) license E/SE/KL/25/99(E135886) dated 22.09.2021.</li> <li>Explosives van-2 (KL01CP2472) license E/SE/KL/25/99(E135883) dated 22.09.2021.</li> <li>Modified Approved Mining Plan by District Geologist, Trivandrum vide Letter No. 2436/DOT/ML/2020 dated 16.11.2020</li> </ul> <p>Copies of the above mentioned approvals were submitted along with HYCR for the period April</p>

	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
		2019 to September 2019. Copy of the renewed CTO was submitted along with HYCR for the period October 2020 to March 2021. Copies of the explosives vans and magazine licenses and Modified Approved Mining Plan was submitted along with the HYCR for the period April 2021 to September 2021.
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	<p><b>Complied</b></p> <p>In view of the additional requirement of building stone for completion of phase 1 of the Vizhinjam project, SEIAA decided to issue EC for the extraction of a further 10.79 Lakh Tons granite rock for the period from 2021-22 to 2023-24 subject original EC conditions vide their order No. 1200/EC2/2018/SEIAA dated 16.11.2020 (A copy of the order was submitted along with the HYCR for the period October 2020 to March 2021). Therefore, permission is accorded for a total of 17.79 (7.00 + 10.79) Lakh Tons of building stones to be extracted from the quarry.</p> <p>During the compliance period (October 2022 to March 2023), a total of 2.002 Lakh Tons of building stones have been extracted and a total cumulative quantity of 15.113 Lakh Tons of building stones have been extracted from inception of mining on 02.07.2019 till 31.03.2023.</p>
23	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.	<p><b>Being Complied</b></p> <p>Based on the SEIAA order No. 1200/EC2/2018/SEIAA dated 16.11.2020 (A copy of the order was submitted along with the HYCR for the period October 2020 to March 2021), as an additional precautionary safeguard measure, Authority decided to constitute a monitoring team to monitor the functioning of the quarry.</p> <p>The team will inspect the quarry at least once every 3 months and prepare an inspection report. The team will also suggest corrective measures for irregularities if any. The project proponent will provide logistic support for field inspection. The first visit was completed and AVPPL have complied with all observations and</p>

	Adani Vizhinjam Port Private Limited (AVPPL)	From: October 2022 To: March 2023
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala		


Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023		
S. No.	Conditions	Compliance Status as on March 31, 2023
		<p>recommendations of the monitoring committee.</p> <p>Thereafter, in line with email from SEIAA dated 03.11.2022 (<b>Annexure 1</b>), a second site visit and field inspection of the monitoring team consisting of Dr. R. Ajayakumar Varma, Chairman, SEAC and Er. M. Dileep Kumar was held on 12.11.2022.</p> <p>The field Inspection report was discussed in the 135<sup>th</sup> SEAC Meeting between 07.12.2022 to 17.12.2022, wherein the committee decided to recommend additional points for compliance. The observations and recommendations of the monitoring committee were received from SEIAA vide letter No. 1200/EC2/2018/SEIAA dated 30.12.2022 (<b>Annexure 2</b>). In this regard, AVPPL have complied with all the observations and recommendations of the monitoring committee and details of the same are given in <b>Annexure 3</b>.</p>
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.	<b>Noted</b>
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	<p><b>Complied</b></p> <p>EC for the project was issued on 01.03.2019. Advertisements, that the project has been accorded EC were published within 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="http://www.seiaakerala.in">www.seiaakerala.in</a>. Screenshot of the website showing the details of the EC was submitted along with HYCR for the</p>


	Adani Vizhinjam Port Private Limited (AVPPL)	From: October 2022 To: March 2023
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala		

Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023		
S. No.	Conditions	Compliance Status as on March 31, 2023
	Impact Assessment Authority (SEIAA) office and may also be seen on the website of the Authority at <a href="http://www.seiaakerala.org">www.seiaakerala.org</a> . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.	<p>period October 2019 to March 2020. Extracts of these newspaper clippings with the advertisements were submitted along with HYCR for the period April 2019 to September 2019.</p> <p>Copy of the advertisements signed on all pages were submitted to SEIAA vide Letter No. AVPPL/SEIAA/2019-20/731 dated 01.04.2019 was submitted along with HYCR for the period April 2019 to September 2019.</p> <p>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.</p>
26	The Environmental Clearance shall be put on the website of the company by the proponent.	<p><b>Complied</b></p> <p>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.</p>
27	Proponent shall submit half yearly reports in soft copy and SEIAA will upload it on the website.	<p><b>Being Complied</b></p> <p>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 &amp; Climate Change (MoEF&amp;CC) dated 26.11.2018, wherein submission of HYCRs by email/soft copy is declared acceptable, soft copy of HYCR for the period April 2022 to September 2022 has been submitted vide email dated 30.11.2022 (a copy of the email is enclosed as <b>Annexure 4</b>).</p>
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	<p><b>Complied</b></p> <p>The details of EC have been displayed at the site next to the entrance of the quarry, visible to the public.</p>




<b>adani</b>	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
	depicted at the entrance of the quarry, visible to the public	 <p><b>EC Details Displayed on Board at Site</b></p>
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.	<b>Complied</b> AVPPL has submitted Notarized Affidavit dated 03.04.2019 to SEIAA stating that all the conditions stipulated in the EC shall be scrupulously followed. Copy of the affidavit and the cover letter vide No. AVPPL/SEIAA/2019-20/731 dated 01.04.2019 have been submitted along with HYCR for the period April 2019 to September 2019.
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	<b>Noted for Compliance</b>
31	The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any	<b>Not Applicable</b> There are no natural water courses and/or water resources of first order streams in and around the mine lease area.

	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		


<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
	mining operations. Necessary safeguard measures to protect the first order streams, if any, 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.	<p><b>Being Complied</b></p> <p>As such, the quarry had been mined earlier by another party and since this is already an open mine, there was no topsoil or overburden available in the quarry; all the produced materials are being used for Breakwater Construction at Vizhinjam Port.</p> <p>However, due to certain geological disturbances in the formation, some overburden has been found in between the rock formation after attaining 6 m on the western slope between p3 and p4 pillars. AVPPL have shifted the topsoil and overburden on the western slope to an area of land in the lower portions of the quarry along with 150 m gabion wall protection. The overburden materials will be managed in this area within the site as per mine closure plan.</p> <p>It will be ensured that the maximum height of the dumps shall not exceed dimensions specified and overall slope of the dumps shall be maintained to 37.5 degrees. The overburden dumps will be vegetated with suitable native species and monitoring and management of the area shall be done until the vegetation becomes self-sustaining.</p>
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	<p><b>Will be Complied</b></p> <p>The quarry has been mined earlier by other parties and is an already open mine and hence there is no topsoil 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 run-off is not required at the project site.</p> <p>A siltation pond has been created by constructing a check dam (up to 10m X 1.5m size) at the</p>

	Adani Vizhinjam Port Private Limited (AVPPL)	From: October 2022 To: March 2023
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala		

Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023																													
S. No.	Conditions	Compliance Status as on March 31, 2023																											
	particularly after monsoon and maintained properly.	bottom of the quarry area to prevent run-off of water and flow of sediments. The water collected is being utilized for watering the mine area, roads, greenbelt development, etc.  The drains will be regularly desilted particularly after monsoon and maintained properly.																											
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	<b>Being Complied</b> 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 accredited laboratory; M/s. Standards Environmental & Analytical Laboratories. Summary of the Ambient Air Quality Monitoring (AAQM) during the compliance period at 5 monitoring locations is mentioned below. <table><tr><th>Parameter</th><th>Unit</th><th>Max</th><th>Min</th><th>Perm. Limit</th></tr><tr><td>PM<sub>10</sub></td><td>µg/m<sup>3</sup></td><td>58.7</td><td>50.9</td><td>100</td></tr><tr><td>PM<sub>2.5</sub></td><td>µg/m<sup>3</sup></td><td>34.6</td><td>28.3</td><td>60</td></tr><tr><td>SO<sub>2</sub></td><td>µg/m<sup>3</sup></td><td>BDL</td><td>-</td><td>80</td></tr><tr><td>NO<sub>2</sub></td><td>µg/m<sup>3</sup></td><td>BDL</td><td>-</td><td>80</td></tr></table> The Ambient Air Quality Monitoring Report is enclosed as <b>Annexure 5</b> . All the monitored parameters were found within the prescribed limits.			Parameter	Unit	Max	Min	Perm. Limit	PM <sub>10</sub>	µg/m <sup>3</sup>	58.7	50.9	100	PM <sub>2.5</sub>	µg/m <sup>3</sup>	34.6	28.3	60	SO <sub>2</sub>	µg/m <sup>3</sup>	BDL	-	80	NO <sub>2</sub>	µg/m <sup>3</sup>	BDL	-	80
Parameter	Unit	Max	Min	Perm. Limit																									
PM <sub>10</sub>	µg/m <sup>3</sup>	58.7	50.9	100																									
PM <sub>2.5</sub>	µg/m <sup>3</sup>	34.6	28.3	60																									
SO <sub>2</sub>	µg/m <sup>3</sup>	BDL	-	80																									
NO <sub>2</sub>	µg/m <sup>3</sup>	BDL	-	80																									
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	<b>Being Complied</b> 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.  Also, 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.	<b>Being Complied</b> The following measures are being taken for the control of noise levels: <ul style="list-style-type: none"><li>• Drilling: Good captive silencers are being used</li></ul>																											


**Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental  
Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019  
for the Period October 2022 to March 2023**

S. No.	Conditions	Compliance Status as on March 31, 2023																		
		<p>in drilling equipment.</p> <ul style="list-style-type: none"> <li>Blasting: AVPPL uses the NONEL method - bottom initiation to reduce the noise of blasting.</li> <li>Machinery &amp; Tippers: It is ensured that equipment is fitted with effective silencers, mufflers, acoustic linings, or shields, as necessary.</li> <li>It is ensured that vehicles transporting the materials follow the speed limit to maintain the noise level.</li> <li>Vehicles are serviced regularly and maintained properly to avoid any unwanted generation of noise or vibration from them.</li> </ul> <p>Ambient Noise is being monitored by NABL accredited laboratory; Standards Environmental &amp; Analytical Laboratories as per Noise Pollution (Regulation &amp; Control) Rules, 2000 (Rules 3 (1) and 4(1)) at 5 locations.</p> <p>Summary of the Ambient Noise Monitoring during the compliance period at 5 monitoring locations is mentioned below:</p> <table border="1"> <thead> <tr> <th>Location</th><th>L<sub>eq</sub> Day time</th><th>L<sub>eq</sub> Night time</th></tr> </thead> <tbody> <tr> <td>Quarry Area (Project Site)</td><td>58.3</td><td>42.3</td></tr> <tr> <td>Near Operators Rest Room (North Side)</td><td>53.9</td><td>41.8</td></tr> <tr> <td>Vanchiyoore UP School (West Side)</td><td>52.6</td><td>41.6</td></tr> <tr> <td>St. Joseph of Cluny Public School (South Side)</td><td>50.6</td><td>41.3</td></tr> <tr> <td>Viswanadhapuram Shiva Temple (East Side)</td><td>50.4</td><td>40.6</td></tr> </tbody> </table> <p>The results obtained were compared with Noise Pollution (Regulation &amp; Control) Rule, 2000 (Rule 3(1) and 4(1)) and it is observed that the noise readings were within limits at all monitoring locations. The Noise Monitoring report is enclosed as <b>Annexure 6</b>.</p>	Location	L <sub>eq</sub> Day time	L <sub>eq</sub> Night time	Quarry Area (Project Site)	58.3	42.3	Near Operators Rest Room (North Side)	53.9	41.8	Vanchiyoore UP School (West Side)	52.6	41.6	St. Joseph of Cluny Public School (South Side)	50.6	41.3	Viswanadhapuram Shiva Temple (East Side)	50.4	40.6
Location	L <sub>eq</sub> Day time	L <sub>eq</sub> Night time																		
Quarry Area (Project Site)	58.3	42.3																		
Near Operators Rest Room (North Side)	53.9	41.8																		
Vanchiyoore UP School (West Side)	52.6	41.6																		
St. Joseph of Cluny Public School (South Side)	50.6	41.3																		
Viswanadhapuram Shiva Temple (East Side)	50.4	40.6																		
37	The funds earmarked for environmental protection measures and CER activate	<p><b>Being Complied</b></p> <p>AVPPL has entered into a Concession Agreement with GoK for the construction and operation of</p>																		


	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

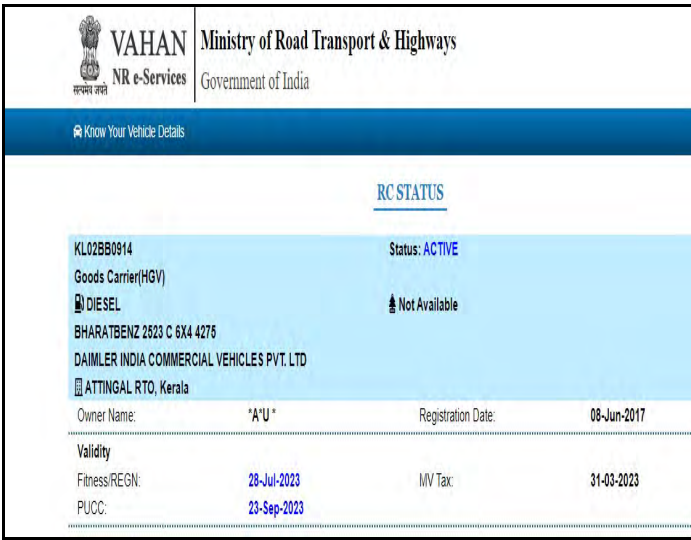
<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
	should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.	<p>Vizhinjam Port whereby it is mandated under Article 32 (copy submitted along with HYCR for the period April 2019 to September 2019) that an Escrow Account must be opened by AVPPL. All deposits must 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.</p> <p>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 and funds earmarked for environmental protection measures will be kept as a balance in the current Escrow Account. Furthermore, as provided above the account will be monitored by the government.</p> <p>Expenditure statement for CER and environmental protection measures is enclosed as <b>Annexure 7</b>.</p>
38	The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.	<p><b>Will be Complied</b></p> <p>All necessary support will be extended to the Regional Office of MoEF&amp;CC located at Bangalore for the monitoring of the compliance of the stipulated conditions Office by furnishing the requisite data/information/monitoring reports.</p>
39	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.	<b>Noted</b>




	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
40	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 this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	<b>Noted</b>
41	The SEIAA may revoke or suspend the order, for non-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 condition in the interest of environment protection	<b>Being Complied</b> Refer Point No. 23 above.
42	The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project.	<b>Noted</b>
43	The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.	<b>Noted</b>
44	The mining operation shall be restricted to above ground water table and it should not intersect ground water table	<b>Complied</b> 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 topmost 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.

	Adani Vizhinjam Port Private Limited (AVPPL)	From: October 2022 To: March 2023
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala		

Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023		
S. No.	Conditions	Compliance Status as on March 31, 2023
		Therefore, mining operations will be restricted to workings at a higher level at the quarry and will not touch the ground water table.
45	All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area	<p><b>Complied</b></p> <p>It is ensured that all vehicles used for transportation are having valid Pollution Under Control (PuC) certificate from authorized centers.</p>  <p><b>PuC Certificate</b></p>
46	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	<p><b>Not Applicable</b></p> <p>AVPPL is not withdrawing the surface water or ground water from the project area for any purposes.</p>
47	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	<p><b>Not Applicable</b></p> <p>There are no springs and perennial nallahs flowing upstream and downstream of the mine lease area as there are no water courses and/or water resources of first order streams in and around the mine lease area.</p>
48	Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to	<p><b>Being Complied.</b></p> <p>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</p>

<b>adani</b>	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala</b>		

<b>Half Yearly Compliance Report (HYCR) on Conditions Stipulated in Environmental Clearance (EC) Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period October 2022 to March 2023</b>		
<b>S. No.</b>	<b>Conditions</b>	<b>Compliance Status as on March 31, 2023</b>
	dust and take corrective measures, if needed	<p>contractor involved in the mining operations to observe any contractions due to exposure to dust and take corrective measures.</p>  <p><b>Medical Examination Report (Form O)</b></p>

**Enclosures:**

<b>Annexure Number</b>	<b>Details of Annexure</b>
Annexure 1:	Email from SEIAA for SEAC Site Inspection
Annexure 2:	Letter from SEIAA based on Field Visit Report
Annexure 3:	Compliance of Recommendations by SEIAA Appointed Monitoring Committee
Annexure 4:	Email Submission of HYCR for the period April 2022 to September 2022
Annexure 5:	Ambient Air Quality Monitoring Report
Annexure 6:	Noise Monitoring Report
Annexure 7:	CER and EMP Expenditure Statement

**Annexure 1: Email from SEIAA for  
SEAC Site Inspection**

**From:** [Jesse Benjamin Fullonton](#)  
**To:** [Jesse Benjamin Fullonton](#)  
**Subject:** FW: SEIAA - Site inspection Intimation-File No.1200/EC2/2018/SEIAA  
**Date:** Monday, May 29, 2023 1:24:38 PM  
**Importance:** High

---

**From:** seiaa kerala [<mailto:seacseiaakerala@gmail.com>]

**Sent:** Thursday, November 3, 2022 8:20 PM

**To:** [kadavilaland1@gmail.com](mailto:kadavilaland1@gmail.com); Hebin Chenthamarakshan <[Hebin.C@adani.com](mailto:Hebin.C@adani.com)>; Dr. R. Ajayakumar Varma <[akvarmaseac@gmail.com](mailto:akvarmaseac@gmail.com)>; M Dilipkumar <[dilepppcb@ymail.com](mailto:dilepppcb@ymail.com)>

**Subject:** SEIAA - Site inspection Intimation-File No.1200/EC2/2018/SEIAA

**\*CAUTION:** This mail has originated from outside Adani. Please exercise caution with links and attachments.\*

Sir,

As per the decision of SEAC meeting, Dr.R.Ajayakumar Varma, Chairman, SEAC (Contact No.**9447048526**) & Er.M.Dileep Kumar (Contact No.**9895623767**) will visit your project site on 12.11.2022 . Hence you are requested to be present with your RQP/Consultant during the site visit and make necessary arrangements for the same. You can contact the members for further details

Mr.Rajesh JHA, CEO, M/s Adani Vizhinjam Port Ltd- 9099005722

Mr.Hebin, M/s Adani Vizhinjam Port Ltd- 9099056757

Regards,

Administrator, SEIAA



**Annexure 2: Letter from SEIAA based  
on Field Visit Report**

# ***State Environment Impact Assessment Authority (SEIAA) Kerala***

***KSRTC Bus Terminal, 4th floor, Thampanoor, Thiruvananthapuram - 695 001***

***Ph: +91471-2334262 (Off) +91471-2334265 (Fax)***

***e-mail: [seacseiaakerala@gmail.com](mailto:seacseiaakerala@gmail.com)***

***web: [www.seiaakerala.org](http://www.seiaakerala.org)***

**No. 1200/EC2/2018/SEIAA**

**Date: 30.12.2022**

**From**

The Administrator  
State Environment Impact Assessment Authority  
Thiruvananthapuram

**To**

Mr. Rajesh Kumar Jha,  
Chief Executive Officer,  
M/s Adani Vizhinjam Port Private Limited,  
2<sup>nd</sup> Floor, Vipanchika Tower, Thycaud,  
Thiruvananthapuram - 695014

**Sir,**

Sub:-SEIAA – Monitoring functioning of quarry of M/s Adani Vizhinjam Port Pvt. Ltd-  
Field inspection report - reg.

Ref :- Minutes of the 135<sup>th</sup> SEAC meeting held on 07<sup>th</sup> to 09<sup>th</sup> & 14<sup>th</sup> & 17<sup>th</sup>  
December, 2022

Attention is invited to the reference cited. The Committee in its 135<sup>th</sup> SEAC meeting, discussed the Field Inspection Report and decided to recommend the following points for compliance by the Proponent with immediate effect.

1. Install adequate sprinkling arrangements in the project area as no sprinklers are found installed in the project site to contain dust emissions except a small mobile water tanker. Sprinklers should be provided at the loading areas, vehicle parking areas and haulage roads
2. Improve the stormwater channelization by providing improved garland drain and silt traps.
3. Provide adequate sanitation arrangements to the workers at the site.
4. As per the approved mining plan, deep hole blasting (depth of the hole 6.5 m, dia 115 mm and 20 to 25 kg explosives per hole) was permitted. Considering the requirement of stringent norm of distance criteria, the Proponent stated that, now 33 mm dia holes of depth 2.4 m used for controlled blasting. The maximum explosive used per hole is



625 gm. This has to be complied with.

5. Deep hole blasting should be strictly avoided as dwelling units and built structures are located in the vicinity of the mine.
6. Green belt development in the buffer zone and the nurturing of plants should be done with more vigour.
7. Garland drain should be developed all around the mine and provided with intermittent silt traps to minimize the discharge of turbid water to the siltation pond and further to the natural drain.
8. Temporary shelters for the mine workers should be provided to safeguard themselves during the blasting events.
9. The Audit report received from the Mining & Geology Department should be shared with the SEIAA.

Hence you are requested to submit the compliance of the above mentioned points

Yours faithfully,

Sd-/

**Harikumar.A.S**  
Administrator,SEIAA


Approved for issue

  
Asst Section officer




**Annexure 3: Compliance of  
Recommendations by SEIAA Appointed  
Monitoring Committee**


### Annexure 3

S. No.	Condition	Compliance
1.	Install adequate sprinkling arrangements in the project area as no sprinklers are found installed in the project site to contain dust emissions except a small mobile water tanker. Sprinklers should be provided at the loading areas, vehicle parking areas and haulage roads.	<p><b>Being Complied</b></p> <p>Mobile Water Sprinklers are modified with good sprinkling capacities and are available to sprinkle water till the loading faces, Parking areas, Haulage roads, etc., and separate pipe is provided from the mobile tanker to spray all over the areas where the tanker is unable to reach.</p>  <p><b>Tanker with Pipeline for Sprinkling</b></p>
2.	Improve the storm water channelization by providing improved garland drain and silt traps.	<p><b>Complied</b></p> <p>The area between the gabion wall and garland drainage is concreted for the proper channelization of storm water.</p>
3.	Provide adequate sanitation arrangements to the workers at the site.	<p><b>Complied</b></p> <p>e-Toilet has been installed for the sanitation requirements of workers at the site.</p>  <p><b>Bio-Toilet at Site</b></p>





	<b>Adani Vizhinjam Port Private Limited (AVPPL)</b>	<b>From: October 2022 To: March 2023</b>
<b>Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District</b>		

<b>S. No.</b>	<b>Condition</b>	<b>Compliance</b>
4.	As per the approved mining plan, deep hole blasting (depth of the hole 6.5 m, dia 115 mm and 20 to 25 kg explosives per hole) was permitted. Considering the requirement of stringent norm of distance criteria, the Proponent stated that, now 33 mm dia holes of depth 2.4 m used for controlled blasting. The maximum explosive used per hole is 625 gm. This has to be complied with.	<b>Complied</b> 33 mm dia holes of depth 2.4 m used for controlled blasting. The maximum explosive used per hole is 625 gm. This criterion is followed.
5.	Deep hole blasting should be strictly avoided as dwelling units and built structures are located in the vicinity of the mine.	<b>Complied</b> Deep hole blasting is not being undertaken.
6.	Greenbelt development in the buffer zone and the nurturing of plants should be done with more vigour.	<b>Complied</b> Greenbelt is developed and maintained in the buffer zone.

S. No.	Condition	Compliance
		 <p><b>Greenbelt Development</b></p>
7.	Garland drain should be developed all around the mine and provided with intermittent silt traps to minimize the discharge of turbid water to the siltation pond and further to the natural drain.	<p><b>Complied</b></p> <p>The area between the gabion wall and garland drainage is concreted for the proper channelization of storm water.</p>

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

S. No.	Condition	Compliance
		 <p><b>Garland Drain</b></p>
8.	Temporary shelters for the mine workers should be provided to safeguard themselves during the blasting events.	<p><b>Complied</b></p> <p>A temporary shelter is available at the site for workers to safeguard themselves during blasting events.</p>  <p><b>Temporary Shelter</b></p>
9.	The Audit report received from the Mining & Geology Department should be shared with the SEIAA.	<p><b>Complied</b></p> <p>The audit report by Director of Mining &amp; Geology was submitted to SEIAA vide our letter AVPPL/SEIAA/2022-23/1981 dated 07.06.2022; which was also included as a part of the Half Yearly Compliance Report for the Period April 2022 to September 2022 as Annexure 3.</p>

**Annexure 4: Email Submission of HYCR  
for the period April 2022 to  
September 2022**



## Jesse Benjamin Fullonton

---

**From:** Rajesh Kumar Jha  
**Sent:** Wednesday, November 30, 2022 12:51 PM  
**To:** rosz.bng-mefcc@gov.in; rosz.bng-mef@nic.in  
**Cc:** seiaa kerala; Hebin Chenthamarakshan; Jesse Benjamin Fullonton; Snehal Jariwala; Environment Avppl; Palanivelu Kumar  
**Subject:** EC No. 1200/EC2/2018/SEIAA dated 01.03.2019 - HYCR - Apr 2022 to Sep 2022 - Kadavilla-1 - Reg.  
**Attachments:** EC No.1200\_EC2\_2018\_SEIAA dated 01.03.2019-HYCR-Apr22-Sep22\_22.11.2022.pdf

Dear Madam/Sir,

This has reference to the Environmental Clearance (EC) Order **No. 1200/EC2/2018/SEIAA issued on 01.03.2019** by State Environmental Impact Assessment Authority (SEIAA), Kerala to Adani Vizhinjam Port Private Limited (AVPPL) 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 **April 2022 to September 2022** is attached vide reference AVPPL/MoEF/2022-23/2223 dated 22.11.2022; 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 Limited**  
**Third Floor, Aspinwall House, Kuravankonam, Kowdiar, Thiruvananthapuram, Kerala - 695003**  
Mobile: +91 471 277 2116  
[www.adani.com](http://www.adani.com)



Thinking big  
Doing better

Our values: Courage, Trust and Commitment

## **Annexure 5: Ambient Air Quality Monitoring Report**

## TEST REPORT

<b>ULR No: TC540223000003281F</b>		
LRI No.: SEAAL23021248A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt : 14-02-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	EN23020414
Sample Name	Ambient Air	Sample Received on	17-02-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	17-02-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-02-2023


DETAILS OF SAMPLING			
Sampling Location	Project Site	Date of Sampling	14-02-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	72 %
Latitude	8° 43'42.7" N	Longitude	76° 50'16.1" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala


TEST RESULTS - CHEMICAL DISCIPLINE					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARDS
1	Particulate matter (PM <sub>10</sub> )	IS 5182 (Part 23): 2006	µg/m <sup>3</sup>	58.7	100 (Max)
2	Particulate matter (PM <sub>2.5</sub> )	IS 5182 (Part 24):2019	µg/m <sup>3</sup>	31.4	60.0 (Max)
3	Sulphur dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001	µg/m <sup>3</sup>	< 4.00	80.0 (Max)
4	Nitrogen dioxide (NO <sub>2</sub> )	IS 5182 (Part 6): 2006	µg/m <sup>3</sup>	< 4.00	80.0 (Max)

Remarks: The Air sample complies with National Ambient Air Quality Standards with respect to above parameters tested.

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

  
**Shency Joy**  
 Dy.TM-Chemical  
 Checked by:



  
**Laiju P.N.**  
 Laboratory Head  
 Authorized Signatory

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

**StandardS Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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

## TEST REPORT

<b>ULR No: TC540223000003282F</b>		
LRI No.: SEAAL23021249A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt : 14-02-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	EN23020415
Sample Name	Ambient Air	Sample Received on	17-02-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	17-02-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-02-2023


DETAILS OF SAMPLING			
Sampling Location	Near Operators Rest Room North Side (2.33 km away from Project Site)	Date of Sampling	14-02-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	73 %
Latitude	8° 43'11.2" N	Longitude	76° 49'6.9" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala


TEST RESULTS - CHEMICAL DISCIPLINE					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARDS
1	Particulate matter (PM <sub>10</sub> )	IS 5182 (Part 23): 2006	µg/m <sup>3</sup>	52.6	100 (Max)
2	Particulate matter (PM <sub>2.5</sub> )	IS 5182 (Part 24):2019	µg/m <sup>3</sup>	29.1	60.0 (Max)
3	Sulphur dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001	µg/m <sup>3</sup>	< 4.00	80.0 (Max)
4	Nitrogen dioxide (NO <sub>2</sub> )	IS 5182 (Part 6): 2006	µg/m <sup>3</sup>	< 4.00	80.0 (Max)

Remarks: The Air sample complies with National Ambient Air Quality Standards with respect to above parameters tested.

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

  
**Shency Joy**  
**Dy.TM-Chemical**  
 Checked by:



  
**Laiju P.N.**  
**Laboratory Head**  
 Authorized Signatory

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

**StandardS Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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

## TEST REPORT

<b>ULR No: TC540223000003283F</b>		
LRI No.: SEAAL23021250A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt : 14-02-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	EN23020416
Sample Name	Ambient Air	Sample Received on	17-02-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	17-02-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-02-2023

DETAILS OF SAMPLING			
Sampling Location	Vanchiyoor UP School West Side (0.85 km away from Project Site)	Date of Sampling	14-02-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	73 %
Latitude	8° 43'16.5" N	Longitude	76° 50'7.1" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala

TEST RESULTS - CHEMICAL DISCIPLINE					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARDS
1	Particulate matter (PM <sub>10</sub> )	IS 5182 (Part 23): 2006	µg/m <sup>3</sup>	55.3	100 (Max)
2	Particulate matter (PM <sub>2.5</sub> )	IS 5182 (Part 24):2019	µg/m <sup>3</sup>	32.7	60.0 (Max)
3	Sulphur dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001	µg/m <sup>3</sup>	< 4.00	80.0 (Max)
4	Nitrogen dioxide (NO <sub>2</sub> )	IS 5182 (Part 6): 2006	µg/m <sup>3</sup>	< 4.00	80.0 (Max)

Remarks: The Air sample complies with National Ambient Air Quality Standards with respect to above parameters tested.

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



**Shency Joy**  
Dy.TM-Chemical  
Checked by:




**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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



## TEST REPORT

ULR No: TC540223000003284F		
LRI No.: SEAAL23021251A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	M/s Adani Vizhinjam Port Pvt Ltd Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt : 14-02-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	EN23020417
Sample Name	Ambient Air	Sample Received on	17-02-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	17-02-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-02-2023

DETAILS OF SAMPLING			
Sampling Location	St. Joseph of Cluny Public School South side (1.01 km away from Project Site)	Date of Sampling	14-02-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	73 %
Latitude	8° 43'35.3" N	Longitude	76° 50'48.2" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala

TEST RESULTS - CHEMICAL DISCIPLINE					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARDS
1	Particulate matter (PM <sub>10</sub> )	IS 5182 (Part 23): 2006	µg/m <sup>3</sup>	57.4	100 (Max)
2	Particulate matter (PM <sub>2.5</sub> )	IS 5182 (Part 24):2019	µg/m <sup>3</sup>	34.6	60.0 (Max)
3	Sulphur dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001	µg/m <sup>3</sup>	< 4.00	80.0 (Max)
4	Nitrogen dioxide (NO <sub>2</sub> )	IS 5182 (Part 6): 2006	µg/m <sup>3</sup>	< 4.00	80.0 (Max)

Remarks: The Air sample complies with National Ambient Air Quality Standards with respect to above parameters tested.

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



Shency Joy  
Dy.TM-Chemical  
Checked by:




Laiju P.N.  
Laboratory Head  
Authorized Signatory

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

Standard<sup>S</sup> Environmental & Analytical Laboratories

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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

## TEST REPORT

<b>ULR No: TC540223000003285F</b>		
LRI No.: SEAAL23021252A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt : 14-02-2023

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	EN23020418
Sample Name	Ambient Air	Sample Received on	17-02-2023
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	17-02-2023
Sampled by	Lab Authorized Sampler	Test Completed on	24-02-2023


DETAILS OF SAMPLING			
Sampling Location	Viswanadhapuram Shiva Temple East Side (1.09 km away from Project Site)	Date of Sampling	14-02-2023
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	73 %
Latitude	8° 44'17.6" N	Longitude	76° 50'10.4" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala


TEST RESULTS - CHEMICAL DISCIPLINE					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARDS
1	Particulate matter (PM <sub>10</sub> )	IS 5182 (Part 23): 2006	µg/m <sup>3</sup>	50.9	100 (Max)
2	Particulate matter (PM <sub>2.5</sub> )	IS 5182 (Part 24):2019	µg/m <sup>3</sup>	28.3	60.0 (Max)
3	Sulphur dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001	µg/m <sup>3</sup>	< 4.00	80.0 (Max)
4	Nitrogen dioxide (NO <sub>2</sub> )	IS 5182 (Part 6): 2006	µg/m <sup>3</sup>	< 4.00	80.0 (Max)

Remarks: The Air sample complies with National Ambient Air Quality Standards with respect to above parameters tested.

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

  
**Shency Joy**  
 Dy.TM-Chemical  
 Checked by:



  
**Laiju P.N.**  
 Laboratory Head  
 Authorized Signatory

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

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017  
 vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43  
 Web: www.sealabs.in, E-mail: seaalab@gmail.com

## **Annexure 6: Noise Monitoring Report**

## TEST REPORT

<b>ULR No: TC540223000003286F</b>		
LRI No.: SEAAL23021253A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt: 14-02-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	EN23020419
Sample Name	Ambient Noise	Monitoring Commenced on	14-02-2023
Monitoring Location	Project Site	Monitoring Completed on	15-02-2023
Test Method	IS 9989:1981	Monitored by	Lab Authorized Sampler
Latitude	8° 43'42.7" N	Longitude	76° 50'16.1" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	44.6	14:00	59.8	22:00	43.2
07:00	47.8	15:00	60.3	23:00	39.1
08:00	52.9	16:00	61.6	24:00	41.9
09:00	57.0	17:00	62.1	01:00	42.7
10:00	59.8	18:00	55.7	02:00	42.3
11:00	63.5	19:00	51.5	03:00	43.1
12:00	60.3	20:00	46.9	04:00	41.9
13:00	59.3	21:00	46.4	05:00	43.9

TEST RESULTS- CHEMICAL DISCIPLINE				
Sl. No.	PARAMETERS	UNIT	RESULT	Limit as per Noise Pollution (Regulation and Control) Rules, 2000 (Industrial Area)
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	58.3	75 dB (A)
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	42.3	70 dB (A)

Remarks: The Noise level Monitoring complies with the Noise Pollution (Regulation and Control) Rules, 2000 (Rules3 (1) and 4(1)).

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



**Shency Joy**  
Dy.TM-Chemical  
Checked by:




**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017  
vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43  
Web: www.sealabs.in, E-mail: seaalabs@gmail.com

## TEST REPORT

<b>ULR No: TC540223000003287F</b>		
LRI No.: SEAAL23021254A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt: 14-02-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	EN23020420
Sample Name	Ambient Noise	Monitoring Commenced on	14-02-2023
Monitoring Location	Near Operators Rest Room North Side (2.33 km away from Project Site)	Monitoring Completed on	15-02-2023
Test Method	IS 9989:1981	Monitored by	Lab Authorized Sampler
Latitude	8° 43'11.2" N	Longitude	76° 49'6.9" E


INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	41.3	14:00	55.4	22:00	40.0
07:00	44.3	15:00	55.8	23:00	38.6
08:00	49.0	16:00	57.1	24:00	41.4
09:00	52.8	17:00	57.5	01:00	42.2
10:00	55.4	18:00	51.5	02:00	41.8
11:00	58.8	19:00	47.7	03:00	42.6
12:00	55.8	20:00	43.5	04:00	41.4
13:00	55.0	21:00	42.9	05:00	43.4


TEST RESULTS- CHEMICAL DISCIPLINE				
Sl. No.	PARAMETERS	UNIT	RESULT	Limit as per Noise Pollution (Regulation and Control) Rules, 2000 (Industrial Area)
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	53.9	75 dB (A)
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	41.8	70 dB (A)

Remarks: The Noise level Monitoring complies with the Noise Pollution (Regulation and Control) Rules, 2000 (Rules3 (1) and 4(1)).

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

  
**Shency Joy**  
**Dy.TM-Chemical**  
 Checked by:



  
**Laiju P.N.**  
**Laboratory Head**  
 Authorized Signatory

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

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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



## TEST REPORT

<b>ULR No: TC540223000003288F</b>		
LRI No.: SEAAL23021255A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt: 14-02-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	EN23020421
Sample Name	Ambient Noise	Monitoring Commenced on	14-02-2023
Monitoring Location	Vanchiyoor UP School West Side (0.85 km away from Project Site)	Monitoring Completed on	15-02-2023
Test Method	IS 9989:1981	Monitored by	Lab Authorized Sampler
Latitude	8° 43'16.5" N	Longitude	76° 50'7.1" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	40.4	14:00	54.1	22:00	39.1
07:00	43.3	15:00	54.5	23:00	38.4
08:00	47.8	16:00	55.7	24:00	41.2
09:00	51.6	17:00	56.2	01:00	42.0
10:00	54.1	18:00	50.3	02:00	41.6
11:00	57.4	19:00	46.6	03:00	42.4
12:00	54.5	20:00	42.4	04:00	41.2
13:00	53.7	21:00	41.9	05:00	43.2

TEST RESULTS- CHEMICAL DISCIPLINE				
Sl. No.	PARAMETERS	UNIT	RESULT	Limit as per Noise Pollution (Regulation and Control) Rules, 2000 (Industrial Area)
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	52.6	75 dB (A)
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	41.6	70 dB (A)

Remarks: The Noise level Monitoring complies with the Noise Pollution (Regulation and Control) Rules, 2000 (Rules3 (1) and 4(1)).

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

**Shency Joy**  
Dy.TM-Chemical  
Checked by:



**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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

## TEST REPORT

<b>ULR No: TC540223000003289F</b>		
LRI No.: SEAAL23021256A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt: 14-02-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	EN23020422
Sample Name	Ambient Noise	Monitoring Commenced on	14-02-2023
Monitoring Location	St. Joseph of Cluny Public School South side (1.01 km away from Project Site)	Monitoring Completed on	15-02-2023
Test Method	IS 9989:1981	Monitored by	Lab Authorized Sampler
Latitude	8° 43'35.3" N	Longitude	76° 50'48.2" E

INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	38.9	14:00	52.1	22:00	37.7
07:00	41.7	15:00	52.5	23:00	38.1
08:00	46.1	16:00	53.7	24:00	40.9
09:00	49.7	17:00	54.1	01:00	41.7
10:00	52.1	18:00	48.5	02:00	41.3
11:00	55.3	19:00	44.9	03:00	42.1
12:00	52.5	20:00	40.9	04:00	40.9
13:00	51.7	21:00	40.4	05:00	42.8

TEST RESULTS- CHEMICAL DISCIPLINE				
Sl. No.	PARAMETERS	UNIT	RESULT	Limit as per Noise Pollution (Regulation and Control) Rules, 2000 (Industrial Area)
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	50.6	75 dB (A)
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	41.3	70 dB (A)

Remarks: The Noise level Monitoring complies with the Noise Pollution (Regulation and Control) Rules, 2000 (Rules3 (1) and 4(1)).

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

**Shency Joy**  
Dy.TM-Chemical  
Checked by:



**Laiju P.N.**  
Laboratory Head  
Authorized Signatory

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

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017  
vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43  
Web: www.sealabs.in, E-mail: seaalab@gmail.com

## TEST REPORT

<b>ULR No: TC540223000003290F</b>		
LRI No.: SEAAL23021257A	Date: 25-02-2023	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	<b>M/s Adani Vizhinjam Port Pvt Ltd</b> Nagaroor, Chirayinkeezhu, Thiruvananthapuram District.
Customer Reference	Test Request dt: 14-02-2023

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	EN23020423
Sample Name	Ambient Noise	Monitoring Commenced on	14-02-2023
Monitoring Location	Viswanadhapuram Shiva Temple East Side (1.09 km away from Project Site)	Monitoring Completed on	15-02-2023
Test Method	IS 9989:1981	Monitored by	Lab Authorized Sampler
Latitude	8° 44'17.6" N	Longitude	76° 50'10.4" E


INFORMATION PROVIDED BY CUSTOMER - SAMPLING SITE DETAILS			
Re - Survey No	555/2, Block No.37		
Village	Nagaroor	Taluk	Chirayinkeezhu
District	Thiruvananthapuram	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	38.7	14:00	51.9	22:00	37.5
07:00	41.5	15:00	52.3	23:00	37.4
08:00	45.9	16:00	53.5	24:00	40.1
09:00	49.5	17:00	53.9	01:00	40.9
10:00	51.9	18:00	48.3	02:00	40.5
11:00	55.1	19:00	44.7	03:00	41.3
12:00	52.3	20:00	40.7	04:00	40.1
13:00	51.5	21:00	40.2	05:00	42.1


TEST RESULTS - CHEMICAL DISCIPLINE				
Sl. No.	PARAMETERS	UNIT	RESULT	Limit as per Noise Pollution (Regulation and Control) Rules, 2000 (Industrial Area)
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	50.4	75 dB (A)
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	40.6	70 dB (A)

Remarks: The Noise level Monitoring complies with the Noise Pollution (Regulation and Control) Rules, 2000 (Rules3 (1) and 4(1)).

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

  
**Shency Joy**  
Dy.TM-Chemical  
Checked by:



  
**Laiju P.N.**  
Laboratory Head  
Authorized Signatory


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

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017  
vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43  
Web: www.sealabs.in, E-mail: seaalab@gmail.com

## **Annexure 7: CER and EMP Expenditure Statement**

	Adani Vizhinjam Port Private Limited (AVPPL)	From: October 2022 To: March 2023
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		

## Annexure 7

### Expenditure Statement for CER for the FY 2022-2023:

S. No.	CER Activity	Expenditure (Rs. Lakhs)
Total FY 2020-2021		8.05
Total FY 2021-2022		6.25
1.	Onam Kit (Groceries & Provisions) Distribution to BPL Families	3.00
2.	Strengthening of Ayiravally Temple Road	18.59
Total FY 2022-2023		21.59
Cumulative Total till date		35.89

### Expenditure Statement for EMP for the FY 2022-2023:

S. No.	EMP Expenditure	Expenditure (Rs. Lakhs)
Total FY 2019-2020		4.95
Total FY 2020-2021		7.34
Total FY 2021-2022		8.89
1.	Water Sprinkling	10.40
2.	Greenbelt Development/Sapling Plantation	3.51
3.	Environmental Monitoring	0.68
Total FY 2022-2023 (till 30.09.2022)		14.59
Cumulative Total till date		35.77



**Half Yearly Compliance Report (HYCR)  
October 2022 to March 2023**

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



**Adani Vizhinjam Port Private Ltd. (AVPPL)**