

Harsh Yadav

From: Rajesh Kumar Jha
Sent: 27 November 2019 11:48
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 3rd 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.

2nd Floor, Vipanchika Tower, PO-Thycaud, Trivandrum- 695014, Kerala, India
Direct Line: 0471 277 2116 | www.adani.com



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Our Values: Courage | Trust | Commitment



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 Compliance Report to Conditions of Environmental Clearance (EC) for the Period April 2019 to September 2019 - 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,

This has reference to the Environmental Clearance (EC) Order 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.

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

Adani Vizhinjam Port Private Limited
2nd Floor, Vipanchika Tower, Thycaud
Thiruvananthapuram
Kerala-695014



www.adani.com

CIN -U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India



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

Thanking you.



Yours Sincerely

Rajesh Jha

CEO – Authorized Signature

Enclosed: As mentioned above

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

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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

**EC Compliance Report
for the Period April 2019 to September 2019**


Project Proponent




Adani Vizhinjam Port Private Ltd. (AVPPL)

November 2019


adani	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		

Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019		
S. No.	Conditions	Compliance Status as on September 30, 2019
Specific Conditions		
1	The mining should be conducted with Non-Electric Detonator (NONEL) Method thereby minimizing air blast, fly rock and ground vibration.	<p>Complied Mining is being conducted using Non-Electric Detonator (NONEL) method of Blasting only. To minimize the air blast, fly rock and ground vibration.</p>  <p>NONEL Blasting at Site</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>Will be Complied Adani Vizhinjam Port Pvt. Ltd. (AVPPL) will extract a maximum of 7 lakh tons of building stone quarry within a period of two years. As on 30.09.2019, a total of 0.12 Lakh tons of building stones have been extracted.</p> <p>Further permission for mining will be obtained based on the requirement and environmental assessment.</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>Will be Complied A total of Rs. 15 Lakhs will be spent on Corporate Environment Responsibility (CER). AVPPL are coordinating with the Local Self Government regarding approval of the proposed CER plan with expense heads under specific activities in line with Ministry of Environment and Forests & Climate Change (MoEF&CC) Office Memorandum (OM) F.No.22-65/2017-IA.III dated 01.05.2018.</p> <p>AVPPL had prepared a plan for the budget of Rs. 15 lakhs and have submitted the same to</p>


	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		

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		<p>the Nagaroor Gram Panchayat seeking their confirmation and go ahead for the proposed CER. Correspondence to the President of the Nagaroor Gram Panchayat is enclosed as Annexure 1. Awaiting confirmation of the same.</p> <p>Once the confirmation from Nagaroor Gram Panchayat has been obtained, affidavit will be submitted that AVPPL will implement the CER agreed upon and expend Rs. 15 lakhs as a part of CER activities.</p>
4	The proponent should follow the closure plans (progressive closure and final closure) as per KMMC Rules.	<p>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 (Section 8.0); enclosed as Annexure 2.</p> <p>The closure procedure (progressive closure and final closures) shall be documented prior to and during the closure of the mine.</p>
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.	<p>Complied 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 constitution of the EMMC is given as Annexure 3.</p>
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.	<p>Will be Complied Since inception of the operations of the quarry on 05.06.2019, the monsoon has been active in Kerala and the project area and there has been continuous spells of rain and there has not been any substantial work done during the compliance period. AVPPL will plant suitable avenue trees along the safety zones, along the boundary of the quarry and on either side of the internal road.</p>
3	Sprinklers shall be installed and used in the project site to contain dust emissions.	<p>Being Complied Operations of the quarry started on 05.06.2019. Since inception the monsoon has been active in Kerala. There has been</p>

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		continuous spells of rain; thereby fugitive dust emissions are being controlled naturally. During non-monsoon seasons, regular water sprinkling through water tankers on haul road and other dust prone areas such as loading and unloading of minerals will be carried out.
4	Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent	Will be Complied Eco-restoration including Mine Closure Plan is provided in Section 8.0 in the Approved Mining Plan; enclosed as Annexure 2 . 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.	Not Applicable Stacking of materials is not being carried out as all the produced materials are used for Breakwater Construction at Vizhinjam Port and being transported directly to the Port site and not stacked at the quarry site. There is also no overburden stacking as there is no overburden available in the quarry since the quarry has been mined earlier by other parties and is an already open mine. 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 A total of Rs. 15 Lakhs will be spent on CER. AVPPL are coordinating with the Local Self Government regarding approval of the proposed CER plan with expense heads under specific 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. Correspondence to the President of the Nagaroor Gram Panchayat is enclosed as Annexure 1 .


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

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S. No.	Conditions	Compliance Status as on September 30, 2019
		Awaiting approval of the same. Once the approval has been obtained, affidavit will be submitted that AVPPL will implement the CER agreed upon and expend Rs. 15 lakhs as a part of CER activities.
7	The project proponent shall comply the conditions stipulated by the statutory authorities concerned	Being Complied AVPPL are complying with all applicable conditions stipulated by respective competent statutory authorities.
8	Tarring /multiple options on the access roads shall be undertaken so as to reduce dust pollution during movement of vehicle.	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. <div>  </div> <p style="text-align: right;">2019/9/25 09:39</p> <p style="text-align: center;">Tar Road at Project Site</p>
9	Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions	Not Applicable The quarry has been mined earlier by another party and is an already open mine. There is no overburden present in the quarry.
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.	Being Complied 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.

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S. No.	Conditions	Compliance Status as on September 30, 2019
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 (Plate No. 6); enclosed as Annexure 2 .
12	No mining operations should be carried out at places having a slope greater than 45.	Being Complied 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	Not Applicable There is no crusher adjacent to the quarry and 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. 
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

Employees with PPEs

	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		


Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019

S. No.	Conditions	Compliance Status as on September 30, 2019
		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 should assess the number of trees in each project site before the issuance of EC so as to ensure the promptness in, planting.	<p>Being Complied</p> <p>The transportation of minerals in trucks is being undertaken covered with tarpaulin cover.</p>  <p>Trucks with Tarpaulin Cover</p> <p>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.</p>
17	Explosives should be stored in magazines in isolated place specified and approved by Explosives Department	<p>Will be Complied</p> <p>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 and Deputy Chief Controller of Explosives, Ernakulam for storage of explosives in the magazine.</p>
18	A minimum buffer distance of 100m from the boundary of the	As per the Government of Kerala (GoK) State Gazette Notification G.O. (P) No. 25/2017/ID

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	quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.	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. 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 is enclosed as Annexure 4 .
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: <ul style="list-style-type: none"> Govt. Land No Objection Certificate (NoC) from Trivandrum District Collector vide Letter No. B7-40269/2017 dated 30.04.2018 (Annexure 5) Letter of Intent from Director of Mining & Geology (DMG) vide Letter No. 9363/M3/2018 dated 04.09.2018 (Annexure 6) 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 (Annexure 4). Purchase and Use of Explosives Approval from Petroleum & Explosives Safety Organization (PESO), Ernakulam vide Letter No. E/Misc/Expl dated 27.03.2019 (Annexure 7)


	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		

Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019

S. No.	Conditions	Compliance Status as on September 30, 2019
		<ul style="list-style-type: none"> • Dangerous and Offensive Trade (D&O) License from Nagaroor Gram Panchayat vide License Number A2.1836\2019 dated 01.04.2019 (Annexure 8). • NoC for Use of Explosives from District Collector, Thiruvananthapuram vide File No.DCTVM/2436/2019-A17 dated 09.05.2019 (Annexure 9). • Approved Mining Plan by District Geologist, Trivandrum vide Letter No. 1716/DOT/ML/18 dated 20.05.2019 (Annexure 2). • Lease Order from DMG vide Letter No. 9363/M3/2018 dated 20.05.2019 (Annexure 10). • Lease Execution from Additional Director of Mining and Geology vide Letter No. 79/2019-20/9363/M3/2018/DMG dated 20.05.2019 (Annexure 11). • Quarrying Lease Registration Agreement in Form H at Chirayinkeezhu Register Office dated 22.05.2019 (Annexure 12).
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 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	Noted


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

Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019		
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	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 and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.	<p>Complied</p> <p>EC for the project was issued on 01.03.2019. Advertisements, that the project has been accorded EC and copies of clearance letters are available with the SEIAA office and can also be seen on the website of the Authority at www.seiaakerala.org, 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. Extracts of these newspaper clippings with the advertisements are enclosed as Annexure 13. Copy of the advertisements signed on all pages were submitted to SEIAA vide Letter No. AVPPL/SEIAA/2019-20/731 dated 01.04.2019; enclosed as Annexure 14.</p> <p>The copy of EC is uploaded to the company website: https://www.adaniports.com/ports-downloads?port=Vizhinjam-Port Screenshot of the same is enclosed as Annexure 15.</p>
26	The Environmental Clearance shall be put on the website of the company by the proponent.	<p>Complied</p> <p>The copy of EC is uploaded to the company website: https://www.adaniports.com/ports-downloads?port=Vizhinjam-Port Screenshot of the same is enclosed as Annexure 15.</p>

	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		


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S. No.	Conditions	Compliance Status as on September 30, 2019
27	Proponent shall submit half yearly reports in soft copy and SEIAA will upload it on the website.	<p>Will be Complied</p> <p>Since the EC for the project was issued on 01.03.2019 and AVPPL did not initiate any work at site by the end of the compliance period ending in 31.03.2019. Therefore the compliance for the half yearly period ending 31.03.2019 was not substantial and AVPPL requested MoEF&CC that the first half yearly compliance report will be submitted for the period April 2019 to September 2019. AVPPL had complied with the conditions that were applicable prior to commencement of operations and details of the same was submitted to MoEF&CC vide letter AVPPL/MOEF/2019-20/752 dated 25.04.2019 and email dated 08.05.2019 is enclosed as Annexure 16; same has been copied to SEIAA and KSPCB.</p> <p>This present report is the first Half Yearly compliance to EC conditions for the period April 2019 to September 2019.</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 depicted at the entrance of the quarry, visible to the public	<p>Complied</p> <p>The details of EC have been displayed at the site next to the entrance of the quarry, visible to the public.</p>

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S. No.	Conditions	Compliance Status as on September 30, 2019
		 <p>2019-9-14 12:24</p> <p>EC Details Displayed on Board at Site</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.	<p>Complied</p> <p>AVPPL has provided Notarized Affidavit dated 03.04.2019 stating that all the conditions stipulated in the EC shall be scrupulously followed; enclosed as Annexure 17. Copy of the same was submitted to SEIAA vide Letter No. AVPPL/SEIAA/2019-20/731 dated 01.04.2019; enclosed as Annexure 14.</p>
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	<p>Noted for Compliance</p>
31	The Project proponent shall ensure that no natural water course and/or water resources	<p>Not Applicable</p> <p>There are no natural water courses and/or water resources of first order streams in and</p>

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	shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	around the mine lease area.
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 run-off 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

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S. No.	Conditions	Compliance Status as on September 30, 2019																														
		<p>sediments. The water so collected will be utilized for watering the mine area, roads, greenbelt development, etc.</p> <p>The drains will be regularly desilted particularly after monsoon and maintained properly.</p>																														
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	<p>Complied</p> <p>Since inception of the operations of the quarry on 05.06.2019, the monsoon has been active in Kerala and the project area and there has been continuous spells of rain thereby fugitive dust emissions are being controlled naturally.</p> <p>During non-monsoon seasons, regular water sprinkling through water tankers on haul road and other dust prone areas such as loading and unloading of minerals will be carried out.</p> <p>Environment Monitoring at the site has been carried out by NABL and MoEF&CC accredited laboratory; M/s. Metamorphosis laboratory Private Limited.</p> <p>Summary of the Ambient Air Quality Monitoring (AAQM) during the compliance period at 5 monitoring locations is mentioned below.</p> <table><tr><th>Parameter</th><th>Unit</th><th>Max</th><th>Min</th><th>Perm. Limit</th></tr><tr><td>PM₁₀</td><td>µg/m³</td><td>60.2</td><td>43.6</td><td>100</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>32.5</td><td>22.8</td><td>60</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>25.2</td><td>16.4</td><td>80</td></tr><tr><td>NO₂</td><td>µg/m³</td><td>14.6</td><td>12.4</td><td>80</td></tr><tr><td>Ammonia</td><td>µg/m³</td><td>BDL</td><td>BDL</td><td>400</td></tr></table> <p>The Monitoring Report is enclosed as Annexure 18.</p> <p>All the monitored parameters were found within the prescribed limits.</p>	Parameter	Unit	Max	Min	Perm. Limit	PM ₁₀	µg/m ³	60.2	43.6	100	PM _{2.5}	µg/m ³	32.5	22.8	60	SO ₂	µg/m ³	25.2	16.4	80	NO ₂	µg/m ³	14.6	12.4	80	Ammonia	µg/m ³	BDL	BDL	400
Parameter	Unit	Max	Min	Perm. Limit																												
PM ₁₀	µg/m ³	60.2	43.6	100																												
PM _{2.5}	µg/m ³	32.5	22.8	60																												
SO ₂	µg/m ³	25.2	16.4	80																												
NO ₂	µg/m ³	14.6	12.4	80																												
Ammonia	µg/m ³	BDL	BDL	400																												


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

Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019

S. No.	Conditions	Compliance Status as on September 30, 2019												
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	<p>Being Complied</p> <p>Since inception of the operations of the quarry on 05.06.2019, the monsoon has been active in Kerala and the project area and there has been continuous spells of rain thereby fugitive dust emissions are being controlled naturally.</p> <p>During non-monsoon seasons, regular water sprinkling through water tankers on haul road and other dust prone areas such as loading and unloading of minerals will be carried out.</p>												
36	Measures should be taken for control of noise levels below 85 dBA in the work environment.	<p>Being Complied</p> <p>The following measures are being taken for the control of noise levels:</p> <ul style="list-style-type: none"> • Drilling: The good captive silencers are being used in drilling equipment. • Blasting: AVPPL is using NONEL method - 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 <p>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:</p> <table border="1"> <thead> <tr> <th>Location</th><th>Leq Day time</th><th>Leq Night time</th></tr> </thead> <tbody> <tr> <td>Quarry Area</td><td>72.6</td><td>55.7</td></tr> <tr> <td>Near Kadavila bus stop @ 450 m >> SE</td><td>69.9</td><td>48.5</td></tr> <tr> <td>Settlement @ 900 m >> W</td><td>62.8</td><td>52.4</td></tr> </tbody> </table>	Location	Leq Day time	Leq Night time	Quarry Area	72.6	55.7	Near Kadavila bus stop @ 450 m >> SE	69.9	48.5	Settlement @ 900 m >> W	62.8	52.4
Location	Leq Day time	Leq Night time												
Quarry Area	72.6	55.7												
Near Kadavila bus stop @ 450 m >> SE	69.9	48.5												
Settlement @ 900 m >> W	62.8	52.4												


	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		

Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019				
S. No.	Conditions	Compliance Status as on September 30, 2019		
		Settlement @ 330 m >> NNW	62.3	53.5
		Near Altharamudu bus stop @ 825 m >> NNE	64.6	54.1
		<p>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 and night 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.</p> <p>The Noise Monitoring report is enclosed as Annexure 19.</p>		
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.	<p>AVPPL has entered into a Concession Agreement with GoK for the construction and operation of Vizhinjam Port whereby it is mandated under Article 32 (Enclosed as Annexure 20) 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 i.e. Yes Bank Limited.</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 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.</p>		
38	The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should	<p>Will be Complied</p> <p>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</p>		


	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		


Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019

S. No.	Conditions	Compliance Status as on September 30, 2019
	extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.	furnishing the requisite data/information/monitoring reports.
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.	Noted
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.	Noted
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	Noted
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.	Noted
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.	Noted
44	The mining operation shall be	Complied

	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		

Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019

S. No.	Conditions	Compliance Status as on September 30, 2019
	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.
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>Complied</p> <p>It is ensured that all vehicles used for transportation are having valid Pollution Under Control (PuC) certificate from authorized pollution taking center.</p>  <p>PuC Certificate</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>Not Applicable</p> <p>AVPPL are not withdrawing the surface water or ground water for any purposes.</p>
47	Regular monitoring of flow rates and water quality upstream and	<p>Not Applicable</p> <p>There are no springs and perennial nallahs</p>

	Adani Vizhinjam Port Private Ltd	From : April 2019 To : September 2019
Building Stone Quarry Project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District		

Compliance Report on Conditions Stipulated in Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for the Period April 2019 to September 2019

S. No.	Conditions	Compliance Status as on September 30, 2019
	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	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.
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	Will be Complied Occupational health surveillance program of the workers will be undertaken. Since the mine has been in operation since 05.06.2019, the medical health test of the workers and laborers shall be taken up taken in December 2019 and will be also taken up periodically to observe any contractions due to exposure to dust and take corrective measures.

Enclosures:

Annexure Number	Details of Annexure
Annexure 1:	Letter to Nagaroor Gram Panchayat regarding proposed CER Plan
Annexure 2:	Approved Modified Mining Plan by District Geologist, Trivandrum
Annexure 3:	Constitution of the Environmental Management and Monitoring Cell
Annexure 4:	Consent to Operate (CTO)
Annexure 5:	Govt. Land NoC from Trivandrum District Collector
Annexure 6:	LoI from DMG
Annexure 7:	Purchase and Use of Explosives Approval from PESO, Ernakulam
Annexure 8:	D&O License from Nagaroor Gram Panchayat
Annexure 9:	NoC for Use of Explosives from District Collector, Thiruvananthapuram
Annexure 10:	Lease Order from DMG
Annexure 11:	Lease Execution from Additional Director of Mining and Geology
Annexure 12:	Quarrying Lease Registration Agreement in Form H
Annexure 13:	Extracts of Newspaper Clippings with EC advertisements
Annexure 14:	Submission Letter of Newspaper Advertisements and Affidavit to SEIAA
Annexure 15:	Screenshot of the APSEZ website with EC uploaded
Annexure 16:	Letter to MoEF&CC for Submission for First Half Yearly Compliance Report to be submitted for the period ending March 2019
Annexure 17:	Notarized Affidavit that all the Conditions stipulated in the EC shall be scrupulously followed
Annexure 18:	AAQM Report
Annexure 19:	Noise Monitoring Report
Annexure 20:	Article 32 of Concession Agreement with GoK

**Annexure 1: Letter to Nagaroor Gram
Panchayat regarding proposed CER
Plan**

Ref: AVPPL/KSPCB/2019-20/883-B

Date: 23rd September 2019

To,
The President
Office of the Nagaroor Grama Panchayat
Chemmarathamukku, Nagaroor
Thiruvananthapuram
Kerala - 695601

Attention: Mr. M. Reghu

Sub: Compliance of the Environmental Clearance Issued for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala – Corporate Environment Responsibility – Reg.

Ref: 1. Ministry of Environment and Forests and Climate Change (MoEF&CC) Office Memorandum (OM) dated 01.05.2018 (Enclosed)
2. Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 (Enclosed)

Dear Sir,

This is with reference to the Environmental Clearance (EC) issued for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala.

As per the above referred EC (Order No. 1200/EC2/2018/SEIAA dated 01.03.2019) obtained for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala, the Specific Condition at Point No. 3 states that *"The proponent shall file an affidavit that he will expend Rs. 15 lakhs as a part of Corporate Environment Responsibility (CER) in consultation with Local Self Government"*.

In this regards, AVPPL have prepared a plan considering the budget of Rs. 15 Lakhs for the proposed CER activities under broad heads in line with the MoEF&CC OM dated 01.05.2018. Please find enclosed the same.


Adani Vizhinjam Port Private Limited
2nd Floor, Vipanchika Tower, Thycaud
Thiruvananthapuram
Kerala-695014

www.adani.com
CIN -U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India

Since as per the EC, the CER plan is to be finalized in consultation with Local Self Government, requesting you to review the plan from your end and revert with appropriate comments/remarks; if any.

Thanking You and With Regards.

 23.9.2019.

Manoranjan Tripathy
Deputy General Manager

Enclosed:

1. Ministry of Environment and Forests and Climate Change (MoEF&CC) Office Memorandum (OM) dated 01.05.2018
2. Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019 for proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala
3. Proposed CER Plan of Rs. 15 Lakhs for proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala

Adani Vizhinjam Port Private Limited
2nd Floor, Vipanchika Tower, Thycaud
Thiruvananthapuram
Kerala-695014

www.adani.com

CIN -U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India



Copy received.



**Annexure 2: Approved Modified
Mining Plan by District Geologist,
Trivandrum**

Revised Mining plan
Xerox

**Modification in the
approved mining plan**
including Progressive Mine Closure plan

*Prepared under Rule 56 (2) & 58 of
Kerala Minor Mineral Concession Rule - 2015
for the applied Building Stone Quarry*

Situated in Re - Sy. Block No. 37, Re - Sy No. 555/2
(**Govt. Land**) of Nagaroor village, Chirayinkeezh Taluk,
Thiruvananthapuram District - Kerala State.

Type of Land : Government Land.

EXTENT : 3.6630HA

M/s. ADANI VIZHINJAM PORT PVT. LTD.,
2nd Floor, Vipanchika Tower, Thycaud
THIRUVANANTHAPURAM - KERALA

PREPARED BY
KANTHARAJ. K.
RQP / GOA / 130 / 2000 / A
METAMORPHOSIS
200, 2 nd Floor, 40 th Main, 1 ST Cross, Behind Silk Board, BTM Layout, 2 nd Stage, Kuvempu Nagar, Bangalore – 560 068 Ph : +91 80 2678 3006 Mob. +91 9448384321

Modified
Mining plan
approved
20/5/19
GEOLOGIST
DISTRICT OFFICE
EPT. OF MINING & GEOLOGY
THIRUVANANTHAPURAM



No. 1716/DOT/ML/18

Department of Mining & Geology
Government of Kerala
District Office, Thiruvananthapuram,
Kesavadasapuram, Pattom Palace P. O.,
Thiruvananthapuram 695004
Phone 0471-2442055
eMail: geo.thi.dmg@kerala.gov.in
Dated 20.05.2019

From
Geologist

To
M/s.AdaniVizhinjam Port Pvt. Ltd.,
2ndFloor,Vipanchika Tower, Thycaud,
Thiruvananthapuram.


Sir,
Sub:- Approval of Eco-friendly modified Mining Plan – Granite Building Stone
quarry in Block no.37Re-sy.nos.555/2, of Nagaroor Village,
ChirayinkeezhuTaluk, ThiruvananthapuramDistrict - reg.

Ref:- 1. Kerala Minor Mineral Concession Rules 2015
2. Your application dated 13.6.2018
3. Site inspection dated 16.5.2019

The modified mining plan for the Granite Building Stone quarry of M/s. AdaniVizhinjam Port Pvt Ltd, 2nd Floor,Vipanchika Tower, Thycaud, ThiruvananthapuramDistrict inBlock no. 37 Re-sy. nos. nos. 555/2of Nagaroor Village, ChirayinkeezhuTaluk, Thiruvananthapuram District, Kerala for an extent of 3.6630 Hectares is hereby approved vide the powers delegated to the District geologist for the approval of mining plan for the minor minerals issued under Rule 66 of Kerala Minor Mineral Concession Rules 2015, with the following conditions:-

1. That you will follow the prescribed Rules & Regulations of Central Government and State Government issued from time to time in regard to mining.
2. That you will follow the Mines Safety Rules & Regulations.
3. That you will store the mining waste in the earmarked location/dumping yard only as specified in the plan.
4. That you will carry out the plantation as committed in the plan.
5. That provision shall be made for the housing facility for the labour with all basic infrastructure facilities including safe drinking water, toilets etc., within the site.
6. That the yearly production (1st year -399375MT, 2nd year -300625MT, 3rd year, 4th year& 5th year - 1078750MT respectively) approved in the plan shall be strictly adhered to and if any deviation is required the same shall be intimated in advance.



Yours faithfully,

Geologist

CERTIFICATES



CERTIFICATE

1. This is to certify that the modification in the approved Mining / quarrying Plan including Progressive Mine Closure Plan of proposed Building Stone quarry is situated at Re - Sy. Block No. 37, Re - Sy No. 555/2 (**Govt. Land**) Nagaroor village, Chirayinkeezh Taluk of Thiruvananthapuram District - Kerala state, extends over an area of **3.6630 Ha**, of **M/s. Adani Vizhinjam Port Pvt. Ltd.**, has prepared under Rule 56 (2) & 58 of KMMCR 2015 by Mr. KANTHARAJ K

This is to request the Department of Mining and Geology, to make any further correspondence regarding any correction of the Mining Plan with the said recognized person at his address below:

KANTHARAJ K	
METAMORPHOSIS	
Head Office	
"PRAKRUTHI BHAVAN" # 200, 1 ST & 2 nd Floor, 40 TH Main, 1 ST Cross, Behind Silk Board, BTM Layout, 2 nd Stage, Bangalore - 560 058	
+91 80 26687649	+9180 26783006
+91 94483 84321	+91 98450 27457

We hereby undertake that all modifications / updating as made in the said Mining plan by the said recognized person be deemed to have been made with our knowledge and consent and shall be acceptable on us and binding in all respects.



2. It is certified that the **Progressive Mine Closure Plan** (in the approved mining plan) of proposed Building Stone quarry is situated at Re - Sy. Block No. 37, Re - Sy No. 555/2 (**Govt. Land**) in Nagaroor village, Chirayinkeezh Taluk of Thiruvananthapuram District - Kerala state, extends over an area of **3.6630 Ha**, of **M/s. Adani Vizhinjam Port Pvt. Ltd.**, Complies all statutory rules, regulations, orders made by the Central or State Government, Statutory Organizations, Court etc., which have been taken into consideration and wherever any specific permission is required the lessee will approach the concerned authorities. The Information furnished in the **Progressive Mine Closure Plan** is true and correct to the best our knowledge and records.
3. The provision of **Mines Act, Rules and Regulations** made there under have been observed in the modified in the approved Mining Plan of proposed Building Stone quarry is situated at Re - Sy. Block No. 37, Re - Sy No. 555/2 (**Govt. Land**) in Nagaroor village, Chirayinkeezh Taluk of Thiruvananthapuram District - Kerala state, extends over an area of **3.6630 Ha**, of **M/s. Adani Vizhinjam Port Pvt. Ltd.**, where specific permissions are required, the applicant will approach Director General of Mines Safety, and further the Standards prescribed by DGMS in respect of Miners Health will be strictly implemented.

For ADANI VIZHINJAM PORT PVT. LTD.

DATE: 01-04-2019

PLACE : THIRUVANANTHAPURAM



Rajesh
RAJESH JHA

Authorized signatory



CERTIFICATE

This is to certify that, the provision of KMMCR 2015, have been observed in preparation of the modification in the approved Mining Plan of proposed Building Stone quarry situated in Nagaroor village, Chirayinkeezh Taluk of Thiruvananthapuram District - Kerala state at Re - Sy. Block No. 37, Re - Sy No. 555/2 (**Govt. Land**) extends over an area of **3.6630 Ha**, of M/s. **Adani Vizhinjam Port Pvt. Ltd.**, wherever the specific permissions are required, the applicant will approach the concerned authorities of Department of Mining and Geology.

The information furnished in the mining plan is true and correct to the best of our knowledge.

Date : 29/3/19

Place : Bangalore.



KANTHARAJ K

RQP / GOA / 130 / 2000 / A.



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21	Copy of the Environmental clearance.	



TEXT



MODIFICATION IN THE APPROVED MINING PLAN / QUARRYING PLAN
OF PROPOSED "BUILDING STONE QUARRY" OF
M/s. ADANI VIZHINJAM PORT PRIVATE LIMITED

situated at Re - Sy. Block No. 37, Re- Sy No. 555/2 (Govt. Land) in Nagaroor village,
Chirayinkeezh Taluk of Thiruvananthapuram District - Kerala state, extends over an
area of 3.6630 Ha, (Prepared under Rule 56 (2) & 58 of KMMCR 2015)

INTRODUCTION.

The mining / quarry plan was prepared for the said proposed quarry for a maximum production of 5,12,000 tonnes per year (during the third year of the plan period) and the same was approved by the District Office, Department of Mining and Geology, Thiruvananthapuram, vide their office letter No. 1716 / DOT / ML / 2018 dated 26.09.2018. a copy of the approval letter of the mining plan is enclosed as Annexure No. 20.

Further SEIAA has accorded the Environmental Clearance for said proposed quarry over a production not exceeding 7,00,000 tonnes for two years, a copy of the Environment Clearance is enclosed as Annexure No. 21. And also stated that if further mining may be considered based on the requirement and Environmental assessment.

In view of the above, the approved mining of the said quarry is now modified accordingly under Rule 56 (2) & 58 of KMMCR 2015 and submitted for your kind approval of the same and which is required to get register and execute the lease.

Note :

Consider the said modification, only the relevant chapters / paragraphs, plans / drawings (Production plan, production section, conceptual plan and Progressive mine closure plan) and two annexure are added (namely copy of the approval of mining plan and copy of the Environment clearance) and one annexure no. 13 (production calculation) are modified accordingly, while the unchanged is retained as it is. Where ever the modification/s paragraphs / chapters are indicated in italic and underlined.



KANTHARAJ K
RQP / GOA / 130 / 2000 / A

The **Adani Group** is one of India's leading business houses based at Ahmadabad – Gujarat, founded in 1988. Adani has grown to become a global integrated infrastructure player with businesses in key industry verticals – Resources, in **coal mining and trading; Logistics**, which is spread across **ports, logistics, shipping and rail; Energy, with renewable, thermal power generation and transmission businesses and Agro commodities and ancillary industries**. The integrated model is well adapted to the infrastructure challenges of the emerging economies.

Adani Ports and Special Economic Zone Limited (APSEZ) is promoted by Adani Group, which is one of India's largest business conglomerates. The US\$11 bn Group has interests across resources.

90% of India's international trade is through its ports, where Adani represent 24% of the country's port capacity and handle 15% of the country's seaborne cargo. Adani ports' footprint is spread across the Indian coastline with ports at 10 different locations. Adani have ports at Mundra, Dahej, Tuna (in Tekra), Hazira and Mormugao, on the west coast; Dhamra and Visakhapatnam on the east coast; and Kattupalli and Ennore on the southern coast of India. **Now container transshipment terminal is also upcoming Vizhinjam port in Thiruvananthapuram, Kerala.**

Adani Vizhinjam Port Pvt, Ltd., (AVPPL) is company belongs to Adani groups, having their Registered office at Ahmedabad – Gujarat, and the local office at 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram - 695014. The said company is a private limited company register under Companies Act, 2013 on 27th July 2015. A copy of the incorporation certificate is enclosed as **Annexure No. 1**.

Further a copy of the MOA & AOA is enclosed as **Annexure No.2**. **Mr. Rajesh Jha** is the Chief Executive officer (CEO) and authorized signatory of the said quarry for all the operations. A copy of the board of resolution passed by the company is enclosed as **Annexure No. 3**. A copy of the photo ID and address proof of the authorized signatory is enclosed as **Annexure No. 4**

The said company is in various infrastructural and construction activities, they have been awarded by the Government for the development of Vizhinjam port at Thiruvananthapuram, which is a national developmental activity. A copy of the same is enclosed as **Annexure No. 5**. In view of the above, for the development of the port, Building stone material is one of the major raw material. So the said company has applied in "Form B" to DMG, Thiruvananthapuram, Government of Kerala for the grant of Quarry lease in Re - Sy. Block No. 37, Re - Sy No. 555/2 of Nagaroor village (Kadavila), Chirayinkeezh Taluk,

Thiruvananthapuram District over an area of 3.6630 Ha. A copy of the **form B** is enclosed as **Annexure No. 6**.

M/s. AVPPL are in receipt of the Letter of Intent from the DMG – Thiruvananthapuram for submission of approved quarry plan and Environmental clearance for process of grant of the lease, a copy of the same is enclosed as **Annexure No. 7**.

Since the said land belongs to government (Parambooke) land, the district collector of Thiruvananthapuram has issued the NOC for purpose of quarry operation a copy of the same is enclosed as **Annexure No. 8**. The proposed area was demarcated on the ground by the village officer and also they have issued the demarcation certificate and non assignment certificate. A copy of the same is enclosed as **Annexure No. 18 & 19** respectively.

When once the lease is granted, applicant will take all the proposed safety, environmental protective and other measures, to this effect an affidavit has been submitted to DMG along with the Form B, a copy of the same is enclosed as **Annexure No. 9**. Further company has filed the income tax returns up to date and an affidavit to an extent has been submitted to DMG along with the Form B, a copy of the same is enclosed as **Annexure No. 10**.

A Block map showing the above said area duly signed by the village officer is enclosed as **Plate No. 3** & Survey maps showing the said lease (lease sketch) duly signed by the village officer is enclosed as **Plate No. 4**. The said area is marked on the google image and enclosed as **Plate No. 5**.

The said area was worked by some party earlier, and there is no operation of this area since from last few years, thereafter M/s. AVPPL approached Kerala government for grant of building stone quarry.



1.0 GENERAL :

a) Name and Address of the Lessee:

Name of the applicant	Adani Vizhinjam Port Pvt, Ltd., Represented by Mr. Rajesh Jha- Chief Executive Officer, (CEO)
Address	2 nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram.
District	Thiruvananthapuram
State	Kerala
Phone	--
Fax	nil
Email	kadavilaland1@gmail.com
Mobile	+91 9099005722

Mr. Rajesh Jha is the chief executive officer (CEO) and authorized signing authority for the operation of the said quarry. To this effect board of resolution was passed and a copy of the same is enclosed as **Annexure No. 3**. Further a copy of the photo ID and address proof of the Authorized signatory is enclosed as **Annexure No. 4**.

b) **Status of the Applicant** : Private Limited Company.

c) **Mineral(s) which is / are included in the prospecting license (for Fresh grant):**

Charnockite as Building Stone Material

d) **Mineral(s) which is / are included in the / are included in the letter of Intent / Lease deed:**

Charnockite as Building stone Material.

e) **Mineral(s) which is the applicant / lessee intends to mine:**

Charnockite as Building stone Material.

f) **Name of the Recognized Person preparing Mining Plan:**

Name	KANTHARAJ K	
Address	METAMORPHOSIS	
	Head Office	
	# 200, 2 nd Floor, 40 th Main, 1 st Cross, Behind Silk Board, BTM Layout, 2 nd Stage, Kuvempu Nagar, Bangalore – 560 068	
Phone & Fax	+91 80 26687649	+9180 26783006
Mobile	+91 94483 84321	+919845027475
E-mail	kantharajk@metamorphosis-india.com,	
Registration No.	RQP / GOA / 130 / 2000 / A	
Valid up to	5 th October 2022	

A copy of RQP certificate is enclosed as **Annexure No. 11**.

2.0 LOCATION AND ACCESSIBILITY:

a) **Lease details :**

The said proposed quarry area falls in the Re - Sy. Block No. 37, Re – Sy No 555/2 (Govt. Land) extends over an area of **3.6630 Ha** of Nagaroor village (Kadavila), Chirayinkeezh Taluk of Thiruvananthapuram District - Kerala state. The said area lies towards southwest of Nagaroor village at a distance of 1.20kms and lies towards north of Kadavila Bus stop at a distance of 0.50kms approximately (distances are aerial distance). This lease area is approachable by all-weather road/s up to the up to Kadavila bus stop, thereafter a kutchra road towards north will leads to area.

Thiruvananthapuram is the district head quarter and state's capital too, which is at a distance of 35.0 kms (by road) towards south of quarry area & Chirayinkeezh is the Taluk head quarter which is at a distance of 13.0 kms towards southwest, where all the infrastructural facilities are available. The nearest airport is at Thiruvananthapuram at a distance of 40.0 kms and sea port at kollam which is at a distance of 50.0 kms. The nearest railhead on Broad-gauge is Chirayinkeezh which is at distance of 9.0 kms.



Toposheet No. with Latitude & Longitude of all corner boundary points / pillars:

This area falls under the Survey of India's Topomap No. **58 / D / 13 & 58 / D / 14**. Since the topomaps of Kerala are restricted the same are not available. The said quarry area falls between the geographical co-ordinates i.e

Latitude	08°43' 42.88" N to 08°43' 51.74" N
Longitude	76°50' 15.26" E to 76° 50' 23.24" E

Totally, there are 5 corner pillars, where all the latitude and longitude are recorded and the same are furnished below:

Boundary Pillar	Latitude : N			Longitude : E		
	D	M	S	D	M	S
1	08	43	45.98	76	50	15.26
2	08	43	48.12	76	50	17.27
3	08	43	51.74	76	50	21.24
4	08	43	44.83	76	50	23.24
5	08	43	42.88	76	50	15.87

However the Latitude and Longitude so recorded of all the corner boundary pillar is also depicted on the Surface Plan enclosed as **Plate No. 6** and the area is marked on the google satellite image and enclosed as **Plate No. 5**.

Name of the Mine : Charnockite as Building stone quarry

Date of Grant of Lease : Applied for fresh grant
& **Period / Expiry Date**

Name of the Lease holder : Adani Vizhinjam Port Pvt, Ltd.,
Mr. Rajesh Jha- Authorized signatory.

Address	2 nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram..
District	Thiruvananthapura
State	Kerala
Phone	--
Fax	nil
Email	kadavilaland1@gmail.com
Mobile	+91 9099005722

b) Details of applied / lease area with location map (fresh area / mine)

Forest		Non Forest	
Forest (Specify)	Area in Ha		Area in Ha
	--	1. Waste Land	
	--	2. Grazing land	
	--	3. Agricultural land	
	--	4. Others specify - Govt. land	3.6630
Total	--	Total	3.6630

Total lease area / applied area : 3.6630 Ha

District & State : Thiruvananthapuram and Kerala
Taluk : Chirayinkeezh **Village** : Nagaroor

Whether the area falls under Coastal Regulation Zone (CRZ)? if yes, details thereof :

The said area does not falls under CRZ

Existence of road railway line, if any nearby approximate distance:

Public road connecting between Alamcode – Nagaroor lies towards south of the quarry area which is at a distance of 0.50 kms, Main central road (MC Road) connecting between Tivandrum to Kottayam lies towards east of the quarry area which is at a distance of 6.50 kms and the National Highway connecting between Thiruvananthapuram to Kochi lies towards west of the quarry at a distance of 9.20 kms. The nearest railway line and station on Broad-gauge is Chirayinkeezh which is at distance of 9.0 kms.

c) Attach a general location map showing area and access routes. It is preferred that the area be marked on a Survey of India Topographical map or a Cadastral map or Forest map as the case may be. However, if none is of these available the area may be shown on an administrative map.

The said area is demarked on the key plan showing the location and surrounding features up to 5.0 kms radius is enclosed as **Plate No. 1**, the location of the said area is marked on the Kerala political map and enclosed as **Plate No. 2**. The applied area is marked on the Block map enclosed as **Plate No. 3**, a survey map / sketch showing the applied area issued by the Thasildar is enclosed as **Plate No. 4**. Further the said quarry area is shown on the Google satellite image enclosed as **Plate No. 5**.



3.0 DETAILS OF APPROVED MINING PLAN / SCHEME OF MINING (if any):

3.1 Date and reference of earlier approved MP / SOM

The mining / quarry plan was prepared for the maximum production of 5,12,000 tonnes per year (during the third year of the plan period) and the same was approved by the District Office, Department of Mining and Geology, Thiruvananthapuram, vide their office letter No. 1716 / DOT / ML / 2018 dated 26.09.2018. a copy of the approval of the mining plan is enclosed as Annexure No. 20.

3.2 Details of last modifications if any (for the previous approved period) of approved MP / SOM, indicating date of approval, reason for modification.

NOT APPLICABLE

3.3 Give reason of earlier approved proposal (if any) in respect of exploration, excavation, reclamation etc.,

NOT APPLICABLE

i) **Exploration** : NOT APPLICABLE

ii) **Mine Development & Exploitation**

This mine / quarry was worked by some other person / company (party / company not know) way back in 2007. Over all in the said Re - Sy. Block No. 37, Re - Sy No 555/2, they have excavated over an area of 2.59 ha approximately and they have removed about 9.00 lakh tonnes, the details are given below:

Following are the parameters considered for excavated quantity.

- | | | |
|---------------------------|---|-----------------------------|
| 1. Excavated area | : | 25,900 sqm (2.59 ha apprx), |
| 2. Average height | : | 14.00 mts, |
| 3. Bulk density / Sp. Gr. | : | 2.50 |

Tonnage : $25,900 \times 14 \times 2.50$: 9,06,500 tonnes or say 9,00,000 tonnes.

iii) **Land Reclamation & Rehabilitation.** : NOT APPLICABLE

iv) **Waste Management.** : NOT APPLICABLE

v) **Plantation.** : NOT APPLICABLE

3.4 Give status of compliance of violations pointed out by IBM.

NOT APPLICABLE

3.5 Indicate and give details of any suspension / closure / prohibitory order issued by any government agency under any rule of court of law.

NOT APPLICABLE

3.6 In case of the MP / SOM is submitted under rules 9 and 10 of the MCDR' 88 or under rule 22 (6) of the MCR' 1960 for approval of modification, specify reason and justification for modification under these rules.

NOT APPLICABLE

All the above paragraphs are not applicable, as this mining plan is first mining plan is being prepared and submitted for approval.



PART - A

1.0 GEOLOGY AND EXPLORATION.

- a) Briefly describe the topography, drainage pattern, vegetation, climatic, rainfall data of the area applied / mining lease area:

Topography :

The said proposed area occupies the isolated hillock lies toward north of Kadavilla trending NW – SE. The highest elevation is about 110 m above MSL towards southeast of the quarry area (near BP 4) and the lowest elevation is 40 m above MSL towards northwest of the proposed area (near BP 1 & 2). The lease area is generally sloppy towards northwest & southeast. The slope is moderate to steep.

Drainage pattern :

There are no any perennial water course / water bodies / streams / nallahs within the quarry area. The storm water passes through the minor water courses and gets confluence with the adjacent nallah. Apart from this the water source in this area is mainly storm water. Entire storm water flows through the garland drains provided all around the quarry pit and same will be collected in settling pond. The drainage pattern in this region is parallel to sub parallel.

Vegetation :

Most of the quarry area is broken up, the broken up area is devoid of any vegetation, the area which remained as unbroken and surrounding the lease is covered by sparsely vegetated.

Climatic :

The climate of the area is typical of Western Ghats region. It receives high rainfall and exhibits temperature variations with moderate summer and moderate winter. Meteorological data for the following climatic are under progress

1. Temperature
2. Relative Humidity
3. Rainfall



Temperature :

The temperature normally ranges from 28° C to 32° C on the plains but drops to about 20°C in the highlands. The Highlands of Kerala, enjoys a cool and invigorating climate the year-round. Owing to its diversity in geographical features, the climatic condition in Kerala is diverse.

Relative humidity :

In general the relative humidity in the area is observed to be high due to its proximity to the sea. During the summer it varies from 36 to 93, during monsoon it varies from 22 to 90 (some time up to 100) and during the winter it varies 80 to 90.

Rainfall :

Generally there are two monsoons in Kerala, the onset monsoon is known as Southwest Monsoon which commence from June and ends in September. The second monsoon is known as Northeast Monsoon and also known as Reverse monsoon which commence from October and ends in November. The average rainfall for the last ten years is around 3,000 mm annually.

b) Brief description of Regional Geology with reference to location of lease / applied area:

Kerala State, bounded by north latitudes 8° 17' 30" and 12° 47' 40" and east longitudes 74° 51' 57" and 77° 24' 47" covers an area of 38,864 sq km and is located in the southwestern part of the Indian Peninsular shield. This linear strip of land is bounded by the Western Ghats on the east and the Arabian Sea on the west.

The state is divisible into four broad physiographic units. They are:

- (i) the low-level coastal strip fringing the Lakshadweep sea,
- (ii) the landforms marked by laterite cappings between altitudes of 30m and 200 m,
- (iii) the foot hills of Western Ghats ranging in altitude from 200 to 600 m and
- (iv) the steeply rising Western Ghat hill ranges with altitudes reaching upto 2500 m. of the total area, 35,955 sq km area is constituted by hard rock crystallines and the rest by soft sediments. The crystalline comprise charnockite, gneiss, granite, metasediments, gabbro and dolerite to mention the major ones. The sedimentaries occur mostly in the coastal areas. mineral deposits of clay, bauxite, rare earth sands, glass sand, iron ore, limestone, gold, graphite, chrysoberyl etc. are known to occur in the state.



The geology of Kerala kindled the interest of even the earliest workers in the field. Buchanan in 1800 coined the term "laterite" after a study of the quarries near Angadipuram in the erstwhile Malabar. General Cullen (1840 – 60) discovered graphite occurrence in Travancore and was the earliest to study the sedimentary formations around Kollam. In the later part of the 19th Century, Bruce Foote, (1883) and William King, (1875, 1878, 1882) of the Geological Survey of India (GSI) took traverses across the State and recorded their findings on geology and mineral resources. In 1907, a Geology Department was formed in Travancore for systematic survey of minerals. Chacko (1922) and Masillamani (1914) made significant contributions to the geology of Kerala.

Geologically, Kerala is occupied by Precambrian crystallines, acid to ultra basic intrusive of Archaean to Proterozoic age, Tertiary (Mio-Pliocene) sedimentary rocks and Quaternary sediments of fluvial and marine origin. Both the crystallines and the Tertiary sediments have been extensively lateritised. Based on the detailed studies by GSI during the last three decades, the following stratigraphic sequence has been suggested.

Quaternary (Q)		Pebble bed
		Kadappuram Formation(marine)
		Periyar Formation(fluvial)
		Viyyam Formation(fluvio-marine)
		Guruvayur Formation (Palaeo-marine)
Mio-Pliocene (Tertiary Tt)		Laterite
		Warkalli Formation(Sandstone and clay with lignite intercalations)
Mesozoic		Quilon Formation (Fossiliferous limestone and calcareous marl).
		Gabbro / Dolerite dykes
	Younger granites (550-390ma)	Alkali granites, granite, granophyres and other acid Intrusive.
	Charnockites(younger) (550Ma)	Massive charnockite, incipient charnockite, Cordierite charnockite.
	Ultrabasic/basics(Younger) (700-600Ma)	Perinthattaorthosite, Kartikulam gabbro, Adakkathodu gabbro, Begur diorite
	Basic Intrusives (2100-1600Ma)	Agali- Anakkatti dykes
	Migmatite/gneiss/older granitoid(PGC II) (Ptm)(2500-2200Ma)	Garnet- biotite- gneiss with associated migmatites, quartzo-felspathic gneiss, hornblende gneiss, hornblende- biotite gneiss, quartz- mica gneiss
PROTEROZOIC	Vengad (APtv) Group	Quartz-mica schist and quartzite, conglomerate

A R C H A E A N	Charnockite(older) (Ac) 2600Ma	Mafic granulite, pyroxene granulite, Banded magnetite quartzite and gneissic charnockite
	Khondalite Group (Ak)	Quartzite, mafic granulite, calc-granulite garnetbiotite- sillimanite-cordierite gneiss, garnet-biotitegneiss, leptynite
	Peninsular Gneissic Complex (PGC I) (Ap) (3000Ma)	Foliated granite, hornblende gneiss, pink granite gneiss, biotite gneiss.
	Layerd ultrabasic – basic Complex (3100- 3000Ma)	Peridotite, dunite, pyroxenite, anorthosite
	Wynad Schist Complex (Aw) (3200Ma)	Talc- tremolite schist , fuchsite quartzite, amphibolite, calc granulite, quartz sericite schist, kyanite quartzite, garnet - sillimanite gneiss/ schist, magnetite quartzite, kyanite mica schist.
Base not recognized		
Source: Geological Survey Of India, Miscellaneous Publication No. 30, Geology And mineral Resources Of The States Of India Part IX – Kerala – May 2005.		

c) Detailed description of geology of the lease area such as shape, size of the mineral / ore deposit.

Most of the quarry area is exposed by Charnokite (commercially known as Granite),only towards the north of the quarry area part is covered by topsoil with the thickness varying from 0.75m to 1.00 mts.

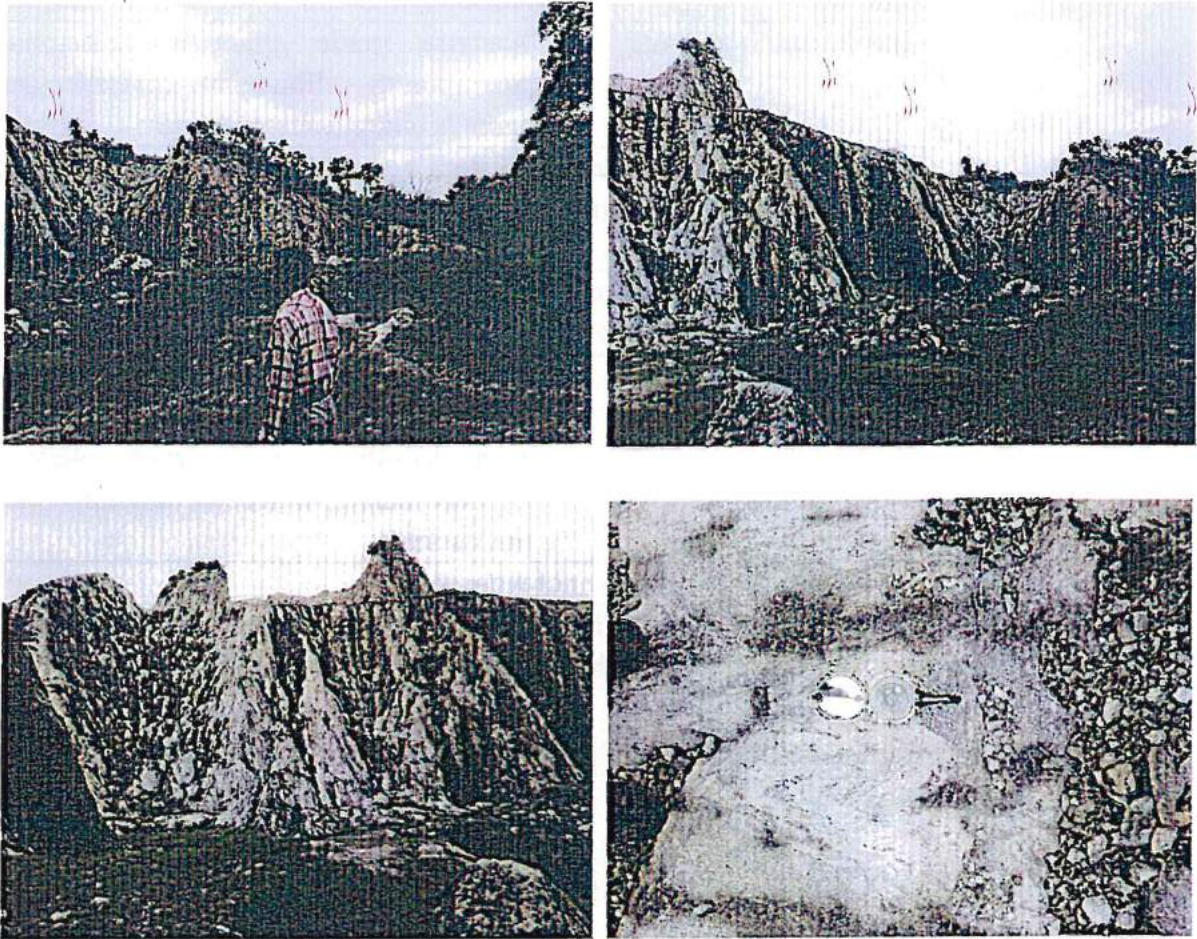
The geological parameters / features of the ore body as obtained from the field mapping and exploration studies reveal the following.

General strike	:	NW - SE with local variation of $15^{\circ} - 20^{\circ}$ on either side.
Dip	:	$70^{\circ} - 80^{\circ}$ dipping northerly.
Length of the ore body	:	250mts.
Width of the ore body	:	150 - 180mts.
Depth of the ore body	:	50 mts

A geological map showing the different litho units is mapped and enclosed as **Plate No. 7.** And the cross section showing the disposition of the different litho units are marked and enclosed as **Plate No. 8.**



Overburden : The overburden is mainly topsoil, intercalated waste and mining loss.



PHOTOGRAPH SHOWING THE OUTCROP OF CHARNOCKITE

d) (i) **Name of the prospecting agency :** In House

(ii)	Address	2 nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram..
	District	Thiruvananthapura
	State	Kerala
	Phone	--
	Fax	nil
(iii)	Email	kadavilaland1@gmail.com
	Mobile	+91 9099005724

e) Details of prospecting / Exploration already carried out:

- i) Number of pits and trenches indicating dimension, spacing etc along and across the strike / foliation with reference to geological plan:**
- ii) Number of Boreholes indicating dimensions, spacing inclination, color level, depth etc with standard borehole logs duly marking on geological plan / section.**
- iii) Details of samples analysis indicating type of sample (surface / subsurface from pit / Trenches / boreholes etc)**
- iv) Expenditure incurred in various prospecting operations:**

No explorations in the form of boreholes / pits / trenches are carried out. More over this quarry area was worked formerly by some party / company way back in 2007 and the broken up area is about 2.14 Ha which is fully exposed by Charnockite / Building stone. More over the material is continued along the strike.

Since the quarry lease area is exposed by Charnokite / Building stone outcrop with thin layer of soil. Charnokite is a type of Granite which is a plutonic igneous rock of coarse to fine grained nature, formed by molten magma. Charnokite, petrologically connotation refers to the group name of a family of deep seated rocks. Hence the exploration is not required and the depth will extend beyond 50.00 mts.

- f) The surface plan of the lease area may be prepared on a scale of 1 : 1000 or 1 : 2000 with contour intervals of maximum of 10 m depending upon the topography and size of the are duly marked by grid lines showing all features.**

Surface plan of the lease area has been prepared on 1 :1000 scale showing all the surface features with 5.0 mts contour interval is enclosed as **Plate No. 6.**

- g) For preparation of geological plan, surface plan prepared on a scale of 1 : 1000 or 1 : 2000 scale specified under para 1.0 (f) of Part A of the format may be taken as the base plan.**

Geological plan of the lease area has been prepared on 1 :1000 scale showing all the geological attitudes such as dip, strike and so on considering the surface plan as a base plan is enclosed as **Plate No. 7.**



- h) Geological sections may be prepared on natural scale of Geological plan at suitable interval across the lease area from boundary to boundary.

Geological cross sections are prepared on 1:1000 scale from boundary to boundary, showing the disposition of the various lithounits, structural features and etc, is enclosed as **Plate No. 8.**

- i) Broadly indicate the future programme of exploration with due justification (duly marking on Geological plan year wise location in different colours) taking into consideration the future tentative excavation programme planned in next five years as in table below:

The said quarry area was worked formerly and Charnockite (building stone material) is exposed in entire area and it can be seen up to 40 mts above from the general ground level. Charnokite is a type of Granite which is a plutonic igneous rock of coarse to fine grained nature, formed by molten magma. Charnokite, petrologically connotation refers to the group name of a family of deep seated rocks. Hence the exploration is not required and the depth will extend beyond 50.00 mts.

- j) Reserves and resources are furnished in a tabular form as given below:

Below table shows the reserves of Building stone material (Charnockite)

: As on 01st August, 2018

Insitu reserves		Unit : in tonnes
Category	ROM	Waste Rock
	Total	
Mineable reserves	17,78,750	Considered as a production.
Blocked reserves	34,17,500	
Geological reserves	51,96,250	

Note : Geological Reserves = Mineable Reserves + Blocked Reserves

Of the above Geological reserves of 5.196 million tonnes, only 1.778 million tonnes of reserves can be exploited / mineable, while the balance of 3.417 million tonnes of reserves is getting blocked which cannot be mined due to the boundary and practical constraints. Hence for all practical purpose (for production and future planning) only Mineable reserves are considered.

Below table shows the Level wise /bench wise Insutu reserves (Mineable)

As on 01st August 2018

Unit : tonnes		
Bench levels	R O M	Waste Rock
106	20,625	Considered as production hence not established
100	66,875	
94	83,750	
88	1,15,625	
82	1,46,250	
76	1,59,375	
70	1,59,375	
64	1,56,875	
58	1,54,375	
52	1,65,625	
46	1,44,375	
40	1,34,375	
34	1,47,500	
28	1,23,750	
Total	17,78,750	--

Below table shows the Section wise Insutu reserves (Mineable) :

As on 01st August 2018

Unit : tonnes		
Between Cross section	R O M	Waste Rock
E : 2050 to E : 2100	1,09,375	Considered as production hence not established
E : 2100 to E : 2150	3,09,375	
E : 2150 to E : 2200	5,75,000	
E : 2200 to E : 2250	5,80,000	
E : 2250 to E : 2300	2,05,000	
Total	17,78,750	



NOTE : Above figures are rounded to next nearest decimal.

The details calculations of section wise / bench wise areas, volume, tonnages are enclosed as Annexure No. 12.

Method of Estimation:

The estimation of ore reserves is made by conventional parallel cross section method using geological cross section. The geological cross sections are prepared at a regular interval of 100 m across the strike of the ore body. The area of individual litho units in each and every cross section is calculated separately. The volume between the cross section is arrived on the basis of the average the area of parallel cross section i. e. $((S1 + S2) / 2)$ and multiplying sectional interval. And tonnage is arrived by multiplying by its bulk density.

Note: Following are the parameters considered for reserve estimation:

Category of ore	Bulk density	Recovery %
Granite	2.50	100.00
Waste rock	-	-

2.0 MINING

A. OPENCAST MINING

- a) Describe briefly the existing as well as proposed method for excavation with all design parameters indicting on plans / sections.

Quarrying / Mining

Formerly, this quarry was in operation, it was being worked with conventional open cast method. Based on the mode and method so adopted and taking into the consideration of geological parameters, the quarry pit is designed such that the height of the bench is kept about 6.0 mts max., and the width is also kept 6.0 mts, maintaining 45° pit slope.

Mining operation will be commenced from higher elevation to the lower elevation, benches will be developed and it will be advance in south and west direction laterally. More so this area was worked earlier by some other party, where there is a high wall benches, so initially the height of the high-wall bench will be reduced, when it comes to the lower levels, benches will take the circular shapes and pit will be formed. The Mining operation will be controlled and supervised by Statutory persons like Mine Manager, Mine Foreman, Mining Mate Cum Blaster certificate Holder issued by the Director General of Mines Safety, Dhanbad.

Drilling, Blasting and its parameters :

The nature of the rock is mainly hard to medium hard in nature hence drilling and blasting is required to dislodge / loosen the material from the main rock mass. The broad blasting parameters are determined for the blasting pattern and blast design, which are as follows:

- The Drilling pattern will be decided by the Certificate Holders / competent personnel and the blasting hole area is marked on the ground by certificate Holders.
- Since the bench height needs to be maintained at 6.0 m, Blast hole will be, preferably by deep hole where the diameter is normally 115 mm and the depth of the hole is 6.5 m including sub drilling. Considering the safety aspect, the blast will be carried out in two phases i.e, 3.00 m each phase.
- Blasting pattern is generally square or rectangle or staggered, The Burden and Spacing will be decided as per the requirements of the size of the boulders, generally the burden ranging from 2.00 to 2.50 meters and spacing of 2.50 to 3.00 meters.
- Usually single / double row of holes is blasted along free face to achieve optimum powder factor, best fragmentation and minimized adverse impacts on account of blasting.
- Maximum numbers of holes will be blasted at a time in a round are generally limited to 20 with non – electrical detonators (NONEL) to mitigate adverse impacts such as air blast, fly rock and ground vibration. The Ignition will be the Non Conventional and Eco Friendly method by **NONEL (Non Electric Detonators)**.
- The 6 Meter hole will be blasted in two phases of 3.0 mts each one after the other, by inserting one Nonel at bottom and another one is at the middle of the hole, so the hole will be blasted two times one after the other with delay of 17 Milli Seconds. The first 3 Meters at the bottom will be blasted first and the middle one next will get blast a gap of 17 Milli Seconds. The blast delay from hole to hole will be 17 Milli Second and 42 Milli Second from row to row. A schematic of drilling and blasting pattern is shown in the foregoing page :
- After drilling the certificate Holder prepare the Blasting Date Sheet incorporating the Burden, Spacing, Depth, Conversion Factor, Expected Yield, Powder factor, Booster consumption in Kgs and Percentage, Column charges in Kgs and Percentages, Charge per Delay, Time of Blasting and other Parameters as per the field and after the Blasting the Noise level, Fly rock distance, Vibration limit will be recorded in the Blasting Date Sheet. Different Parameters and get approval from the Head of Mining Operation.
- Nitrate mixture types of explosives are used for blasting with 20 to 25 percent, proportion of primer / booster cartridges and rest as column charge. About 20 - 25kgs of explosives are loaded in 115 mm diameter holes. And powder factor ranging between 5 to 6 tons per kgs of explosives is achieved.



- Subsequent to the drilling and blasting, the material so fragmented / loosens from the rock mass, the boulders so generated subsequent to the blasting, will be broken with the help of the rock breakers. There after the material is loaded into trucks / tippers of 20 tonnes capacity with the help of the excavator. The loaded material is transported to the Vizhinjam Port.

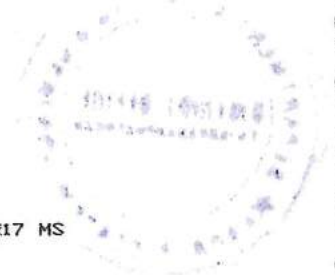
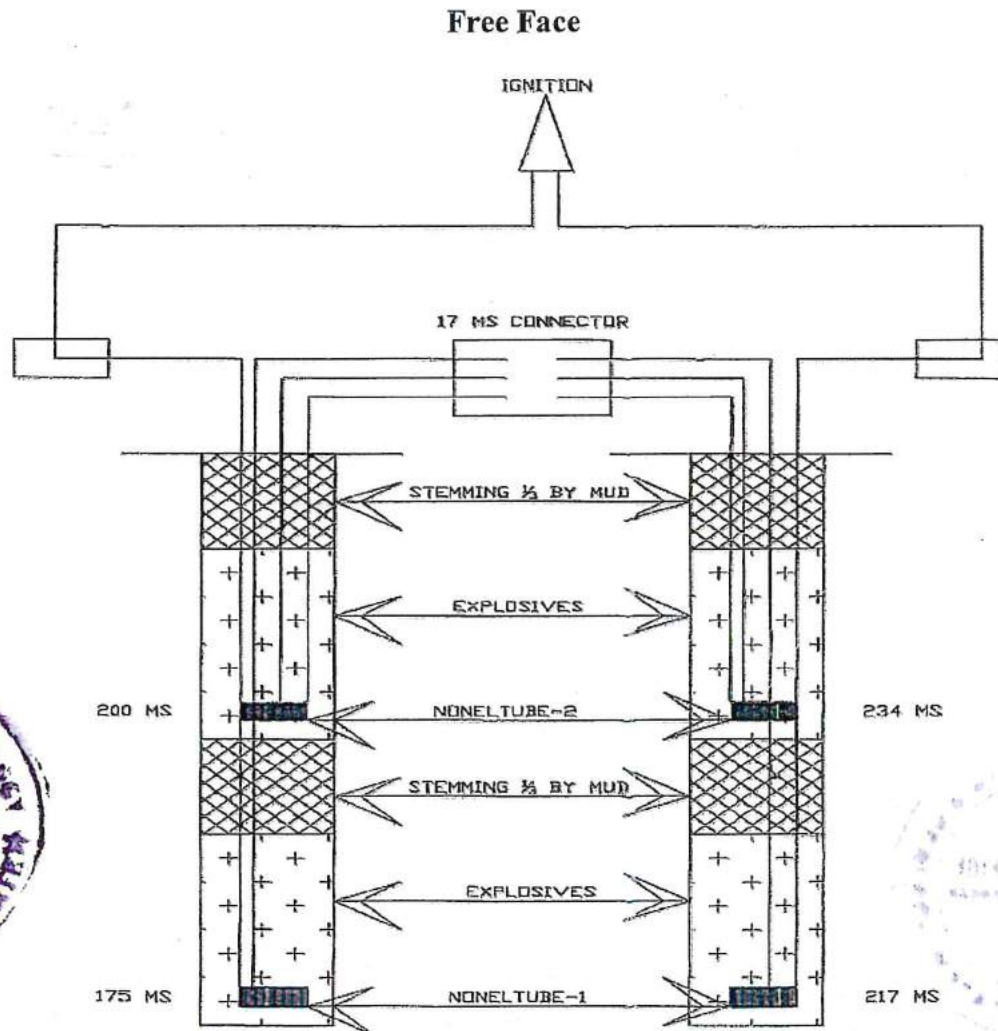
SCHAMITIC SHOWING THE BLAST HOLE PATTERN

O -17Ms-O- 17Ms-O -17Ms-O-17Ms-O-17 Ms-O- 17Ms-O- 17 Ms-O- 17Ms-O - second row

620	586	552	518	484	467	433	399	365	42Ms
603	569	535	501	467	450	416	382	348	

O -17Ms-O- 17Ms-O -17Ms-O-17Ms-O-17 Ms-O- 17Ms-O- 17 Ms-O- 17Ms-O x - first row

34	68	102	136	170	204	238	272	306
17	51	85	119	153	187	220	255	289



PRECAUTION TAKEN WHILE BLASTING

1. Siren will given three Times before the Blasting and Hooter announcement will be made before the Blasting
2. 8 persons will be sent to different locations with Red flag as a sign of caution of blasting.
3. After getting the confirmation from 8 persons through Mobil or WalkeTalke (wireless) the ignition will be given.
4. One Time siren will be given after the Blasting.
5. The 8 persons will be called back to the Quarry and get the feed back about the Blasting.

ADVANTAGES OF NONEL

1. The Nonel is used in rainy season because it is Non Electric Detonator.
2. It is bottom ignition.
3. The Noise is less.
4. Fly Rock is less.
5. Vibration is less.
6. Fragmentation is good.
7. It is Eco friendly method of Blasting.

Safety and Precautions:

Before onset of monsoon, drains are cut along toe of the quarry faces to divert the surface run off. Garland drain is provided at the quarry top to regulate monsoon water and direct the same to the settling ponds / quarry pit to contain the quarry wash off and to avoid the same joining to the adjoining surface water bodies / water courses. It also helps to avert eventual collapses and damages to the quarry faces.

The pit will be fenced by barbed wire, such that no habitats can enter the pit. And watch and ward is provided round the clock.



- b) Indicate year – wise tentative Excavation in Cubic meter indicating development, ROM, pit wise as in table below:

I. Insitu tentative excavation.

Below table shows the proposed Year wise Production & Development quantities (in three leases) with its respective strip ratio:

<u>Unit in Tonnes</u>		
<u>Year</u>	<u>ROM</u>	<u>Waste</u>
<u>1st Year - 2019 - 20</u>	<u>3,99,375</u>	<u>Considered as production hence not calculated</u>
<u>2nd Year - 2020 - 21</u>	<u>3,00,625</u>	
<u>Total</u>	<u>7,00,000</u>	

*The year wise projection of working is marked on the Production plan and enclosed as **Plate No. 9**. The year wise proposed projection and its dispositions of the benches are shown on the Geological Cross Section and enclosed as **Plate No. 10**. The detail calculation of the area, volume & tonnage for the above said years is enclosed as **Annexure No. 13**.*

II. Dump re-handling (for the purpose of recovery of mineral)

Presently there are no any dumps so as to recover the mineral.

- c) Enclose individual year wise development plans and sections showing pit layouts, dumps, stacks of mineral rejects, if any etc in case of “A” category mines. Composite development plans showing pit layouts, dumps, stacks of mineral reject, if any, etc, and year wise sections in case of “B” category mines.

The year wise projection of working is marked on the Production and Development plan and enclosed as **Plate No. 9**. The year wise proposed projection and its dispositions of the benches are shown on the Geological Cross Section and enclosed as **Plate No. 10**.

Describe briefly giving salient features of the proposed method of working indicating category of mine.

By taking into the consideration of geological parameters of the building stone, the said quarry is proposed to work with conventional open cast method with bench system and mode of operation is mechanized. Based on the mode and method so adopted and considering the geological parameters the quarry pit is designed such that the height of the bench is kept about 6.00 mts max., and the width is also kept 6.00 mts, maintaining 45° pit slope.

- e) Describe briefly the layout of mine workings, pit road layout, the layout of the faces and sites for disposal of overburden / waste along with the ground preparation prior to disposal of waste, reject etc. a reference to the plans and sections may be given.

As far as mine working is considered, a systematic and scientific way of mining will be carried out. Based on the mode and method so adopted and taking into the consideration of geological parameters of the ore body the quarry pit is designed such that the height of the bench is kept about 6.00 mts max., and the width is also kept 6.00 mts, maintaining 45° pit slope. To win the material the benches are advanced sideward and laterally.

The waste rock in this quarry is mainly, the topsoil. Generally, in the building stone quarry about 5 – 6 % of waste will likely to generate. But in this quarry the material is consumed for development / construction of Sea port, where the waste generated is consumed for the purpose. Hence no waste is estimated.

Extent of mechanization:

The maximum handling building stone material is 3,99,375 tonnes during the first year of the ensuing plan period. The adequate total handling capacity of loading units will be deployed. For hauling of proposed quantities of building stone, the requirement is met with a fleet of 20 nos. of tippers of 20 tonnes capacity each. List of Quarrying machinery deployed in the quarry along with their capacities, are shown in below table:

<u>Sr. No</u>	<u>Equipment / Machinery</u>	<u>No. of units</u>	<u>Engine H P</u>	<u>Bucket Capacity</u>
<u>1</u>	<u>Excavator</u>	<u>2</u>	<u>350</u>	<u>2.5 M³</u>
<u>2</u>	<u>Rock breaker</u>	<u>2</u>	<u>165</u>	<u>F 22</u>
<u>3</u>	<u>Tippers</u>	<u>15</u>	<u>400</u>	<u>20 tonnes</u>
<u>4</u>	<u>Compressor</u>	<u>2</u>	<u>169</u>	<u>600 CFM</u>
<u>5</u>	<u>Drilling machine</u>	<u>2</u>	<u>--</u>	<u>--</u>
<u>6</u>	<u>Water tanker</u>	<u>1</u>	<u>130</u>	<u>10.0KL</u>



Conceptual Mine planning upto the end of lease period taking into consideration the present available reserves and resources describing the excavation, recovery of ROM, Disposal of waste, Back filling of voids, Reclamation and rehabilitation showing on a plan with few relevant sections.

For any Mine / quarry, Preparation of Conceptual Plan amounts to, fore-seeing in totality and planning for quarrying and related activities through-out its life span, till such time all the usable mineral / ores are exhausted to the economical limits and lease area is reclaimed to the extent possible. The norms laid down by the government agencies from time to time do play important roles.

Therefore, preparation of ideal conceptual quarry plan for any quarry is difficult and such plan prepared, remains acceptable only under given circumstances. It cannot be over looked that, any such plan undergoes amendments and revisions in the course of progressive stages of exploitation.

Anticipated Life of Quarry :

Based on the reserves and considering the projected production target during first five year and next five years the anticipated life of the quarry will be about 5years.

Excavation : The below table shows the production for the successive blocks of five year till the conceptual period:

<u>Period of five years</u>	<u>Qty in tonnes</u>
	<u>Proposed Production</u>
<u>1st block of five years (only for first two years) 19 - 20 to 20 - 21</u>	<u>7,00,000</u>
<u>1st block of five year (for next three years) 21 - 22 to 23 - 24 ***</u>	<u>10,78,750</u>
<u>Total</u>	<u>17,78,750</u>

*** indicates if required it will be produced @ the rate of 3,59,583 every year

Recovery of R O M: Subsequent to the drilling and blasting, the material so dislodged / fragmented / loosens from the rock mass, the boulders so generated, will be broken with the help of the rock breakers. There after the material is loaded into trucks / tippers of 20.0 tonnes capacity with the help of the excavator. The loaded material is transported to the port development.

Disposal of waste : Generally, in the building stone quarry about 5 - 6 % of waste will likely to generate. But in this quarry the material is consumed for development /

construction of Sea port, so the waste generated is considered as production. Hence no waste is estimated and no disposal of waste.

Backfilling of voids : Since there is no waste generation at this quarry, no backfilling of voids.

Reclamation and rehabilitation:

At the end of the lease period / conceptual period pit extends over an area of **3.0000 ha** approximately (including roads). Part of the pit i.e **0.9500 ha** of area will be converted as a water pond, and the balance area **2.05 Ha** will be retained as pit.

Plantation will be carried out on the lease periphery, covering at the rate of **0.2210ha** yearly by sapling about **330nos** per year. Over all during the first block of five years **0.6630 ha** will be covered by plantation by sapling **990 nos**. Mainly the local species will be planted along with the other plants such as Rain tree, Bougainville, Picus, plantation crops like Fruit bearing plants like mango tree, jack fruit tree will be planted. It is proposed to plant at the rate of 1,500 saplings per hectare. Anticipated survival growth rate is about 60 – 70 %. The above measures are marked on Production plan and Conceptual / plan enclosed as **Plate No.9 & 12** respectively.

3.0 MINE DRAINAGE

- a) Minimum and maximum depth of water table based on the observations from nearby wells and water bodies.**

Based on the observations made in and around the quarry area it was found that the general ground level in this area is 32 m above MSL, and the general ground water table is 8 m below the general ground level i.e 24 m above MSL. During monsoon the ground water table will raise by 2 – 3 mts.

- b) Indicate maximum and minimum depth of workings:**

The lease area is situated on the isolated hillock where the top most working level is about 106 m above MSL and the lowest is 28 m above MSL, total depth of quarry will be 78 mts.



- c) Quantity and quality of water likely to be encountered, the pumping arrangements and places where the mine water is finally proposed to be discharged.

The mine is situated on the hillocks, where the ultimate workings are not going to touch the ground water table; the general water table is 24 m above MSL and the ultimate working is 28 m above MSL. Hence no pumping of water is required.

- d) Describe regional and local drainage pattern. Also indicate annual rainfall, catchment area, and likely quantity of rain water to flow through the lease area, arrangement for arresting solid wash off.

Drainage pattern :

There are no any perennial water course / water bodies / streams / nallahs within the quarry area. The storm water passes through the minor water courses and gets confluence with the adjacent nallah. Apart from this the water source in this area is mainly storm water. Entire storm water flows through the garland drains provided all around the quarry pit and same will be collected in settling pond. The drainage pattern in this region is parallel to sub parallel.

Rainfall :

Generally there are two monsoons in Kerala, the onset monsoon is known as Southwest Monsoon which commence from June and ends in September. The second monsoon is known as Northeast Monsoon and also known as Reverse monsoon which commence from October and ends in November. The average rainfall for the last ten years is around 3,000 mm annually.

**STACKING OF MINERAL REJECT / SUBGRADE MATERIAL AND
DISPOSAL OF WASTE:**

Indicate briefly the nature and quantity of topsoil, overburden / waste and Mineral reject to be disposed off.

Top Soil :

Most of the quarry area is exposed by Charnokite, part of area towards the north of the quarry is covered by topsoil with the thickness varying from 1.00m to 1.50 m, topsoil so visualized is sparsely distributed. However during the course of quarrying of this area, the topsoil so occurs will be removed and stacked separately and it will be used for plantation purpose.

Spread area : 1000Sq M
Depth 1.00 mts
Bulk density 1.50

$$1,000 \times 1.0 \times 1.50 = 1,500 \text{ tonnes.}$$

- b) The proposed dumping ground within the lease area be proved for presence or absence of mineral and be outside the UPL unless simultaneous backfilling is proposed or purely temporary dumping for a short period is proposed in mineralized area with technical constraints & justification.

And

- c) Attach a note indicating the manner of disposal of waste, configuration and sequence of year wise build up of dump along with the proposals for protective measures:

Since no waste is generating at this quarry, so no dumping is proposed.

5.0 USE OF MINERALS AND MINERAL REJECT:

- a) Describe briefly the requirement of end – use industry specifically in terms of physical and chemical composition:

The material produced at this quarry will be used for development / construction of Vizhinjam Port.

- b) Give brief requirement of intermediate industries involved in up-gradation of mineral before its end use.

Not applicable.

- c) Give detail requirements for other industries, captive consumption, export associated industrial use etc.

The material generated at this quarry is supplied to port development.



d) Indicate precise physical and chemical specification stipulated by buyers:

Basically, the material produced at this quarry is used for development / construction of Vizhinjam Port. Only physical specifications are involved and the same are mentioned below:

Sl. No.	Details	specifications
1	Boulders	100 mm / 2,400 Cum

e) Give detail of processes adopted to upgrade the ROM to suit the used requirement.

No process is adapted to up-grade the Building stone.

6.0 PROCESSING OF ROM AND MINERAL REJECT:

a) If processing / beneficiation of the ROM or Mineral Reject is planned to be conducted, briefly describe nature of processing / beneficiation. This may indicate size and grade of feed material and concentrate (finished marketable product), recovery etc.

b) Give a material balance chart with flow sheet or schematic diagram of the processing procedure indicating feed, product, recovery and its gradate each stage of processing:

Not applicable.

c) Explain the disposal method for tailings or reject from the processing plant.

d) Quantity and quality of tailings / reject proposed to be disposed, size and capacity of tailing pond, toxic effect of such tailings, if any, with process adopted to neutralize any such effect before their disposal and dealing of excess water from the tailings dam.

e) Specific quantity and type of chemicals if any to be used in the processing plant.

f) Specific quantity and type of chemicals to be stored on site / plant.

g) Indicate quantity (cum per day) of water required for mining and processing and sources of supply of water, disposal of water and extent of recycling. Water balance chart may be given.

All the above paragraphs are not applicable as there is no processing / beneficiation plant

7.0 OTHERS : Describe the following:

a) Site Services.

The said proposed quarry area falls in the Re - Sy. Block No. 37, Re – Sy No 555/2 (Govt. Land) extends over an area of **3.6630 Ha** of Nagaroor village, Chirayinkeezh Taluk of Thiruvananthapuram District - Kerala state. The said area lies towards southwest of Nagaroor village at a distance of 1.20 kms and lies towards north of Kadavila Bus stop at a distance of 0.50 kms approximately (Distances are aerial distance). This lease area is approachable by all-weather road/s up to the up to Kadavila bus stop, thereafter a kutch road will leads to area.

Thiruvananthapuram is the district head quarter and state's capital which is at a distance of 35.0 kms (by road) towards south of quarry area & Chirayinkeezh is the Taluk head quarter which is at a distance of 13.0 kms towards southwest of quarry area, where all the infrastructural facilities are available. The nearest airport is at Thiruvananthapuram at a distance of 40.0 kms and sea port at kollam which is at a distance of 50.0 kms. The nearest railhead on Broad-gauge is Chirayinkeezh which is at distance of 9.0 kms.

This area falls under the Survey of India's Topomap No. **58 / D / 13 & 58 / D / 14**. Since the topomaps of Kerala are restricted the same are not available. The said quarry area falls between the geographical co-ordinates i.e

Latitude	08°43' 42.88" N to 08°33' 51.74" N
Longitude	76°50' 15.26" E to 76° 50' 23.24" E

However the Latitude and Longitude so recorded of all the corner boundary pillar is depicted on the Surface Plan enclosed as **Plate No. 6** and the area is marked on the google satellite image and enclosed as **Plate No. 5**.

b) Employment potential:

About 30 people are appointed as direct employment and it generates indirect employment for few hundred people. Most of the directly employed people are skilled. The respective distribution/ numbers are follows.

Highly skilled	:	03 nos., such as technical professionals like Quarry Manager Quarry eng., Asst. Quarry Manager and etc.,
Skilled	:	12 nos., under skilled category of people includes Quarry Foreman, Quarry mates, heavy earth moving machinery operators, drivers, mechanics and asst. mechanics etc.
Semi skilled	:	08 nos. include helpers, greaser's etc.
Un skilled	:	07 nos. include spotters, cleaners, attendant's etc.

8.0 PROGRESSIVE MINE CLOSURE PLAN.

8.1 Environment Baseline information:

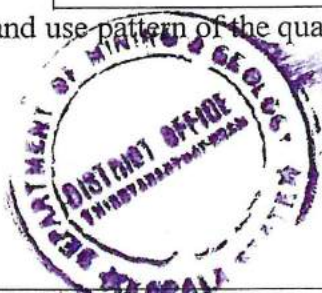
Attach a note on the status of baseline information with regard to the following.

- **Existing land use pattern indicating the area already degraded due to mining, roads, processing plant, workshop, township etc in tabular form:**

Quarrying area is **3.6630 ha**. Entire area is exposed by Charnockite, more so, this area was worked formerly by some other party. The present land use pattern of the Quarrying area is shown below:

Description	As on date (area in Ha)
Area under Quarrying	1.9000
roads	0.0200
Safety barrier 7.50 mts	0.6630
Area for future use / undisturbed	1.0800
Total	3.6630

The existing land use pattern of the quarry is shown on the surface plan enclosed as **Plate No. 6.**



➤ Water regime:

Water resources in this area are Ground water and rainwater. The area receives copious amount of rainfall 3,000 to 4,000 mm annually on an average. Hence the level of water table in the open wells is shallow i. e about 8mts below the general ground level.

There are no any perennial water course / water bodies / streams / nallahs within the quarry area. The storm water passes through the minor water courses and gets confluence with the adjacent nallah. Apart from this the water source in this area is mainly storm water. Entire storm water flows through the garland drains provided all around the quarry pit and same will be collected in settling pond. The drainage pattern in this region is parallel to sub parallel.

Flora & Fauna

Flora & Fauna surveys were carried out as part of the management plan preparation. The observation of the Flora and Fauna are given below:

A. Floral Diversity

Table 1.1. List of Trees

Sl No	Scientific Name	Vernacular / English Name	Family	Status
1.	Terminalia paniculata	Maruthu	Combretaceae	Indigenous / Common
2.	Gliricidia sepium	Gliricidia/ Poonchedi	Fabaceae	Exotic

Table 1.2. List of Shrubs

Sl No	Scientific Name	Vernacular / English Name	Family	Status
1.	Manihot utilissima	Cheeni	Euphorbiaceae	Exotic
2.	Chromolaena odorata	Communistpacha	Asteraceae	Exotic weed
3.	Hyptis suaveolens	Nattapoochedi	Lamiaceae	Common
4.	Melastoma malabathricum	Athirani	Melastomataceae	Common



Table 1.3. List of Herbs

Sl No	Scientific Name	Vernacular / English Name	Family	Status
1.	Leucasaspera	Thumba	Lamiaceae	Common
2.	Mimosa pudica	Thottavadi	Mimosaceae	Exotic
3.	Phyllanthusniruri	Keezharnelli	Euphorbiaceae	Common

Table 1.4. List of Climbers

Sl No	Scientific Name	Vernacular / English Name	Family	Status
1.	Calycopteris floribunda	Pullanji	Combretaceae	Common
2.	Acacia caesia	Incha	Leguminosae	Common

Table 1.5. List of Grass

Sl No	Scientific Name	Vernacular / English Name	Family	Status
1.	Cymbopogoncitratatus	Inchipullu	Poaceae	Common
2.	Axonopuscompressus	Kalapullu	Poaceae	Common

B. Faunal Diversity

Sl No	Scientific Name	Vernacular / English Name	Family	Status
Frog				
1.	Pseudophilautus sp.	Bush frog	---	Common
Dragon Fly				
2.	Prodasineuraverticilis	Black bambootail	Platycnemididae.	Common
3.	Rhyothemisvariegata	Picturewing/ Onathumbi	Libellulidae	Common
Birds				
4.	Acridotherestrictis	Indian myna	Sturnidae	Common

The majority of the mined area extensively altered from its natural state through past mining activity. There is no area used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering and migration within the applied lease area. Shrubs and grasses cover the area in a scattered manner. Some trees of small height can be spotted in entire lease land. As there is no natural forest cover, the area does not contain any wild animals. Only domestic animals like goat, cow, buffalo, cat, dog etc. are observed / found in the area.



PHOTOGRAPHS SHOWING FLORA IN AND AROUND QUARRY AREA



QUALITY OF AIR, AMBIENT NOISE LEVELS AND WATER

To know the base line values within the core and buffer zone monitoring was carried out for various environmental parameters such Air, Water, Noise and soil the location of the same is shown in below table:

Sl. No.	Locations	Distance and direction wrt quarry	Environmental parameters			
CORE ZONE						
1	Quarry area	--	Air	--	Noise	Soil
BUFFER ZONE						
1	Nearest settlement towards Near (Kadavila bus stop)	@ 450 mts>> SE	Air	Water	Noise	Soil
2	Nearest settlement towards	@ 900 mts>> W	Air	Water	Noise	---
3	Nearest settlement towards	@ 330 mts>> NNW	Air	Water	Noise	Soil
4	Nearest settlement towards (near Altharamudu bus stop)	@ 825 mts>> NNE	Air	Water	Noise	----
5	Vamanapuram river	@ 1.90 km >> SSE	--	Water	---	--

A key plan showing all the above monitoring location is enclosed as **Plate No. 1**. Apart from this a Surface plan showing the existing environment / land use up to 500 mts from the quarry area is enclosed as **Plate No. 11**.

➤ Quality of Air:

Quarrying activity contributes to pollution of air due to Quarry operation, since the mode of Quarrying is mechanized heavy earth moving machineries are involved; the pollution of the air is mainly due to generation of dust and noise. However the air quality monitoring was carried out to study the baseline values and found that the values so obtained are well within the limits. A copy of the air quality monitoring reports is enclosed as **Annexure No. 14**.

Water Quality:

There are no perennial water courses / bodies within the leasehold area, but for the minor seasonal watercourses. Apart from this the water source to this area is mainly storm and

ground water. Entire storm water flows through the minor watercourses and joins the adjoining seasonal nallah. The drainage pattern in this area is dendritic in nature.

However the water samples were collected both in core and buffer zone to know the baseline values and found that the values so obtained are well within the limits. A copy of the air quality reports is enclosed as **Annexure No. 15.**

➤ **Ambient noise level :**

Since the quarry is mechanized the generation of the noise at this quarry is mainly by machineries and movement of trucks. However the noise levels were monitored to study the baseline values and found that the values so obtained are well within the limits. A copy of the Noise levels reports is enclosed as **Annexure No. 16.**

➤ **Climatic conditions :**

The climate of the area is typical of Western Ghats and the Malnad region. It receives high rainfall and exhibits temperature variations with moderate summer and moderate winter. Meteorological data for the following climatic are under progress

1. Temperature
2. Relative Humidity
3. Rainfall

Temperature : The temperature normally ranges from 28°C to 32° C on the plains but drops to about 20°C in the highlands. The Highlands of Kerala, enjoys a cool and invigorating climate the year-round. Owing to its diversity in geographical features, the climatic condition in Kerala is diverse.

Relative humidity : In general the relative humidity in the area is observed to be high due to its proximity to the sea. During the summer it varies from 36 to 93, during monsoon it varies from 22 to 90 (some time up to 100) and during the winter it varies 80 to 90.

Rainfall : Generally there are two monsoons in Kerala, the onset monsoon is known as Southwest Monsoon which commence from June and ends in September. The second monsoon is known as Northeast Monsoon and also known as Reverse monsoon which commence from October and ends in November. The average rainfall for the last ten years is around 3,000 mm annually.



➤ **Human settlements :**

There is no any human settlement within the quarry area, but the nearest human settlement is 300 m & 700 m from the quarry area towards North and Southeast respectively. The nearest village is Nagaroor which is at a distance of 1.2 kms. There are totally 24 villages / wadas within 5.0 kms study area.

In 2011, Thiruvananthapuram district had population of 33,01,427 of which male and female were 15,81,678 and 15,69,917 respectively. There was change of 2.07 percent in the population compared to population as per 2001.

Average literacy rate of Thiruvananthapuram district in 2011 were 93.02 compared to 89.28 of 2001. Total literate in Thiruvananthapuram District were 2,785,408 of which male and female were 1,354,857 and 1,430,551 respectively. With regards to Sex Ratio in Thiruvananthapuram, it stood at 1087 per 1000 male compared to 2001 census figure of 1060.

➤ **Public building, Places of worship and monuments:**

There are no any public building, places of worship and monuments within the lease area.

➤ **Indicate any sanctuary is located in the vicinity of leasehold:**

There are no any sanctuaries located in the vicinity of the leasehold area. And there are no any sanctuary, wildlife within the buffer zone of 5.00 kms.

Impact Assessment : Attach an Environmental Impact Assessment Statement describing the impact of mining and beneficiation on environment on the following:

Land area indicating the area likely to be degraded due to quarrying, dumping, roads, workshop, processing plant, tailing pond / dam, township etc.,

Due to Quarrying and exploitation of the ore, there will be change in the ground profile in the form of pits and dumps. The detail of the land use as at present, Plan / conceptual period is shown below in tabular form:

Unit in Ha.

Description	As on date	Plan / lease period
Area under Quarrying	1.9000	2.9800
roads	0.0200	0.0200
Green belt	--	0.6630
Safety barrier 7.50 mts	0.6630	--
Area for future use / undisturbed	1.0800	--
Total	3.6630	3.6630

Subsequent to the Conceptual stage, this quarry will be used for various activities as per the mine closure plan, as a part of closure the activities such as water pond, back filling and etc., the details of the land use of post mine closure is given below:

Sl. No.	Type of activities	Extent in Ha.	Post mining land use of degraded land	Extent in Ha.
1.	Area under Quarrying	2.9800	1. Area under water pond 2. Area remained as pit	0.9540 2.0260
2.	roads	0.0200	Retained as roads	0.0200
3.	Green belt	0.6630	Retained as Green belt	0.6630
	Total	3.6630	Total	3.6630

NOTE: Roads are part of the quarry area.

A conceptual plan / Post mining land use plan is enclosed as **Plate No. 12.**

ii) Air quality:

Quarrying activity contributes to pollution of air due to working heavy earth moving & Quarrying machineries. To know the impacts of quality of air the parameter such as Suspended Particulate Matter (SPM), Sulphur Dioxide (SO₂), oxides of Nitrogen (NO_x) and Carbon monoxide (CO) monitoring is being carried out through consultant having MoEF& NABET accredited agencies.

However may be the impact, to reduce the same, following measures are adopted.

1. Water sprinkling will be done at regular interval on haul roads, pit and etc., to avoid the emission of dust into atmosphere.
2. Wet drilling will be adopted to avoid the dust in the air atmosphere.
3. All the belt conveyors are covered such that no is entered into the atmosphere.



4. Regular maintenance of haul roads to avoid the dust generation.

A copy of the Air quality report is enclosed as **Annexure No. 14.**

ii) Water Quality:

During the monsoon, there will be an impact in the form of surface runoff, wash off where the material will be transported to the local water bodies. And also there will be an impact on the ground water due to mining activities.

Following protective measures will be adopted to maintain the water quality:

1. Garland drains are cut all along the benches prior to the monsoon to avert the water into the pit.
2. No mine working will touch the ground water.
3. Where ever the water flow is likely to join with nalas or water bodies, the check dam will be constructed.
4. Retention wall / rubble walls will be constructed to arrest any wash off / surface runoff from the quarry area.

A copy of the Water quality report is enclosed as **Annexure No. 15.**

iii) Noise levels :

Since the quarry is mechanized, the noise pollution is mainly due to the Quarrying machinery and movement of trucks and drilling and blasting activities. There will be impact in surrounding area due to the noise generation.

To reduce the impact on the noise following measures will be adopted:

1. Preventive maintenance of HEMM and Trucks
2. Controlled blasting will be carried out to avoid noise levels.
3. No employees are allowed to work without PPE's where the noise levels are more and beyond the limits.

A copy of the Noise monitoring report is enclosed as **Annexure No. 16.**



iv) Vibration levels (due to blasting):

Due to drilling and blasting, following are the impacts visualized:

1. There will be disturbance of Fauna,
2. Vibration due to blasting,
3. Noise generation but as per the list enclosed.

To mitigate the above visualized impacts, following are the measures will be adopted.

1. Scientific methods will be adopted to while drilling and blasting,
2. Proper spacing and burden will be adopted,
3. Controlled blasting will be carried out to avoid noise levels and also to control the PPV.
4. NONEL technology will be adopted,

v) Water Regime :

There are no perennial water courses / bodies within the quarry area. Apart from this the water source in this area is mainly storm and ground water. Entire storm water flows through the minor watercourses and joins the adjoining seasonal nallah. The drainage pattern in this area is parallel to sub parallel in nature.

Water resources in this area are Ground water and rainwater. The area receives copious amount of rainfall 3,000 – 4,000 mm annually on an average. Hence the level of water table in the open wells is shallow. Based on the observations made in and around the quarry area it was found that the general ground level in this area is 32 m above MSL, and the general ground water table is 8 m below the general ground level i.e 24 m above MSL. During monsoon the ground water table will raise by 2 – 3 mts. The bottom most working of the pit is 28 m above MSL where quarry operation will not touch the general ground water table. The impact could be in the form of the fluctuation of the ground water table, which is insignificance.

During the monsoon, there will be an impact in the form of surface runoff, wash off where the material will be transported to the local water bodies. To avoid these following protective measures will be taken up.



1. Construction of rubble walls all along the toe of the dumps.
2. Construction of drains all along the toe of the dumps.
3. Before onset of monsoon, drains are cut along toe of the quarry faces to divert the surface run off. Garland drain is provided at the quarry top to regulate monsoon water and direct the same to the settling ponds / quarry pit to contain the quarry wash off and to avoid the same joining to the adjoining surface water bodies / water courses. It also helps to avert eventual collapses and damages to the quarry faces.

Water drainage / Rain water harvesting plan to this effect is enclosed as **Plate No. 14**.

vi) **Acid Mine drainage :** Not applicable.

vii) **Surface Subsidence :** Not applicable.

viii) **Socio Economics :**

There are twenty four wadas / villages within the buffer zone of 5.00 kms radius. In which the three villages namely Nagaroor, Kadavila, Vellalore and so on. Due to this Quarrying activity, no significant adverse changes are visualized in the traditional way of life of the people residing in the villages within the buffer zone. Further people residing in the nearby villages are benefited by the direct and indirect employment opportunities created by the Quarrying activities. Quarrying activity will contribute towards economic up-liftment by way of job opportunities in the region, hence there is an increase in population of the area. Quarrying activity also boosts the ancillary industries, business and market establishments.

Facilities like power linkage, water supply, communication facilities, construction of roads and statutory buildings, medical facility, vocational training provided by the lessee will augment the socio-economic status of the villagers residing nearby.

As a part of CSR activities, following community welfare measures are proposed to be carried out and the same will be continued:

Sr. No	Description	Amount in INR	Remarks
1.	Medical checkups camps like eye checkup, cancer checkup nearby villages Nagaroor, Kadavila, Vanichoor (Each year one village will be camped for special checkups and general checkup every year in all the villages)	1,00,000/-	yearly
2.	Distribution of school bag, umbrella, text and note books for primary school children at Nagaroor,	1,00,000/-	yearly

	Kadavila, Vanichoor village.		
3.	Contribution for marriages to poor / needy people at least 4 people @ Rs. 25,000/- each	1,00,000/-	yearly
4.	Contribution for local cultural and festivals	50,000/-	yearly
5.	Distribution of ration through panchayat to the needy people during Onam / Ramzan / Christmas festival at least 50 families @ Rs. 500/- per family each festival	50,000/-	yearly
6.	Construction of washrooms / toilets for government Schools / High schools Nagaroor, Kadavila, Vanichoorvillage. (every year one village will be taken up)	1,50,000/-	yearly
7	Renovation / repair of temples nearby (Sree Ayiravilly, Sree Durgadevi, Perumpally temples)	1,00,000/-	yearly
	Total	6,50,000/-	-

ix) Historical Monuments:

No historical monuments exist within the vicinity of the quarry.

8.3 Progressive Reclamation Plan:

8.3.1 Mined – out Land:

Due to Quarrying and exploitation of the ore, there will be change in the ground profile in the form of pits and dumps. The detail of the land use as at present, Plan / conceptual period is shown below in tabular form:

Description	As on date	Unit in Ha.
		Plan / lease period
Area under Quarrying	1.9000	2.9800
roads	0.0200	0.0200
Green belt	--	0.6630
Safety barrier 7.50 mts	0.6630	--
Area for future use / undisturbed	1.0800	--
Total	3.6630	3.6630

Subsequent to the Conceptual stage, this quarry will be used for various activities as per the mine closure plan, as a part of closure the activities such as water pond, back filling and etc., the details of the land use of post mine closure is given below:



Sl. No.	Type of activities	Extent in Ha.	Post mining land use of degraded land	Extent in Ha.
1.	Area under Quarrying	2.9800	1. Area under water pond 2. Area remained as pit	0.9540 2.0260
2.	roads	0.0200	Retained as roads	0.0200
3.	Green belt	0.6630	Retained as Green belt	0.6630
	Total	3.6630	Total	3.6630

NOTE: Roads are part of the quarry area.

A conceptual plan / Post mining land use plan is enclosed as **Plate No. 12.**

8.3.2 Topsoil management:

More or less entire area is exposed by Building Stone Material only at places, topsoil is visualized which is sparsely distributed. The amount of topsoil exists to the thickness is just 1.00mts (average). However during the course of quarrying of this area, the topsoil so occurs will be removed separately and will be used for plantation purpose. During the entire life of the quarry about 1,500tonnes of topsoil is likely to generate.

As a part of the topsoil management, to know the present quality levels of the topsoil, three soil samples locations were identified i.e one in core zone and two in buffer zone namely one location is nearest human settlements at a distance of 450 mts towards SE from the quarry site and the other is at a distance of 330 mts towards NNW from quarry. Accordingly it was sample and analysed, a quality report of the same is enclosed as **Annexure No. 17.**

8.3.3 Tailings Dam Management : Not applicable.

8.3.4 Acid mine drainage, if any and it mitigative measures : Not applicable.

8.3.5 Surface subsidence mitigation measure through back filling the mine voids or by other means and its monitoring mechanism:

Not applicable.

8.4 Disaster Management and Risk Assessment:

Disasters might occur only due to natural calamities like earth quake, excessive rains and flooding etc. To overcome such risks, help / aid would be sought from emergency services providers like Police station, Fire station, Hospital, Ambulance services from the authorities

in the vicinity of the mine site. Their contact telephone numbers and communication facilities are provided and displayed on the board at the mine office as well as mine site. Responsibility of coordinating rescue activities is entrusted to Quarry – in - Charge at the Quarry site in addition to Quarry – in Charge is also looking after statutory obligations under Mines Act, 1952.

8.5 Care and Maintenance during temporary discontinuance:

Lessee proposes to work continuously, till the conceptual stage as such there is no temporary discontinuance of the mine. All required actions are timely taken and therefore, we do not foreseen such discontinuation to occur, however, management is fully equipped up to overcome any such eventuality. However due to unforeseen situation, if mines happens to discontinue temporarily due to strike, lockout & any order passed by the government, court and etc, lessee shall take care of mine by fencing the pit/quarry deploying the security guards for watch and ward of the mine.

8.6 Financial assurance :

(Submitted under Rule 58 of KMMCR 2015, as a component of Mining Plan)

Area for the Financial Assurance is calculated as per the Rule 58 of KMMCR 2015, till the end of the Ensuing Mining Plan period and the details of land use considered are furnished below:

Sl. No.	Type of Land use	Area of Land in use (in Ha)			The area is considered as fully reclaimed and rehabilitated	Net area considered for calculation
		Area put on use at start of Plan	Additional Requirement during plan period	Total		
		A	B	C = (A + B)		
1	Area under Quarrying	1.9000	1.0800	2.9800		2.9800
2	roads	0.0200		0.0200		0.0200
3	Green belt	--		0.6630		0.6630
4	Safety barrier 7.50 mts	0.6630		--		--
5	Area for future use / undisturbed	1.0800		--		--
Total		3.6630		3.6630		3.6630

A P M C P showing the below land use is enclosed as Plate No. 13



The total area under utilization till the end of the plan Period : **3.6630 Ha**
Financial assurance @ Rs. 25,000/- per hectore.

3.6630 Ha X Rs. 25,000/- per hectore. Rs. 91,575/-

The financial assurance being the sum of Rs. Ninety One thousand Five Hundred Seventy Five only. But as per the rule 62 of KMMCR 2015, the minimum financial amount is **Rs. One Lakh only**. Accordingly the sum of **Rs. One Lakh only** will be submitted in the form of Bank guarantee, when once we receive the vetted from your department.

9.0 CERTIFICATES : All the required certificates are enclosed.

10.0 PLATES : All the required plates are enclosed and made the reference in the text at relevant places.

11.0 ANNEXURES. : All the required annexure are and made the reference in the text at relevant places.



KANTHARAJ K

RQP / GOA / 130 / 2000 / A





GOVERNMENT OF INDIA
MINISTRY OF CORPORATE AFFAIRS

Registrar of Companies, Ahmedabad
RoC Bhavan , Opp Rupal Park Society , Behind Ankur Bus Stop , Naranpura

Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 of the Companies Act, 2013 and rule 8 of the Companies (Incorporation) Rules, 2014]

I hereby certify that ADANI VIZHINJAM PORT PRIVATE LIMITED is incorporated on this Twenty Seventh day of July Two Thousand Fifteen under the Companies Act, 2013 and that the company is limited by shares.

The CIN of the company is U61200GJ2015PTC083954.

Given under my hand at Ahmedabad this Twenty Seventh day of July Two Thousand Fifteen.

Signature Invalid

Rathod Kamleshkumar Gangjibhai
Assistant Registrar of Companies
Gujarat

Mailing Address as per record available in Registrar of Companies office:

ADANI VIZHINJAM PORT PRIVATE LIMITED
Adani House, Nr. Milhakhal Six Roads, Navrangpura,
Ahmedabad - 380009,
Gujarat, INDIA



Kantharaj K.
KANTHARAJ K.
RQPI/GOA/139/2009/A



MEMORANDUM
AND
ARTICLES OF ASSOCIATION
OF
ADANI VIZHINJAM PORT PRIVATE LIMITED

ATTESTED
VERIFIED AND CERTIFIED
THAT THIS IS THE TRUE COPY
OF THE ORIGINAL



T.N. Omana
13-6-2000

T.N. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State South India

Kantharaj K.
KANTHARAJ K.
RQP/GOA/130/2000/A



THE COMPANIES ACT, 2013
COMPANY LIMITED BY SHARES
MEMORANDUM OF ASSOCIATION

OF

ADANI VIZHINJAM PORT PRIVATE LIMITED

- I. The Name of the Company is "ADANI VIZHINJAM PORT PRIVATE LIMITED".
- II. The Registered Office of the Company will be situated in the State of Gujarat.
- III. The objects for which the Company is established are:

[A] THE OBJECTS TO BE PURSUED BY THE COMPANY ON ITS INCORPORATION ARE:

1. To construct, develop, maintain, build, equip, hire or otherwise deal with ports, shipyard, jetties, harbours, docks, ship breaking, ship repair, ship building at any port in India or elsewhere and to carry on business of inland and sea transport including goods, passengers and mail, shippers, ship agents, ship underwriters, ship managers, tug owners, barge owners, loading brokers, freight brokers, freight contractors, stevedores, warehouseman, wharfingers and building, assembling, fitting, constructing, repairing, servicing and managing ships, seagoing vessels for inland waterways and to carry on in India and in any part of the world the business and to construct, develop, erect, build, buy, sell, give or take on lease or license, repair, remodel, demolish, develop, improve, own, equip, operate and maintain, ports and port approaches, breakwaters for protection of port or on the fore shore of the port or port approaches with all such convenient arches, drains, landing places, hard jetties, floating barges or pontoons, stairs, fences, roads, railways, sidings, bridges, tunnels and approaches and widening, deepening and improving any portion of the port or port approaches, light houses, light ships, beacons, pilot boats or other appliances necessary for the safe navigation of the ports and the port approaches and to construct and establish, dry docks, shipways and boat basins and workshops to carry out repairs or overwhelming of vessels, tugs, boats, machinery or appliances.

1

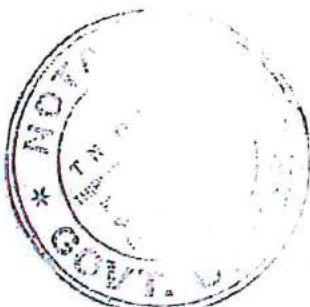


T.N. Omana

T.N. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State South India

[B] MATTERS WHICH ARE NECESSARY FOR FURTHERANCE OF THE OBJECTS SPECIFIED IN CLAUSE III [A] are:

1. To construct, improve, maintain, develop, manage, carry out or control any wharfwings, fuel storage tanks, fire stations, electric workshops, stores, roadways and convenience which may seem to advance the business interest and contribute to or subsidise, assist or take part in the construction, improvement, maintenance, working, management, carving out, control thereof and to maintain, overhaul, repair, fit-out, refit, improve, insure, alter, sell, exchange or let out on hire or hire purchase or charter or otherwise deal with and dispose off any of the ships and container, Roll-on and Roll-off Vessels, manufacturing and processing vessels and aircrafts, helicopters, all kinds of off-shore drilling rigs, platforms, storage-floating and transport and such other facilities and other transport and conveyances or any of the engines or furnitures or equipments or stores on the ships, aircrafts or other transport and conveyances.
2. To acquire, build, construct, improve, develop, give or take in exchange or on lease, rent, occupy, allow, control, maintain, operate, run, sell dispose off carry out or later as may be necessary or convenient any leasehold or freehold lands, movable or immovable properties, including building jetty, workshops, warehouse, stores, easement or other rights, machineries, plant, work, stock-in-trade industrial colonies, conveniences together with all modern amenities and facilities such as housing, schools, hospitals, water supply, sanitation, townships and other facilities or properties which may seem calculated directly or indirectly to advance the Company's objects and interest either in consideration of a gross sum of a rent charged in cash or services.
3. To acquire and takeover any business or undertaking carried on, upon or in connection with / without any land or building which the Company may desire to acquire as aforesaid or become interested in and the whole or any of the assets and liabilities of such business or undertaking and to carry on the same or to dispose or remove or put an end thereto.
4. To acquire, purchase, start, run, erect and maintain lands, buildings, factories, foundries, workshops, mills, cold storage plants, equipments, machineries, plants and tools, industrial undertaking of any kind, warehouses, cellars, vaults, wagons, branch offices, depots and show-rooms for the business of the Company.
5. To form, promote, subsidise, organise and assist or aid in forming, promoting, subsidising, organising or aiding companies, syndicates and partnerships of all kinds for the purpose of acquiring and undertaking any properties and liabilities of this Company or for advancing directly the objects thereof which this Company may think expedient.
6. To acquire from and/or give to any person, firm or body corporate incorporated whether in India or elsewhere, technical information, know-how, processes, engineering, manufacturing and operating data, plants, lay outs and blue prints useful for the design, erection and operation of plant required for any of the business of Company and to acquire any grant or licenses and other rights and benefits in the foregoing matters and things.
7. To pay to promoters such remuneration and fees and otherwise recompensate them for their time and for the services rendered by them.
8. To invest any moneys of the Company not immediately required for the purpose of its business in such investments or securities as may be thought expedient including securities issued and/or guaranteed by Central or State Government, Corporations, Trusts and Financial Institutions.
9. To carry out in any part of the world all or any part of the Company's objects as principal, agent, factor, trustee, contractor either alone or in conjunction with any other Person, Firm, Association, Corporate Body, Municipality Province, State of Government or Colony or Dependency thereof.
10. To secure or discharge any debt or obligation of or binding on the Company in such manner as may be thought fit and in particular by mortgage, charges upon the undertaking and all or any of the assets and properties (present and future) and the uncalled capital of the Company or by the creation and issue on such terms as may be thought expedient of debentures, debenture-stock or other securities of any description or by the issue of shares credited as fully or partly paid up.



T.N. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State South India



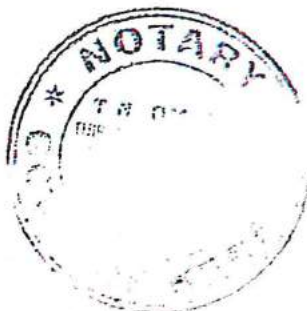
11. To purchase or otherwise acquire, sell, dispose off, concerns and undertakings, mortgages, charges, annuities for certain period or on deferred basis, patents, licences, securities, concessions, policies, book debts and claims, any interest in real or personal property and any claims against such property or against any person or company.
12. To amalgamate, enter into partnerships or into any arrangements for sharing profits or losses, union of interests, co-operation, joint ventures or reciprocal concessions with any person or company carrying on or engaged in or about to carry on or engaged in or which can be carried on in conjunction therewith or which is capable of being conducted so as directly or indirectly to benefit the Company and to give or accept by way of consideration for any of the acts or things aforesaid or properties acquired, any shares, debentures, debenture-stock or securities that may be agreed upon and to hold and retain or sell, mortgage and deal with any shares, debentures, debenture-stock or securities so received.
13. To negotiate, enter into agreements and contracts or collaborate with foreign companies, firms and individuals for getting or supplying and procuring technical assistance, know-hows in the marketing, importing and exporting of any of the products.
14. To become member of and to communicate with Chamber of Commerce and other mercantile and public bodies throughout the world and to advise on, concert, promote and support measures for the protection, advancement, growth of commerce and industry and for protection and welfare of persons engaged therein.
15. To take or hold mortgages, liens and charges, to secure the payment of the purchase price or any unpaid balance of the purchase price of any part of the Company's property of whatsoever kind sold by the Company or any money due to the Company from the purchaser and others.
16. To contract with lease holders, borrowers, lenders, annuitants and other for the establishment, accumulation, provisions and payment of sinking funds, renewal funds, redemption funds any other special funds and that either in consideration of lumpsum or of annual premium or otherwise and generally on such terms and conditions as may be arranged.
17. To undertake and execute any trust or discretion the undertaking whereof may seem desirable and the distribution amongst the beneficiaries, pensioners or other persons entitled to thereof, any income, capital, annuity or other sums of moneys or other properties whether periodically or otherwise and whether in money or in specimen in furtherance of any trust discretion or other obligation or permission.
18. To lend money to, or provide guarantee or security on behalf of any subsidiary or group company, and guarantee obligations of any subsidiary or group company, and the payment of interest on any stocks, shares and securities of any company, firm or person in any case in which such loan, guarantee or security may be considered likely directly or indirectly to further the objects of this Company or any of its subsidiaries or group companies, and generally to give any guarantee or security whatsoever which may be deemed likely, directly or indirectly, to any person to benefit the Company or its members.
19. To train and get trained to and/or pay to training for the employees both present and future, for and in connection with the business of the Company.
20. To hold, administer, sell, realise, invest, dispose off the moneys and properties, both real and personal and to carry on, sell, realise, dispose off and deal with any estate of which the Company is executor or administrator or in any trust of which the Company is the Trustee or which the Company is administrator or in an trust of which the Company is trustee or administrator, receiver, liquidator or agent.
21. To make deposit, enter into recognised bonds and otherwise give security for the execution of the offices and performance of the duties of executors, administrators and trustees, receivers, liquidators and agents.
22. To take such steps as may be necessary to give the Company the same rights and privileges in any part of the world as are possessed by local companies or partnership of a similar nature.



T.N. Omana

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 Advocate & Notary
 Thiruvananthapuram Revenue District
 Kerala State South India

23. To apply for tender, purchase or otherwise acquire any contracts, sub-contracts, licences and concessions for or in relation to the objects or business herein mentioned or any of them and to undertake, execute, carry out, dispose off or otherwise turn to account the same.
24. To dedicate present or otherwise dispose off either voluntarily or for value any property of the Company deemed to be of national, public or local interest to any national trust, public body, museum, corporation or authority or any trustees for or on behalf of the same or on behalf of the public.
25. To promote, assist or take part and appear or lead evidences before any commission, investigation, inquiry, trial or hearing, whether public or private, relating to matters connected with any trade, business or industry.
26. To promote co-operation, hold conferences, organise and participate in meetings, maintain bureau, carry on correspondence, arrange discussions, symposiums and debates, prepare statements, reports and articles relating to any and all matters of interest to the Company.
27. To acquire by purchase, lease, assignment or otherwise, lands, tenements, buildings, basements, rights and advantages of any kind whatsoever and to resell, mortgage and let on lease the same.
28. To subject all or any of the works, contracts from time to time and upon such terms and conditions as may be thought expedient.
29. To form, manage, join or subscribe to any syndicate, pool or cartel for the business of the Company.
30. Subject to the provisions of the Companies Act, 2013 to distribute among the members, in specie, any property of the Company or any proceeds of sale or disposal of any property in the event of winding up.
31. To enter into any arrangement with any Government or authority, supreme, municipal, local or otherwise or any person or company that may seem conducive to the Company's objects or any of them and to obtain from any such Government, authority, person or company any rights, privileges, charters, licences and concession which the Company may think fit and desirable to obtain and to carry out, exercise and comply therewith.
32. To apply for, promote and obtain any act, charter, order, regulation, privilege, concession, licence or authorization of any Government, State or municipality or any authority or any corporation or any Public Body which may be empowered to grant for enabling the Company to carry on its objects into effect or for extending any of powers of the Company or for affecting any modification of the Company's constitution or for any other purpose which may seem expedient and to oppose any bills, proceedings, applications which may seem calculated directly or indirectly to prejudice the Company's Interest and to appropriate any of the Company's shares, debentures, debenture-stock or other securities and assets to defray the necessary costs, charges and expenses thereof.
33. To apply for, purchase or otherwise acquire, use, protect and renew in any part of the world any patents, patent rights, brevets, d'invention, trademarks, designs, licences, copyrights, concessions and the like conferring any exclusive or non-exclusive or limited right to their use or any secret or other information as to any invention which may seem capable of being used for any of the purposes of the Company or acquisition of which may seem calculated directly or indirectly to benefit the Company and to use, exercise develop or grant licences in respect of or otherwise turn to account the property, rights or information so acquired and to expend money in experimenting upon, testing or improving any such patents, inventions or rights.
34. To establish, provide, maintain, conduct or otherwise subsidise, assist research laboratories and experimental workshops for scientific and technical researches and experiments and to undertake and carry on the scientific and technical research, experiments and tests of all kinds and to promote studies and research, both scientific and technical, investigations and invention by providing, subsidising, endowing or assisting laboratories, workshops, libraries, the remuneration of scientific or technical professors or teachers and by providing for the award of scholarships, prizes and grant to students or otherwise and generally to encourage, promote and reward studies, researches, investigations, experiments, tests and inventions of



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any kind that may be considered likely to assist any of the businesses which the Company is authorised to carry on.

35. To make donations to such persons or institutions either of cash or any other assets as may be thought directly or indirectly conducive to any of Company's objects or otherwise and in particular to remunerate any person or corporation introducing business to this Company and also to subscribe, contribute or otherwise assist or guarantee money for charitable, scientific, religious or benevolent, national, public, cultural, educational or other institutions or objects or any exhibitions for any public, general or other objects.
36. To establish aid, support or / and in the establishment and support of association, institutions, funds, trusts, private or public, for the benefit of its employees or ex-employees, Directors, ex-Directors of the Company or its connections in business and for persons having dealings with the company or the dependents, relatives or connections of such persons and in particular friendly or other benefit societies and grant pensions, allowances, gratuities and bonuses either by way of annual payment or lumpsum and to make payment towards insurance and to form and contribute to provident and other benefit funds for such persons and to provided for the welfare of Directors, ex-Directors and employees and ex-employees of the company and the wives, widows and families or the dependents or connections of such persons by building or contributing to the building of houses, dwellings or chawls or by grant of moneys, pensions, allowances, bonuses or other payments and to provide or subscribe or contribute towards places of instructions and recreations, hospitals, dispensaries, holiday-homes, medical and other attendance and other assistance as the company shall think fit.
37. To refer or agree to refer any claims, demands, disputes or any other questions by or against the Company or in which the Company is interested or concerned and whether between the Company and the member or members or his or their representatives or between the Company and third parties to arbitration in India or any places outside India and to observe and perform awards made thereon and to do all acts, deeds, matters and things to carry out or enforce the awards in accordance with the provisions of India Arbitration Act.
38. To pay all preliminary expenses of any company promoted by the Company or any company in which the Company is or may contemplate being interested and preliminary expenses may include all or any part of the costs and expenses of owners of any business or property acquired by the Company.
39. To enter into joint sector arrangements with any person, body or corporate whether in India or abroad for the business of the Company.
40. To pay, out of the funds of the Company, all expenses which the Company may lawfully pay with respect to the promotion, formation and registration of the Company or the issue of capital including brokerage and commission for obtaining applications for taking, placing or underwriting of shares, debentures, debenture-stocks or other securities of the Company.
41. To pay for any rights or properties acquired by the Company and to pay or to remunerate any person or company for services rendered or to be rendered in placing or assisting to place or guaranteeing the placing of shares in Company's capital or any debentures, debenture-stocks or other securities of the Company or in or about the formation or promotion of the company or acquisition of properties by the Company for the purpose of the Company whether by cash payment or by the allotment of shares, debentures, debenture-stocks or other securities of the Company credited as paid-up in full or in part or otherwise as the case may be.
42. To open current or fixed accounts with any bank, bankers, shroff or merchants and to pay into and draw money from such accounts and to draw, make endorse, discount and execute all types of negotiable Instruments.
43. To insure the whole or any part of the property and personnels of the Company either full or partially, to protect and indemnify any part or portion thereof either on mutual, principal or otherwise.
44. To employ experts to investigate and examine into conditions value, character and circumstances of any business, concerns and undertakings having similar objects and generally of any assets properties or rights.
45. To carry on any branch of a business whether in India or outside India which this Company is authorised to carry on by means or through the agency of any subsidiary company or

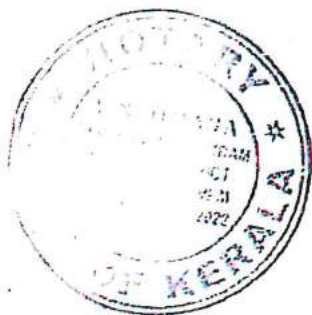


T.N. Oshara

Administrative Officer
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companies and to enter into any arrangement with such subsidiary company for taking the profits and bearing the losses of any business or branch so carried on or for finance any such subsidiary, guaranteeing its liabilities or to make any other arrangement which seem desirable with reference to any business or branch so carried on including the power and provision at any time either temporarily or permanently to close any such branch or business.

46. To take part in the management, supervision, conduct and control of the business or operations of any company or undertaking having similar objects and for that purpose to appoint and remunerate the Directors, trustees, accountants or other experts, personnel or agent for any of such operations or purposes.
47. To purchase, take on lease or exchange, hire or otherwise, acquire and dispose off any immovable or movable properties, real or personal of all kinds and of any rights or privileges which the Company may think necessary or convenient for the purpose of its business and either to retain the properties so acquired for the purpose of the Company's business or to turn the same to account as may seem expedient.
48. To accept as consideration for or in lieu of the whole or any part of the Company's properties either land or cash or Government security or securities guaranteed by Government or shares in joint stock companies or partly the one and partly the other and such other properties or securities as may be determined by the Company and to take back or acquire the property so disposed off by repurchasing or taking lease the same at such price and on such terms and conditions as may be agreed upon by the Company.
49. To let on lease, or license, or on hire purchase or to lend or any properties belonging to the Company and to finance for the purpose of any article or articles whether made by the Company or not by way of loans or by hire-purchase system.
50. To sell, purchase, mortgage, grants, easements and other rights over and in any other manner deal with the undertakings, properties, assets, both movable and immovable, rights, effects of the Company or any part thereof whether real or personal for such consideration as the Company may think fit and in particular for shares, debentures, debenture-stock, securities of any other company whether or not having objects altogether or in part similar to those of the Company and to make advances upon the security of land and/or buildings and/or other properties movable and/or any interest therein.
51. To vest any movable or immovable properties, rights or interest acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the Company and with or without any declared trust in favour of the Company.
52. To undertake and execute any contracts for works for the business of the Company.
53. To create any depreciation fund, reserve fund, sinking fund, insurance fund or any other special fund whether for depreciation or for repairing, improving, extending or maintaining any of the properties of the Company or for redemption of debentures or redeemable preference shares or any other purpose whatsoever conducive to the interest of the Company.
54. To accept, donations, gifts with such conditions, restrictions, obligations, stipulations and liabilities provided that such receipts are not derogative to any objects of the Company.
55. To alienate, transfer, gift, donate, settle any property of the Company with or without consideration to any person including any trust whether public or private, discretionary or specific either by revocable or irrevocable transfer or settlement and upon such terms and conditions as the Company may deem fit.
56. To explore, examine, investigation, test, make, experiment, obtain report, opinion of experts, certificates, analysis, surveys, plans, descriptions and information in relation to any property or right which the Company may acquire or become interested in or may propose to acquire or with the view of discovering properties or rights which company may acquire or become interested in and to engage, employ, pay fees to retain the services of and send to any part or the world agents, explorers, technical experts, engineers, lawyers and counsels.
57. To adopt such means of making known the business/activities of the Company as may seem expedient and in particular by advertising in the press, by circulars, by purchase and exhibition of works of art or interest, by publications of books and periodicals and by granting prizes, rewards and donations.



PN Kumar

Chief Executive Officer
Kerala State Road Transport Corporation



58. To undertake, carry out, promote, sponsor, contribute or assist in any activity, project for rural development including any programme for promoting the social and economic welfare of or the upliftment of the people in rural areas irrespective whether the Company has any business dealings in such areas or not and to incur any expenditure or use any of the assets and facilities of the Company on any programme or project or activity or rural development and to assist execution and promotion thereof either directly or in association with any other company or person or organisation or through an independent agency or in any manner as the Company may deem fit in order to implement any of the projects or programmes or activities of rural development, to transfer without consideration or at such fair or concessional value and divert the ownership of the properties of the Company to or in favour of any public or local body, authority, Central or State Government or any public institution or trust or fund.
59. To raise or borrow money from time to time for any of the purposes and objects of the Company by receiving advances of any sum or sums with or without security upon such terms as the Directors may deem expedient and in particular by taking deposits from or open current accounts with any individual or firms including the agents of the Company, whether with or without giving the security or by mortgaging or selling or receiving advances on the sale of any lands, buildings, machineries, goods or other properties of the Company or by the issue of the debentures or debenture-stocks, perpetual or otherwise, charged upon all or any of Company's properties (both present and future) including its uncalled capital or by such other means as Directors may in their absolute discretion deem expedient.
60. Subject to the Companies Act, 2013 and rules made thereunder and directions issued by Reserve Bank of India, to borrow, raise, or secure the payment of money to or receive money and deposit as time deposit or otherwise at interest for any purpose of the Company and at such time or times and in such manner as may be thought fit and in particular by the creation and issue of the debentures or debenture-stock, bonds, shares credited as fully or partly paid up, obligations, mortgages, charges and securities of all kinds, either perpetual or otherwise either redeemable annuities in as and by way of securities for any such money so borrowed, raised or received or of any such debentures, debenture-stock, bonds, obligations, mortgage, charges and securities of all kinds, either so issued to mortgage, pledge or charge the undertaking or whole or any part of the properties, rights, assets or revenue and profits of the Company, present and future, including its uncalled capital or otherwise howsoever by trust, special assignment or otherwise or to transfer or convey the same absolutely or in trust and give the lenders powers, as may seem expedient and to purchase, redeem or pay off any such securities. The Company shall not carry on business of Banking as defined by the Banking Regulation Act, 1949.
61. To promote or join in the promotion of any company or companies including subsidiary companies (wholly owned or partly owned) for the purpose of acquiring all or any of the properties, rights and liabilities of the Company or for any other purpose which may seem directly or indirectly calculated to benefit the Company and to underwrite shares and securities therein.
62. To indemnify, members, officers, Directors, agents and employees of the Company against proceedings, cost, damages, claims and demands in respect of anything done or ordered to be done by them and in the interest of the Company of any loss, damage or misfortune whatsoever which shall happen in the execution of the duties of their offices or in relation thereto.
63. Subject to the provisions of the Act, the Company shall have power to borrow any sum or sums of money for the purpose of the Company on such other terms and conditions and from such person or persons, firms, bank or any financial, industrial, institutions or any Government or Semi-Government Corporation as the Company may deem fit.
64. To provide for the welfare of Directors, employees, or ex-employees of the Company and the wives, widows and families of the dependents or connections of such persons by building or contributing for the building, houses, dwelling or quarters, or by grants of money, pensions, gratuities, allowance, bonus, profit sharing bonus or benefits or other payments or by creating and from time to time subscribing to contributing to provident and other associations, institutions, funds, profit sharing or other scheme or trust and hospitals and dispensaries, medical and other attendants, and other assistance as the Company shall think fit.



P. N. G. [Signature]

Thiruvananthapuram Revenue District
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65. To undertake and/or direct all types of constructions and the maintenance of or/and acquire by purchase, lease, exchange, hire or otherwise, lands, properties, buildings and estates of any tenure or any interest therein, to sell, lease let, mortgage or otherwise dispose off the same and to purchase, construct and sell or for any person free hold or lease hold lands, house properties, buildings, offices, factories, workshops, godowns farm houses, farm and any kind of landed properties or any share/interest therein and to carry on the business of land and estate agents on commission or otherwise without commission.
66. To act as promoters and developers of lands, commercial buildings, offices or other buildings in furtherance of the objects and for the purpose to purchase, take on lease acquire, hold, develop, prepare building sites, construct, reconstruct, repair maintain, pull down alter, improve, decrease, furnish, give on hire, purchase or on installments or deal in any lands, commercial buildings, offices, works and sanitary conveniences of all kinds and to lay out roads, drainage pipes, water pipes and electric installations and to set apart lands for pleasure, gardens and recreation grounds or improve the land or any part thereof.
67. To establish, maintain and operate shipping, air transport and road transport services and all ancillary services and for these purposes as or an independent undertaking to purchase, take in exchange, charter, hire, build construct or otherwise acquire and to own, work, manage and trade with steam, sailing, motor and other ships, trawlers, drifters, tugs and vessels, aircraft and motor and other vehicles with all necessary and convenient equipments, engines, tackle, gears, furniture and stores and to maintain, repair, fit out, refit, improve, insure, alter, sell, exchange or let out on hire or hire-purchase or charter or otherwise deal with and dispose off any of the ships, vessels, aircrafts and vehicles or any of the engines, tackles, gears, furniture, equipments and stores.
68. To establish the business of warehousing in all its aspects in India and elsewhere.
69. To purchase or acquire container stacking cranes, Mobile Container Cranes, Van Movers, Trailers, Heavy Forklift Trucks, barges, Ships, Wooden Crafts and Pallets, Portainers, Transtainers, Straddle carries and such other handling equipment and retain them as service in Docks, Container Freight and on roads.
70. To purchase, take on exchange or on lease or on rent, occupy, or otherwise acquire lands, warehouse, godowns and to erect, construct, build and establish Cold Storage Plants, Warehouses, godowns, Container Terminals and container freight stations or to enter into contracts with Government Bodies, to construct such container freight stations or terminals as required by them.
71. To manufacture and repair containers, to purchase or acquire on lease or otherwise containers and give them on lease or on rent.
72. To make available the warehousing facilities including cold storage facilities for stuffing and destuffing the cargo into the containers.
73. To erect or build container freight station or container terminals semi or fully automated.
74. To study, advice planning, management and administration of terminals, port operating companies, handling of general and RO/RO-LO/LO cargo, handling of bulk goods, warehousing, handling of containers, trucking of containers, collecting and disposal of oily residues, recycling of special wastes.
75. To offer facilities and services for RO/RO handling such as despatch of all sizes of vessels, trailer handling, cargo lashing.
76. To offer facilities and services for port lighterage and barge transport for conventional and bulk cargo, container transport, heavy lifts and specialised transports, push boats and tug services, barge rental, storage in lighters.
77. To offer facilities and services for inland waterway transports, such as push boat, seabee and lash transports, bulk goods transports, forwarding storage.
78. To offer facilities and services for rank transportation in port and inland waterway push boat transports of mineral and vegetable oils, chemicals and other liquids, bundering, oily residues, ballast and tank wash water, transit storage of all types of oil.

B



T.H. Omana

T.H. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District

IV. The liability of the members is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.

V. The Authorised Share Capital of the Company is Rs. 5,00,000/- [Rupees Five Lac Only] divided into 50,000 [Fifty Thousand] Equity Shares of Rs.10/- [Rupees Ten Only] each.

TESTED
AND CERTIFIED
THAT THIS IS THE TRUE COPY
OF THE ORIGINAL










T.N. Omana
13/6/2019

T.N. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State South India

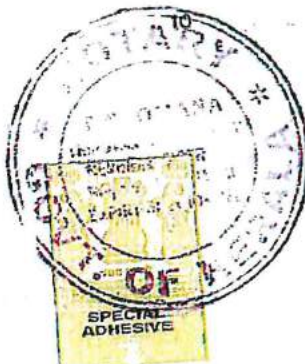


We, the several persons, whose name and addresses are subscribed are desirous of being formed into a Company in pursuance of this Memorandum of Association and we respectively agree to take the respective number of shares in the capital of the Company set opposite our respective names:

Photo	Sr. No.	Name, Addresses, Descriptions, Occupation and Signature of the subscribers	Number of Equity Shares taken by each subscriber	Name, Address, Description and Occupation of the Common Witness
	1	For and on behalf of M/s Adani Ports and Special Economic Zone Limited (CIN L63090GJ1998PLC034182) having its registered office at Adani House, Nr. Mithakhali Six Roads, Navrangpura, Ahmedabad - 380009 through its authorised person vide Board Resolution passed on 1st May, 2015. Dipti Shah W/o Yogesh Shah residing at 601, Shailraj Tower, Nehru Park, Vastrapur, Ahmedabad-380015 Occupation: Service Sd/-	49,940 (Forty Nine Thousand Nine Hundred Forty only)	Common witness for all 7 subscribers I, witness to subscribers who have subscribed and signed in my presence. Further, I have verified his/her/their identify details for their identification and satisfied myself of their identification particulars as filled in Hardik Sanghvi S/o. Shri Harshadkumar Sanghvi residing at 15, Parshwanathnagar Society, Nr. Police Chowki, Naranpura Char Rasta, Ahmedabad-380013, Occupation: Service Company Secretary FCS No. 7247 Sd/-
	2	Malay Mahadevia [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Dr. Ramesh Mahadevia residing at 12-B, Gyankunj Society, Opp. St. Xavier's College, Navrangpura, Ahmedabad - 380009. Occupation: Service Sd/-	10 (Ten Only)	
	3	Ravi Bhamidipaty [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Srirama Murthy Bhamidipaty residing at 'Amrut' 26, Amrashrith Bunglows, Opp. Chhimanbhai Patel Institute, Bh. Shapath 4, Prahaladnagar, Ahmedabad-380058 Occupation: Service Sd/-	10 (Ten Only)	
	4	Azad Kumar Somani [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Jwala Prasad Somani residing at 84, Star Apartments, Karnavatipagarkpa Bazar, Ahmedabad-380001. Occupation: Service Sd/-	10 (Ten Only)	
	5	Manoj Kumar Chanduka [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Biswanath Lal Chanduka residing at B-401, Panchamrut Apartments, Opp. Nehru Foundation, Bodakdev, Ahmedabad-380054. Occupation: Service Sd/-	10 (Ten Only)	
	6	Anish Ashokkumar Shah [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Ashokkumar Amrutlal Shah residing at B-12, Keshav Apartments, Near Memnagar Talavdi, Memnagar, Ahmedabad-380052. Occupation: Service Sd/-	10 (Ten Only)	
	7	Kamlesh Bhagia [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Prabhudas Bhagia residing at A-203, Samarthy Residency, Nr. P. R. Patel School, D'cabin, Kaligam, Sabarmati, Ahmedabad-380019. Occupation: Service Sd/-	10 (Ten Only)	
Total:			50,000 (Fifty Thousand)	

Place: Ahmedabad

Dated: 22.07.2015



ALL THE
MEMBERS
HAVE SIGNED
THIS IS TRUE

T.N. Omana
13.6.2014

T.N. OMANA
Advocate & Notary



THE COMPANIES ACT, 2013
[COMPANY LIMITED BY SHARES]

ARTICLES OF ASSOCIATION

OF
ADANI VIZHINJAM PORT PRIVATE LIMITED

PRELIMINARY AND INTERPRETATION

1. [1] The Regulations contained in Table "F" in Schedule I of the Companies Act, 2013 shall not apply to the Company, except in so far as the same are repeated, contained or expressly made applicable in these Articles or by the said Act.

- [2] (a) The marginal notes used in these Articles shall not affect the construction thereof.

- (b) In the interpretation of these Articles, the following expressions shall have the following meanings, unless repugnant to the subject or context

"Act" means the Companies Act, 2013 or any statutory modification or re-enactment thereof for the time being in force and the Companies Act 1956, so far as may be applicable.

"Articles" means these articles of association of the Company or as altered from time to time.

"Board of Directors" or "Board" means collective body of Directors of the Company.

"Company" means "ADANI VIZHINJAM PORT PRIVATE LIMITED".

"Depository" means and includes a Company as defined in the Depositories Act 1996.

"Rules" means the applicable rule for the time being in force as prescribed in relevant sections of the Act.

"Seal" means Common Seal of the Company.

"Secretarial Standards" means standards provided by the Institute of Companies Secretaries of India.

"Securities" means the securities as defined in clause (h) of Section 2 of the Securities Contracts (Regulation) Act 1956.



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Thiruvananthapuram Revenue District
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- (d) Words importing the singular number also include, where the context requires or admits, the plural number and vice-versa.
- (e) Unless the context otherwise requires, words or expression contained in these Articles shall bear the same meaning as in the Act or the Rules, as the case may be.

PRIVATE COMPANY

2. The Company is a Private Company Limited by Shares within the meaning of Section 2(68) of the Act, and accordingly,

- (a) Restricts the right to transfer its shares, in the manner and to the extent as hereinafter provided;
- (b) Limits the number of its members to 200 [Two Hundred] but not including :
- (i) Persons who are in the employment of the Company.
- (ii) Persons who, having been formerly in the employment of the Company, were members of the Company while in that employment and have continued to be the members after the employment ceased; provided that where two or more persons hold one or more shares in the Company jointly, they shall, for the purpose of this Article, be treated as a single member.
- (c) Prohibits any invitation to the public to subscribe for any securities of the Company.
- (d) The Company is having a minimum paid up share capital of Rs. 1,00,000/- (Rupees One Lac only) or such higher amount of capital as may be prescribed.

SHARE CAPITAL AND VARIATION OF RIGHTS

3. Subject to the provisions of the Act and these Articles, the shares in the capital of the company shall be under the control of the Directors who may issue, allot or otherwise dispose of the same or any of them to such persons, in such proportion and on such terms and conditions and either at par or at a premium or at consideration otherwise than in cash and at such time as they may from time to time think fit. The Company may issue equity with voting rights and/or with differential rights as to dividend, voting or otherwise in accordance with the Rules and preference shares.
4. (i) Every person whose name is entered as a member in the register of members shall be entitled to receive within two months after allotment or within one month after the application for the registration of transfer or transmission or within such other period as the conditions of issue provide,-

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such sum as may be prescribed for each certificate after the first.

- (ii) Every certificate shall be under the seal and shall specify the shares to which it relates and the amount paid-up thereon.
- (iii) In respect of any share or shares held jointly by several persons, the company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all such holders.

5. Every holder of or subscriber to Securities of the Company shall have the option to receive security certificates or to hold the Securities with a depository. Such a person who is the beneficial owner of the Securities can at any time opt out of a Depository, if permitted, by the law, in respect of any Securities in the manner provided by the Depositories Act, 1996 and the Company shall, in the manner and within the time prescribed, issue to the beneficial owner the required Certificates for the Securities.

6. (i) If any share certificate be worn out, defaced, mutilated or torn or if there be no further space on the back for endorsement of transfer, then upon production and surrender thereof to the company, a new certificate may be issued in lieu thereof, and if any certificate is lost or destroyed then upon proof thereof to the satisfaction of the company and on execution of indemnity or such other documents as may be prescribed by the Board, a new certificate in lieu thereof shall be given. Every certificate under this Article shall be issued on payment of fees for each certificate as may be fixed by the Board,

(ii) The provisions of the foregoing article relating to issue of certificates shall mutatis mutandis apply to debentures or other securities of the company.

7. Except as required by law, no person shall be recognised by the company as holding any share upon any trust, and the company shall not be bound by, or be compelled in any way to recognise (even when having notice thereof) any equitable, contingent, future or partial interest in any share, or any interest in any fractional part of a share, or (except only as by these regulations or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.

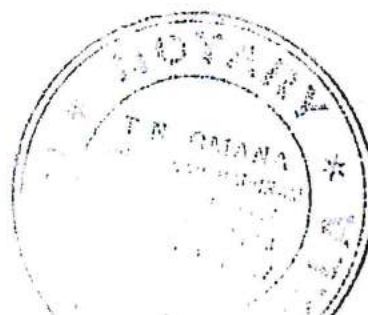
8. (i) The company may exercise the powers of paying commissions conferred under the Act, provided that the rate per cent or the amount of the commission paid or agreed to be paid shall be disclosed in the manner required under the Act and rules made thereunder.

(ii) The rate or amount of the commission shall not exceed the rate or amount prescribed in rules made under the Act.

(iii) The commission may be satisfied by the payment of cash or the allotment of fully or partly paid shares or partly in the one way and partly in the other.

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of the shares of that class) may, subject to the provisions of the Act, and whether or not the company is being wound up, be varied with the consent in writing of the holders of three-fourths of the issued shares of that class, or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class.

- (ii) To every such separate meeting, the provisions of these regulations relating to general meetings shall mutatis mutandis apply.

10. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking pari passu therewith.

11. Subject to the provisions of the Act, any preference shares may be issued on the terms that they are to be redeemed or converted into equity shares on such terms and in such manner as the company before the issue of the shares may, determine.

12. The Board or the Company as the case may be, may, by way of right issue or preferential offer or private placement or any other manner, subject to and in accordance with Act and the Rules, issue further securities to;

(a) persons who, at the date of the offer, are holders of equity shares of the Company. Such offer shall be deemed to include a right exercisable by the person concerned to renounce the shares offered to him or any of them in favor of other person or;

(b) employees under the employees' stock option or;

(c) any person whether or not those persons include the persons referred to in clause (a) or clause (b) above;

LIEN

13. (i) The company shall have a first and paramount lien-

(a) on every share (not being a fully paid share), for all monies (whether presently payable or not) called, or payable at a fixed time, in respect of that share; and

(b) on all shares (not being fully paid shares) standing registered in the name of a single person, for all monies presently payable by him or his estate to the company;

Provided that the Board of directors may at any time declare any share to be wholly or in part exempt from the provisions of this clause.

(ii) The company's lien, if any, on a share shall extend to all dividends payable and bonuses declared from time to time in respect of such shares.

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Provided that no sale shall be made-

- (a) unless a sum in respect of which the lien exists is presently payable; or
- (b) until the expiration of fourteen days after a notice in writing stating and demanding payment of such part of the amount in respect of which the lien exists as is presently payable, has been given to the registered holder for the time being of the share or the person entitled thereto by reason of his death or insolvency.

15. (i) To give effect to any such sale, the Board may authorise some person to transfer the shares sold to the purchaser thereof.
- (ii) The purchaser shall be registered as the holder of the shares comprised in any such transfer.
- (iii) The purchaser shall not be bound to see to the application of the purchase money, nor shall his title to the shares be affected by any irregularity or invalidity in the proceedings in reference to the sale.
16. (i) The proceeds of the sale shall be received by the company and applied in payment of such part of the amount in respect of which the lien exists as is presently payable.
- (ii) The residue, if any, shall, subject to a like lien for sums not presently payable as existed upon the shares before the sale, be paid to the person entitled to the shares at the date of the sale.

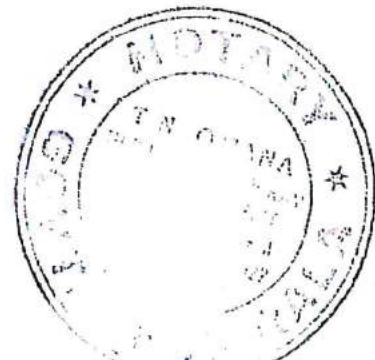
The provisions of these Articles relating to Lien shall mutatis mutandis apply to any other Securities including debentures of the Company.

CALLS ON SHARES

17. (i) The Board may, from time to time, make calls upon the members in respect of any monies unpaid on their shares (whether on account of the nominal value of the shares or by way of premium) and not by the conditions of allotment thereof made payable at fixed times:

Provided that no call shall exceed one fourth of the nominal value of the share or be payable at less than one month from the date fixed for the payment of the last preceding call.

- (ii) Each member shall, subject to receiving at least fourteen days' notice specifying the time or times and place of payment, pay to the company, at the time or times and place so specified, the amount called on his shares.
- (iii) A call may be revoked or postponed at the discretion of the Board.
18. A call shall be deemed to have been made at the time when the resolution of the Board authorising the call was passed and may be required to be paid by installments.



20. (i) If a sum called in respect of a share is not paid before or on the day appointed for payment thereof, the person from whom the sum is due shall pay interest thereon from the day appointed for payment thereof to the time of actual payment at ten per cent per annum or at such lower rate, if any, as the Board may determine.
- (ii) The Board shall be at liberty to waive payment of any such interest wholly or in part.
21. (i) Any sum which by the terms of issue of a share becomes payable on allotment or at any fixed date, whether on account of the nominal value of the share or by way of premium, shall, for the purposes of these regulations, be deemed to be a call duly made and payable on the date on which by the terms of issue such sum becomes payable.
- (ii) In case of non-payment of such sum, all the relevant provisions of these regulations as to payment of interest and expenses, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.
22. The Board-
- (a) may, if it thinks fit, receive from any member willing to advance the same, all or any part of the monies uncalled and unpaid upon any shares held by him; and
- (b) upon all or any of the monies so advanced, may (until the same would, but for such advance, become presently payable) pay interest at such rate not exceeding, unless the company in general meeting shall otherwise direct, twelve per cent per annum, as may be agreed upon between the Board and the member paying the sum in advance.

TRANSFER OF SHARES

23. (i) The instrument of transfer of any share in the company shall be executed by or on behalf of both the transferor and transferee.
- (ii) The transferor shall be deemed to remain a holder of the share until the name of the transferee is entered in the register of members in respect thereof.
24. The Board may, subject to the right of appeal conferred by the Act decline to register-
- (a) the transfer of a share, not being a fully paid share, to a person of whom they do not approve; or
- (b) any transfer of shares on which the company has a lien.



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- (a) the instrument of transfer is in the form as prescribed in rules made under the Act;
- (b) the instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Board may reasonably require to show the right of the transferor to make the transfer; and

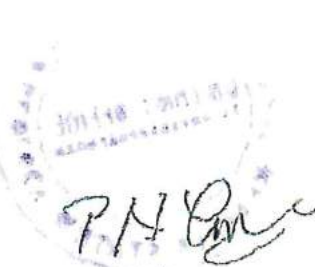
26. (c) the instrument of transfer is in respect of only one class of shares. On giving not less than seven days' previous notice in accordance with the Act and rules made there under, the registration of transfers may be suspended at such times and for such periods as the Board may from time to time determine:

Provided that such registration shall not be suspended for more than thirty days at any one time or for more than forty-five days in the aggregate in any year.

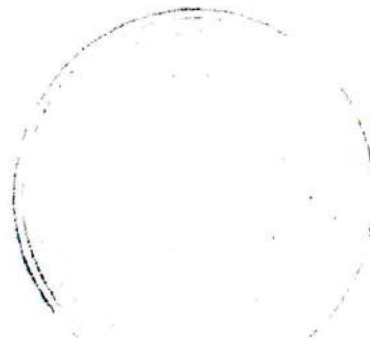
27. The provision of these Articles relating to transfer of shares shall mutatis mutandis apply to any other securities including debentures of the Company.

TRANSMISSION OF SHARES

28. (i) On the death of a member, the survivor or survivors where the member was a joint holder, and his nominee or nominees or legal representatives where he was a sole holder, shall be the only persons recognised by the company as having any title to his interest in the shares.
- (ii) Nothing in clause (i) shall release the estate of a deceased joint holder from any liability in respect of any share which had been jointly held by him with other persons.
29. (i) Any person becoming entitled to a share in consequence of the death or insolvency of a member may, upon such evidence being produced as may from time to time properly be required by the Board and subject as hereinafter provided, elect, either-
- (a) to be registered himself as holder of the share; or
 - (b) to make such transfer of the share as the deceased or insolvent member could have made.
- (ii) The Board shall, in either case, have the same right to decline or suspend registration as it would have had, if the deceased or insolvent member had transferred the share before his death or insolvency.
30. (i) If the person so becoming entitled shall elect to be registered as holder of the share himself, he shall deliver or send to the company a notice in writing signed by him stating that he so elects.



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- (iii) All the limitations, restrictions and provisions of these regulations relating to the right to transfer and the registration of transfers of shares shall be applicable to any such notice or transfer as aforesaid as if the death or insolvency of the member had not occurred and the notice or transfer were a transfer signed by that member.

31. A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the company:

Provided that the Board may, at any time, give notice requiring any such person to elect either to be registered himself or to transfer the share, and if the notice is not complied with within ninety days, the Board may thereafter withhold payment of all dividends, bonuses or other monies payable in respect of the share, until the requirements of the notice have been complied with.

32. The Company shall incur no liability or responsibility whatsoever in consequence of its registering or giving effect to any transfer of shares made or purporting to be made by any apparent legal owner thereof (as shown or appearing in the Register of Members) to the prejudice of persons having or claiming any equitable right, title or interest to or in the said shares, notwithstanding that the company may have had notice of such equitable right, title or interest or notice prohibiting registration of such transfer and may have entered such notice referred thereto in any book of the company and the company shall not be bound or required to regard or attend or give effect to any notice which may be given to it of any equitable right, title or interest or be under any liability whatsoever for refusing or neglecting so to do, though it may have been entered or referred to in some book of the company, but the company shall nevertheless be at liberty to regard and attend to any such notice and give effect thereto if the Directors shall so think fit.

FOREFEITURE OF SHARES

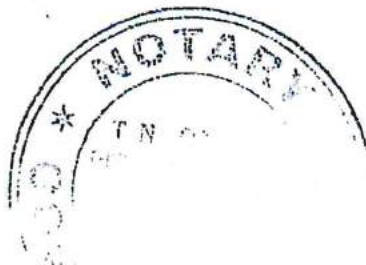
33. If a member fails to pay any call, or installment of a call, on the day appointed for payment thereof, the Board may, at any time thereafter during such time as any part of the call or installment remains unpaid, serve a notice on him requiring payment of so much of the call or installment as is unpaid, together with any interest which may have accrued.

34. The notice aforesaid shall-

- (a) name a further day (not being earlier than the expiry of fourteen days from the date of service of the notice) on or before which the payment required by the notice is to be made; and



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forfeited.

35. If the requirements of any such notice as aforesaid are not complied with, any share in respect of which the notice has been given may, at any time thereafter, before the payment required by the notice has been made, be forfeited by a resolution of the Board to that effect.
36. (i) A forfeited share may be sold or otherwise disposed of on such terms and in such manner as the Board thinks fit.
- (ii) At any time before a sale or disposal as aforesaid, the Board may cancel the forfeiture on such terms as it thinks fit.
37. (i) A person whose shares have been forfeited shall cease to be a member in respect of the forfeited shares, but shall, notwithstanding the forfeiture, remain liable to pay to the company all monies which, at the date of forfeiture, were presently payable by him to the company in respect of the shares.
- (ii) The liability of such person shall cease if and when the company shall have received payment in full of all such monies in respect of the shares.
38. (i) A duly verified declaration in writing that the declarant is a director, the manager or the secretary, of the company, and that a share in the company has been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the share;
- (ii) The company may receive the consideration, if any, given for the share on any sale or disposal thereof and may execute a transfer of the share in favour of the person to whom the share is sold or disposed of;
- (iii) The transferee shall thereupon be registered as the holder of the share; and
- (iv) The transferee shall not be bound to see to the application of the purchase money, if any, nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, sale or disposal of the share.
39. The provisions of these regulations as to forfeiture shall apply in the case of non payment of any sum which, by the terms of issue of a share, becomes payable at a fixed time, whether on account of the nominal value of the share or by way of premium, as if the same had been payable by virtue of a call duly made and notified.

ALTERATION OF CAPITAL

40. Subject to provisions of the Act the company may, from time to time, increase the share capital by such sum, to be divided into shares of such amount, as may be specified in the resolution.



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- (a) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;
- (b) convert all or any of its fully paid-up shares into stock, and reconvert that stock into fully paid-up shares of any denomination;
- (c) sub-divide its existing shares or any of them into shares of smaller amount than is fixed by the memorandum;
- (d) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

42. Where shares are converted into stock,-

- (a) the holders of stock may transfer the same or any part thereof in the same manner as, and subject to the same regulations under which, the shares from which the stock arose might before the conversion have been transferred, or as near thereto as circumstances admit:

Provided that the Board may, from time to time, fix the minimum amount of stock transferable, so, however, that such minimum shall not exceed the nominal amount of the shares from which the stock arose.

- (b) the holders of stock shall, according to the amount of stock held by them, have the same rights, privileges and advantages as regards dividends, voting at meetings of the company, and other matters, as if they held the shares from which the stock arose; but no such privilege or advantage (except participation in the dividends and profits of the company and in the assets on winding up) shall be conferred by an amount of stock which would not, if existing in shares, have conferred that privilege or advantage.
- (c) such of the regulations of the company as are applicable to paid-up shares shall apply to stock and the words "share" and "shareholder" in those regulations shall include "stock" and "stock-holder" respectively.

43. The company may, subject to provisions of the Act, reduce in any manner and with, and subject to, any incident authorised and consent required by law,-

- (a) Its share capital;
- (b) any capital redemption reserve account; or
- (c) any share premium account.
- (d) any other reserve in the nature of share capital

CAPITALISATION OF PROFITS

44. (i) The company in general meeting may, upon the recommendation of the Board, resolve-



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or to the credit of the profit and loss account, or otherwise available for distribution; and

(b) that such sum be accordingly set free for distribution in the manner specified in clause (ii) amongst the members who would have been entitled thereto, if distributed by way of dividend and in the same proportions.

(ii) The sum aforesaid shall not be paid in cash but shall be applied, subject to the provision contained in clause (iii), either in or towards-

(a) paying up any amounts for the time being unpaid on any shares held by such members respectively;

(b) paying up in full, unissued shares of the company to be allotted and distributed, credited as fully paid-up, to and amongst such members in the proportions aforesaid;

(c) partly in the way specified in sub-clause (a) and partly in that specified in sub-clause (b);

(d) A securities premium account and a capital redemption reserve account may, for the purposes of this regulation, be applied in the paying up of unissued shares to be issued to members of the company as fully paid bonus shares;

(e) The Board shall give effect to the resolution passed by the company in pursuance of this regulation.

45. (i) Whenever such a resolution as aforesaid shall have been passed, the Board shall-

(a) make all appropriations and applications of the undivided profits resolved to be capitalised thereby, and all allotments and issues of fully paid shares if any; and

(b) generally do all acts and things required to give effect thereto.

(ii) The Board shall have power-

(a) to make such provisions, by the issue of fractional certificates or by payment in cash or otherwise as it thinks fit, for the case of shares becoming distributable in fractions; and

(b) to authorise any person to enter, on behalf of all the members entitled thereto, into an agreement with the company providing for the allotment to them respectively, credited as fully paid-up, of any further shares to which they may be entitled upon such capitalisation, or as the case may require, for the payment by the company on their behalf, by the



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unpaid on their existing shares;

- (iii) Any agreement made under such authority shall be effective and binding on such members.

BUY-BACK OF SHARES

46. Notwithstanding anything contained in these articles but subject to the provisions of the Act or any other law for the time being in force, the company may purchase its own shares or other specified securities.

GENERAL MEETINGS

47. All General Meetings other than Annual General Meeting shall be called Extra ordinary General Meeting.
48. The Board may, whenever it thinks fit, call an Extra ordinary General Meeting.

PROCEEDINGS AT GENERAL MEETINGS

49. (i) No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business.
(ii) Save as otherwise provided herein, the quorum for the general meetings shall be as provided in the Act.
50. The chairperson, if any, of the Board shall preside as Chairperson at every general meeting of the company.
51. If there is no such Chairperson, or if he is not present within fifteen minutes after the time appointed for holding the meeting, or is unwilling to act as chairperson of the meeting, the directors present shall elect one of their members to be Chairperson of the meeting.
52. If at any meeting no director is willing to act as Chairperson or if no director is present within fifteen minutes after the time appointed for holding the meeting, the members present shall choose one of their members to be Chairperson of the meeting.
53. On any business at any general meeting in the case of an equality of votes, whether on a show of hands, electronically or on a poll, the Chairman of the meeting shall have second or casting vote.

ADJOURNMENT OF MEETING

54. (i) The Chairperson may, suomotu and, in the absence of quorum shall adjourn the meeting from time to time and from place to place.
(ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.



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- (iv) Save as aforesaid, and as provided in the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

VOTING RIGHTS

55. Subject to any rights or restrictions for the time being attached to any class or classes of shares,-
- (a) on a show of hands, every member present in person shall have one vote; and
 - (b) on a poll or through voting by electronic means, the voting rights of members shall be in proportion to his share in the paid-up equity share capital of the company.
56. A member may exercise his vote at a meeting by electronic means in accordance with the Act and shall vote only once.
57. (i) In the case of joint holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders.
- (ii) For this purpose, seniority shall be determined by the order in which the names stand in the register of members.
58. A member of unsound mind, or in respect of whom an order has been made by any court having jurisdiction in lunacy, may vote, whether on a show of hands or on a poll or through voting by electronic means, by his nominee or other legal guardian, and any such nominee or guardian may, on a poll, vote by proxy.
59. Any business other than that upon which a poll has been demanded may be proceeded with, pending the taking of the poll.
60. No member shall be entitled to vote at any general meeting unless all calls or other sums presently payable by him in respect of shares in the company have been paid.
61. (i) No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes.
- (ii) Any such objection made in due time shall be referred to the Chairperson of the meeting, whose decision shall be final and conclusive.

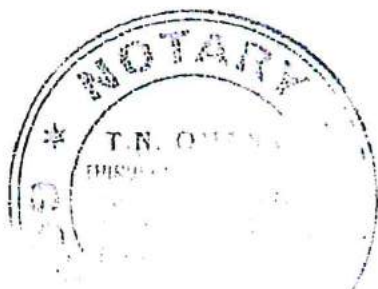


62. The instrument appointing a proxy and the power-of-attorney or other authority, if any, under which it is signed or a notarised copy of that power or authority, shall be deposited at the registered office of the company not less than 48 hours before the time for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, or in the case of a poll, not less than 24 hours before the time appointed for taking of the poll; and in default the instrument of proxy shall not be treated as valid.
63. An instrument appointing a proxy shall be in the form as prescribed in the rules made under the Act.
64. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given:

Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.

BOARD OF DIRECTORS

65. (i) Until otherwise determined by a General Meeting of the Company and subject to the provisions of the Act, the number of Directors shall not be less than three nor more than fifteen.
- (ii) The first Directors of the Company are:
1. Sudipta Bhattacharya (DIN: 06817333)
 2. Karan Adani (DIN: 03088095)
 3. Santosh Kumar Mohapatra (DIN: 00284280)
66. Subject to provisions of the Act, the Board shall have the power to determine the directors whose period of office is or is not liable to determination by retirement of directors by rotation.
67. The same individual may, at the same time, be appointed as Chairman as well as Managing Director or Chief Executive Officer of the Company.
68. (i) The remuneration of the directors shall, in so far as it consists of a monthly payment, be deemed to accrue from day-to-day.
- (ii) In addition to the remuneration payable to them in pursuance of the Act, the directors may be paid all travelling, hotel and other expenses properly incurred by them-
- (a) in attending and returning from meetings of the Board of Directors or any committee thereof or general meetings of the company; or
 - (b) in connection with the business of the company.



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provisions of under the Act) make and vary such regulations as it may thinks fit respecting the keeping of any such register.

70. All cheques, promissory notes, drafts, hundis, bills of exchange and other negotiable instruments, and all receipts for monies paid to the company, shall be signed, drawn, accepted, endorsed or otherwise executed, as the case may be, by such person and in such manner as the Board shall from time to time by resolution determine.
71. Every director present at any meeting of the Board or of a committee thereof shall sign against his name in a book to be kept for that purpose.
72. (i) Subject to the provisions of the Act, the Board shall have power at any time, and from time to time, to appoint a person as an Additional Director, provided the number of the Directors and Additional Directors together shall not at any time exceed the maximum strength fixed for the Board by the articles.
- (ii) Such person shall hold office only up to the date of the next Annual General Meeting of the company but shall be eligible for appointment by the company as a Director at that meeting subject to the provisions of the Act.
73. (i) The Board may appoint an Alternate Director to act for a Director (herein after in this Article called "the Original Director") during his absence for a period not less than three months from India. No person shall be appointed as an Alternate Director for an Independent Director unless he is qualified to be appointed as an Independent Director under the provisions of the Act.
- (ii) An Alternate Director shall not hold office for a period longer than that permissible to the Original Director in whose place he has been appointed and shall vacate the office if and when Original Director returns to India.
- (iii) If the term of office of the Original Director is determined before he return to India the automatic reappointment of retiring directors in default of another appointment shall apply to the Original Director and not the Alternate Director.
74. (i) If the office of any director appointed by the Company in general meeting is vacated before his term of office expires in the normal course, the resulting casual vacancy may, be filled by the Board of Directors at a meeting of the Board.
- (ii) The Director so appointed shall hold office only upto the date till which the Director in whose place he is appointed would have held office if it had not been vacated.

NOMINEE DIRECTOR

75. Notwithstanding anything to the contrary contained in these Articles, so long as any moneys shall be owing by the Company to the any financial institutions, corporations, banks or such other financing entities, or so long as



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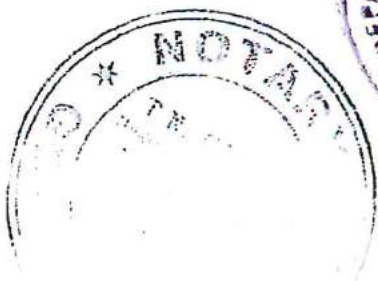
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subscription or so long as any guarantee given by any of the aforesaid financial institutions or such other financing entities in respect of any financial obligation or commitment of the Company remains outstanding, then in that event any of the said financial institutions or such other financing entities shall, subject to an agreement in that behalf between it and the Company, have a right but not an obligation, to appoint one or more persons as Director(s) on the Board of Director as their nominee on the Board of Company. The aforesaid financial institutions or such other financing entities may at any time and from time to time remove the Nominee Director appointed by it and may in the event of such removal and also in case of the Nominee Director ceasing to hold office for any reason whatsoever including resignation or death, appoint other or others to fill up the vacancy. Such appointment or removal shall be made in writing by the relevant corporation and shall be delivered to the Company and the Company shall have no power to remove the Nominee Director from office. Each such Nominee Director shall be entitled to attend all General Meetings, Board Meetings and meetings of the Committee of which he is a member and he and the financial institutions or such other financing entities appointing him shall also be entitled to receive notice of all such meetings.

MANAGEMENT UNDER GENERAL CONTROL OF DIRECTORS

76. (i) The general control, management and supervision of the Company shall vest in the Board and the Board may exercise all such powers and do all such acts and things as the Company is by its Memorandum of Association or otherwise authorised except as are required to be exercised or done by the Company in General Meeting, but subject nevertheless to the provisions of the Act, and of these presents and to any regulations not being inconsistent with these presents from time to time made by the Company in General Meeting, provided that no such regulation shall invalidate any prior acts of the Directors which would have been valid if such regulation had not been made.
- (ii) Subject to the provisions of the Act, the Director may borrow, raise and secure the payment of such sum or sums in such manner and upon such terms and conditions in all respects as they may think fit and in particular by the issue of bonds, perpetual or redeemable, debenture or debenture-stock or any mortgage or charge or other security on the undertaking of the whole of any part of the property of the Company (both present and future) including its uncalled capital for the time being.
- (iii) Subject to the provisions of the Act, the Company may enter into any contract, arrangement or agreement in which a Director or Directors of the Company are, in any manner, interested.
- (iv) A Director, Managing Director, officer or employee of the Company may be or become a Director, of any company promoted by the Company or in which it may be interested as a vendor, member or otherwise, and no such Director shall be accountable for any benefits received as Director or member of such company except to the extent and under the circumstances as may be provided in the Act.

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subject to the provisions of the Act execute or cause to be executed any mortgage, charge or security over or affecting the whole or any part of the assets of the Company by way of indemnity to secure the Directors or persons so becoming liable as aforesaid from any loss in respect of such liability.

- (vi) A Director may resign from his office upon giving notice in writing to the Company.

PROCEEDINGS OF THE BOARD

77. (i) The Board of Directors may meet for the conduct of business, adjourn and otherwise regulate its meetings, as it thinks fit.
- (ii) A Director may, and the manager or secretary on the requisition of a director shall, at any time, summon a meeting of the Board.
78. (i) Save as otherwise expressly provided in the Act, questions arising at any meeting of the Board shall be decided by a majority of votes.
- (ii) In case of an equality of votes, the Chairperson of the Board shall have a second or casting vote.
79. The continuing Directors may act notwithstanding any vacancy in the Board; but, if and so long as their number is reduced below the quorum fixed by the Act for a meeting of the Board, the continuing directors or director may act for the purpose of increasing the number of directors to that fixed for the quorum, or of summoning a general meeting of the company, but for no other purpose.
80. (i) The Board may elect a Chairperson of its meetings and determine the period for which he is to hold office.
- (ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting, the directors present may choose one of their number to be Chairperson of the meeting.
81. (i) The Board may, subject to the provisions of the Act, delegate any of its powers to committees consisting of such member or members of its body as it thinks fit.
- (ii) Any committee so formed shall, in the exercise of the powers so delegated, conform to any regulations that may be imposed on it by the Board.
82. (i) A committee may elect a Chairperson of its meetings.
- (ii) If no such Chairperson is elected, or if at any meeting the Chairperson is not present within five minutes after the time appointed for holding the meeting,



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T.H. Omar
District

83. (i) A committee may meet and adjourn as it thinks fit.
- (ii) Questions arising at any meeting of a committee shall be determined by a majority of votes of the members present, and in case of an equality of votes, the Chairperson shall have a second or casting vote.
84. All acts done in any meeting of the Board or of a committee thereof or by any person acting as a Director, shall, notwithstanding that it may be afterwards discovered that there was some defect in the appointment of any one or more of such Directors or of any person acting as aforesaid, or that they or any of them were disqualified, be as valid as if every such Director or such person had been duly appointed and was qualified to be a Director.
85. Save as otherwise expressly provided in the Act, a resolution in writing, signed by all the members of the Board or of a committee thereof, whether manually or electronically, for the time being entitled to receive notice of a meeting of the Board or committee, shall be valid and effective as if it had been passed at a meeting of the Board or committee, duly convened and held.

MANAGING DIRECTORS

86. (i) Subject to the provisions of the Act and of these Articles the Board shall have power to appoint from time to time any of its members as Managing Director or Managing Directors and/or Whole Time Directors of the Company for a fixed term not exceeding five years at a time and upon such terms and conditions, including liability to retire by rotation, as the Board thinks fit, and the Board may by resolution vest in such Managing Director or Managing Directors/Whole Time Director(s), such of the power hereby vested in the Board generally as it thinks fit, and such powers may be made exercisable for such period or periods, and upon such condition and subject to such restriction as it may determine, the remuneration of such Directors may be by way of monthly remuneration and/ or fee for each meeting and/ or participation in profits, or by any or all of those modes, or of any other mode not expressly prohibited by the Act.
- (ii) The Directors may whenever they appoint more than one Managing Director, designate one or more of them as "Joint Managing Director" or "Joint Managing Directors" or "Deputy Managing Directors" as the case may be.
- (iii) Subject to the provisions of the Act, the appointment and payment of remuneration to the above Director shall be subject to approval of the members in the General Meeting and of the Central Government, if required.

CHIEF EXECUTIVE OFFICER, MANAGER, COMPANY SECRETARY OR CHIEF FINANCIAL OFFICER

87. Subject to the provisions of the Act,-
- (i) A Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer may be appointed by the Board for such term, at such



T.N. Omana
T.N. OMANA
Notary Public & Notary

officer so appointed may be removed by means of a resolution of the Board;

- (ii) A Director may be appointed as Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer.

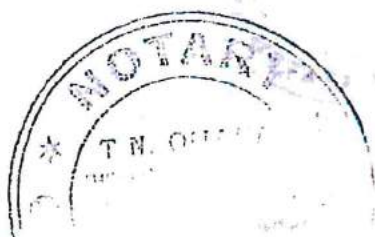
A provision of the Act or these regulations requiring or authorizing a thing to be done by or to a Director and Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer shall not be satisfied by its being done by or to the same person acting both as Director and as, or in place of, Chief Executive officer, Manager, Company secretary or Chief Financial Officer.

THE SEAL

88. (i) The Board shall provide for the safe custody of the seal.
- (ii) The seal of the company shall not be affixed to any instrument except by the authority of a resolution of the Board or of a committee of the Board authorised by it in that behalf, and except in the presence of at least one Director or of the Manager or secretary or such other person as the Board or Committee may appoint for the purpose; and the Director or Manager or Secretary or other person aforesaid shall sign every instrument to which the seal of the company is so affixed in his /her presence.

DIVIDENDS AND RESERVE

89. The company in general meeting may declare dividends, but no dividend shall exceed the amount recommended by the Board, but the Company in a general meeting may declare a lesser dividend.
90. Subject to the provisions of the Act, the Board may from time to time pay to the members such interim dividends of such amount on such class of shares as appear to it to be justified by the profits of the company.
91. (i) The Board may, before recommending any dividend, set aside out of the profits of the company such sums as it thinks fit as a reserve or reserves which shall, at the discretion of the Board, be applicable for any purpose to which the profits of the company may be properly applied, including provision for meeting contingencies or for equalising dividends; and pending such application, may, at the like discretion, either be employed in the business of the company or be invested in such investments (other than shares of the company) as the Board may, from time to time, thinks fit.
- (ii) The Board may also carry forward any profits which it may consider necessary not to divide, without setting them aside as a reserve.
92. (i) Subject to the rights of persons, if any, entitled to shares with special rights as to dividends, all dividends shall be declared and paid according to the amounts paid or credited as paid on the shares in respect whereof the



T.N. Omana
T.N. OMANA
Advocate & Notary
Madurai District

amounts of the shares.

- (ii) No amount paid or credited as paid on a share in advance of calls shall be treated for the purposes of this Article as paid on the share.
 - (iii) All dividends shall be apportioned and paid proportionately to the amounts paid or credited as paid on the shares during any portion or portions of the period in respect of which the dividend is paid; but if any share is issued on terms providing that it shall rank for dividend as from a particular date such share shall rank for dividend accordingly.
93. The Board may deduct from any dividend payable to any member all sums of money, if any, presently payable by him to the company on account of calls or otherwise in relation to the shares of the company.
94. (i) Any dividend, interest or other monies payable in cash in respect of shares may be paid by electronic mode or by cheque or warrant sent through the post directed to the registered address of the holder or, in the case of joint holders, to the registered address of that one of the joint holders who is first named on the register of members, or to such person and to such address as the holder or joint holders may in writing direct.
- (ii) Every such cheque or warrant shall be made payable to the order of the person to whom it is sent.
- (iii) Payment in any way whatsoever shall be made at the risk of the person entitled to the money paid or to be paid. The Company will not be responsible for any payment which is lost or delayed. The Company will be deemed to having made a payment and received a good discharge for it if a payment using any of the foregoing permissible means is made.
95. Any one of two or more joint holders of a share may give effective receipts for any dividends, bonuses or other monies payable in respect of such share.
96. Notice of any dividend that may have been declared shall be given to the persons entitled to share therein in the manner mentioned in the Act.
97. The waiver in whole or in part of any dividend on any share by any document shall be effective only if such document is signed by the member (or the person entitled to the share in consequence of death or bankruptcy of the holder) and delivered to the Company and if or to the extent that the same is accepted as such or acted upon by the Board.
98. No dividend shall bear interest against the company.

ACCOUNTS

99. (i) The books of accounts and books and papers of the Company, or any of them, shall be open to the inspection of Directors in accordance with the applicable



T.N. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State South India



- (ii) No member (not being a director) shall have any right of inspecting any account or book or document of the company except as conferred by law or authorised by the Board or by the company in general meeting.

WINDING UP

100. Subject to the applicable provisions of the Act and rules made thereunder-

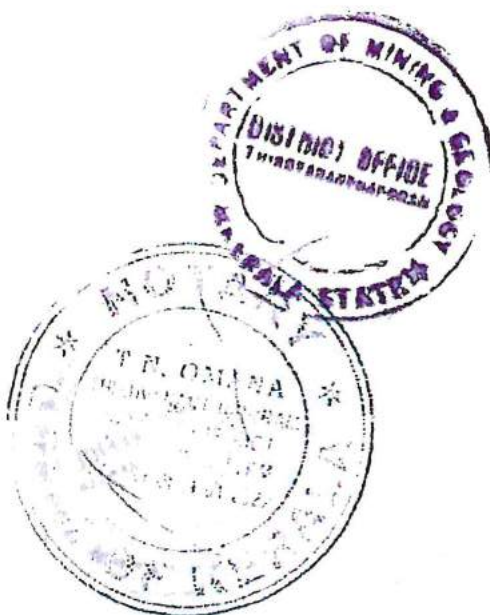
- (i) If the company shall be wound up, the liquidator may, with the sanction of a special resolution of the company and any other sanction required by the Act, divide amongst the members, in specie or kind, the whole or any part of the assets of the company, whether they shall consist of property of the same kind or not.
- (ii) For the purpose aforesaid, the liquidator may set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members or different classes of members.
- (iii) The liquidator may, with the like sanction, vest the whole or any part of such assets in trustees upon such trusts for the benefit of the contributories if he considers necessary, but so that no member shall be compelled to accept any shares or other securities whereon there is any liability.

INDEMNITY

101. Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal.

GENERAL POWER








102. Wherever in the Act, it has been provided that the Company shall have any right, privilege or authority or that the Company could carry out any transaction only if the Company is authorised by its Articles, then in that case this Article authorises and empowers the Company to have such rights, privileges or authorities and to carry such transactions as have been permitted by the Act, without there being any specific Article in that behalf herein provided.



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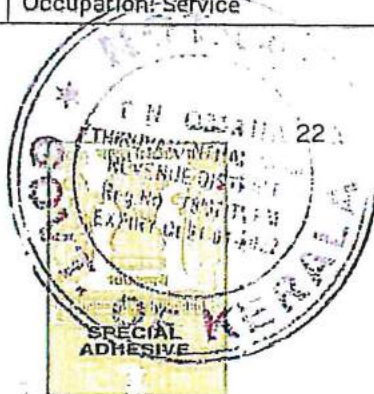
T.N. Omana
13-6-2016

T.N. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State South India

Photo	Sr. No.	Name, addresses, descriptions, occupation and signatures of the subscribers	Signature, names, addresses, descriptions and occupation of witnesses
	1	For and on behalf of M/s Adani Ports and Special Economic Zone Limited (CIN L63090GJ1998PLC034182) having its registered office at Adani House, Nr. Mithakhali Six Roads, Navrangpura, Ahmedabad - 380009 through its authorised person vide Board Resolution passed on 1 st May, 2015. Dipti Shah W/o Yogesh Shah residing at 601, Shailraj Tower, Nehru Park, Vastrapur, Ahmedabad-380015 Occupation: Service Sd/-	Common witness for all 7 subscribers I, witness to subscribers who have subscribed and signed in my presence. Further, I have verified his/her/their identify details for their identification and satisfied myself of their identification particulars as filled in Hardik Sanghvi S/o. Shri Harshadkumar Sanghvi residing at 15, Parshwanathnagar Society, Nr. Police Chowki, Naranpura Char Rasta, Ahmedabad-380013, Occupation: Service Company Secretary FCS No. 7247 Sd/-
	2	Malay Mahadevia [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Dr. Ramesh Mahadevia residing at 12-B, Gyankunj Society, Opp. St. Xavier's College, Navrangpura, Ahmedabad - 380009, Occupation: Service Sd/-	
	3	Ravi Bhamidipaty [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Srirama Murthy Bhamidipaty residing at 'Amrut' 26, Amrashrith Bunglows, Opp. Chimanbhai Patel Institute, Bh. Shapath 4, Prahaladnagar, Ahmedabad-380058 Occupation: Service Sd/-	
	4	Azad Kumar Somani [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Jwala Prasad Somani residing at 84, Star Apartments, Karnavatipagarkpa Bazar, Ahmedabad-380001. Occupation: Service Sd/-	
	5	Manoj Kumar Chanduka [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Biswanath Lal Chanduka residing at B-401, Panchamrut Apartments, Opp. Nehru Foundation, Bodakdev, Ahmedabad-380054, Occupation: Service Sd/-	
	6	Anish Ashokkumar Shah [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Ashokkumar Amrutlal Shah residing at B-12, Keshav Appartments, Near Memnagar Talavdi, Memnagar, Ahmedabad-380052, Occupation: Service Sd/-	
	7	Kamlesh Bhagia [As nominee of Adani Ports and Special Economic Zone Ltd.] S/o Shri Prabhudas Bhagia residing at A-203, Samarthy Residency, Nr. P. R. Patel School, D'cabin, Kaligam, Sabarmati, Ahmedabad-380019, Occupation: Service Sd/-	

Place: Ahmedabad

Dated: 22.07.2015



ATTESTED
VERIFIED AND CERTIFIED
THAT THIS IS THE TRUE COPY
OF THE ORIGINAL

7/1/2016
13-7-15



205 Notary
Thiruvananthapuram Revenue District
Kerala State South India



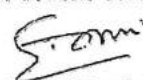
EXTRACT OF MINUTES OF MEETING OF BOARD OF DIRECTORS OF ADANI VIZHINJAM PORT PRIVATE LIMITED HELD ON 30TH APRIL, 2018 AT THE REGISTERED OFFICE OF THE COMPANY

"RESOLVED THAT Mr. Rajesh Kumar Jha, Managing Director of the Company be delegated following powers:


- 1) To represent, negotiate and settle with Central Government authorities, State Government authorities, local bodies and other concerned authorities in respect of customs, central excise, income-tax, service tax, sales tax, licensing and other related matters in connection with the business of the Company;
- 2) To represent and appear on behalf of the Company in any Court, Tribunal or Authority under different laws and rules, to appoint advocates, pleaders or specialists to represent the Company;
- 3) To sub-delegate and/or withdraw any of powers to any officer or officers working in the Company for the aforesaid authorities."

"RESOLVED FURTHER THAT Mr. Rajesh Kumar Jha, Managing Director of the Company be and is hereby authorized to sign deeds, documents, papers, MoUs, undertakings, execute agreements, to make correspondence, to represent on behalf of the Company and to do all such acts, deeds and things as may be necessary, desirable or expedient in connection therewith."

**Certified True Copy
For Adani Vizhinjam Port Private Limited**


Daljeet Singh Sandhu
Company Secretary




KANTHARAJ K.
RQP/GOA/130/2006/A

Adani Vizhinjam Port Pvt Ltd
Adani House
Nr Mithakhali Six Roads, Navrangpura
Ahmedabad 380 009
Gujarat, India

Tel +9179 2656 5555
Fax +9179 2555 5500
Info@adani.com
www.adani.com
CIN: U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Six Roads, Navrangpura, Ahmedabad 380 009, Gujarat, India



INCOME TAX DEPARTMENT

RAJESH KUMAR JHA

KRISHNA CHANDRA JHA

03/11/1985

Permanent Account Number

AAXPJ8308B

Signature



GOVT OF INDIA



उपभोक्ता पहचान

UPROOF IDENTIFICATION AUTHORITY OF INDIA

पता:

आदमम: कृष्णा चंद्र झा,
हाउस नं- एच 7 - एच 8,
निशान्ट विहार, आशियाना
सेन्टर के पार्क, जमशेदपुर,
आदित्यपुर, सरावकेला-
खरसावा, जारखण्ड - 831013

Address:

S/O: Krishna Chandra Jha,
House No-H 7 - H 8, Nishant
Vihar, Near Aashiana Trade
Centre, Jamshedpur, Adityapur,
Seraikela-Kharsawan,
Jharkhand - 831013

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help@uidai.gov.in

www.uidai.gov.in

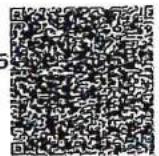
P.O. Box No. 1947,
Bengaluru-560 001भारत सरकार
GOVERNMENT OF INDIA

राजेश कुमार झा

Rajesh Kumar Jha

जन्म तिथि/ DOB: 03/11/1985

पुरुष / MALE



2712 6816 7724

सेरा आधार, मेरी पहचान

KANTHARAJ K.
RGP/GOA/130/2000/A





GOVERNMENT OF KERALA

Abstract

Vizhinjam International Deep water Multipurpose Seaport Project - Bid submitted by M/s Adani Ports & Special Economic Zone Ltd - Approved - Orders issued.

Fisheries & Ports (E) Department

G.O(MS) No.35/2015/F&PD.

Dated, Thiruvananthapuram, 13-07-2015.

- Read:-
- 1 G.O(MS) 69/2013/F&PD dated 29-11-2013
 - 2 G.O(MS) 21/2014/F&PD dated 01-03-2014
 - 3 G.O(MS) 26/2014/F&PD dated 31-03-2014
 - 4 G.O(MS) 28/2014/F&PD dated 22-04-2014
 - 5 Letters No. VISL/PPP/2014/420 dated 02-05-2015, VISL/PPP/2014/471 dated 14-05-2015, VISL/PPP/2014/497 dated 26-05-2015, VISL/2014-15/GOM/511 dated 28-05-2015, VISL/2014-15/GOM/519 dated 29-05-2015 of Managing Director, Vizhinjam International Seaport Ltd.
 - 6 G.O(MS) No.31/2015/F&PD dated 12-06-2015

ORDER

As per Government Order read as 1st paper above Government have restructured Vizhinjam International Deep water Multipurpose Seaport Project as suggested by the Planning Board for availing Viability Gap Funding from Government of India. Based on the above order, Vizhinjam International Seaport Ltd issued Request for Qualification (RFQ).

Subsequently as per Government Order read as 2nd paper above, the Engineering Procurement Construction work for the construction of Breakwater and fishing harbour was included as Funded Works in the Public Private Partnership tender for the Vizhinjam International Deep water Multipurpose Seaport Project for which State would provide the funding.

As per Government Order read as 3rd paper above, all the 5 applicants who submitted the Request for Qualification were shortlisted, strictly based on the financial and technical qualification set in the Request for Qualification document. The Request For Proposal document in respect of Vizhinjam International Deep water Multipurpose Seaport Project was approved by Government vide Government Order read as 4th paper above and authorized Vizhinjam International Seaport Ltd



to issue the same to shortlisted applicants on behalf of Government of Kerala. Three bidders purchased the bid documents.

The Bid due date for the project was scheduled at 05:00 PM, 24th April 2015. Up to the closing time of bid submission, only one qualified bidder M/s Adani Ports & Special Economic Zone Limited submitted its bid. The Bid Opening Committee opened the bid at the scheduled bid opening time of 5:30 PM. The bids were evaluated by the Project Consultants. The bid documents / submissions were found to be in conformity with the Request For Proposal requirement and were hence found responsive. The authenticity of the bid bond submitted by the bidder was also confirmed with the bank which issued the bond.

The grant sought by the bidder M/s Adani Ports & Special Economic Zone Limited is INR 1,635 crore. This works out to around 39.985% of the Total Project Cost as mentioned in the Draft Concession Agreement (INR 4,089 crore), and hence is within the range permitted under the Viability Gap Funding (VGF) guidelines. The amount is within the range of 40.7% (Rs.1664 Cr) estimated in the revised Feasibility Report also.

Managing Director, Vizhinjam International Seaport Ltd, as per letter read as 5th paper above reported that the Minutes of bid opening meeting, bid evaluation report submitted by Transaction Advisors M/s Ernst & Young and Legal Consultant M/s HSA, Letter from Bank confirming the authenticity of the bid bond were submitted before the 23rd Meeting of the Empowered Committee.

The Empowered Committee noted that , in the current model, the cash outflow with respect to this particular concession from the State Government is limited to Rs. 2280.20 Cr (Rupees Two thousand two hundred and Eighty Crore Twenty Lakh only). This comprises of Rs.1463 Crore towards cost of funded works and Rs. 817.2 Crore towards Government of Kerala contribution of VGF. The cost of Funded Work will be adjusted for the Whole sale Price Index variation between the Bid Due Date and Appointed Date as per the provisions of DCA. The Committee noted that the current model offers considerable saving to State Government when compared to the earlier model on current price level.

Government vide orders read as 6th paper, ratified the amendment made by the Empowered Committee in the Draft Concession Agreement regarding the revision of project cost to Rs.4089 crore and cost of funded works to Rs.1463 crore. Empowered Committee also noted that no restrictive changes suiting any particular applicant or bidder were made during the selection process in respect of Project



Structure, DCA, qualification criteria and specification. The committee further noted that the certainty of cash outflow, potential savings and other merits of the current model. The Committee also felt that the chances of getting a better offer in a future bid is negligible considering the traffic risk involved, high investment needed and depressed market Internationally and Nationally. Therefore it is a situation where in the project may not materialise in future, if it does not materialise now ("Now or Never") This is particularly important in the light of the fact that this is the fourth attempt to bid the project and in the context of the development of the proposed nearby competing port locations.

The Committee after detailed discussions and based on the above, decided to recommend to the Board of Directors of VISL and Government of Kerala to accept the bid submitted by M/s Adani Ports and Special Economic Zone Ltd and to issue the Letter of Award (LOA) to M/s Adani Ports and Special Economic Zone Ltd.

Managing Director, Vizhinjam International Seaport Ltd in his letter dated 14-05-2015 has further reported that the recommendations of the Empowered Committee were placed before the Board of Directors of VISL at its 37th Meeting held on 13th May 2015. The decisions of Empowered Committee were discussed by Board of Directors and approved the above decisions and recommended Government of Kerala to approve the following:

- i) Approve and accept the bid submitted by M/s Adani Ports and Special Economic Zone Ltd for a grant of Rs.1635 crore (Rupees one thousand six hundred and thirty five crore)
- ii) Issue Letter of Award to M/s Adani Ports and Special Economic Zone Ltd.

Managing Director, Vizhinjam International Seaport Ltd has therefore requested Government to approve and accept the bid submitted by M/s Adani Ports and Special Economic Zone Ltd and to issue Letter of Award to the firm.

Government have examined the matter in detail. Vizhinjam International Deep water Multipurpose Seaport Project is a flagship project of the State. It is found that Development of this port is of great national importance considering the fact that the major share of Indian transshipment is currently handled by foreign ports of Colombo, Singapore and Dubai. The Project would shift these operations to India and thereby generate considerable saving in foreign exchange to the national economy. The port has the potential to become the transshipment hub serving the entire Indian Coast. The development of port and its allied facilities would



significantly contribute to the large scale growth of Industry and Economy in Kerala, besides generating employment opportunities. Retendering of the project will lead to further time delay and cost escalation resulting in loss to the State exchequer. Besides chances of getting a better offer in a future bid is negligible considering the traffic risk involved, high investment needed and depressed market Internationally and Nationally.

In the circumstance, Government are pleased to approve the bid submitted by M/s Adani Ports and Special Economic Zone Ltd for a grant of Rs.1635 crore (817.8 crores from Government of India and 817.2 crores from Government of Kerala) for the development of Vizhinjam International Deep water Multipurpose Seaport Project. Accordingly, Letter of Award will be issued to M/s Adani Ports and Special Economic Zone Ltd

(By Order of the Governor)

JAMES VARGHESE

Principal Secretary to Government

To

- 1) The Managing Director, Vizhinjam International Seaport Ltd, Thiruvananthapuram.
- 2) The Principal Accountant General (Audit), Kerala
- 3) The Accountant General (A&E), Kerala, Thiruvananthapuram.
- 4) The General Administration (SC) Department (Vide item No. 6787 dated 20-05-2013 and item No. 6885 dated 10-06-2015)
- 5) The Finance Department
- 6) The Law Department
- 7) SF/OC

Forwarded/By order


Section Officer



adani

Ref: AVPPL/GoK/2018-19/441

12th June, 2018

The District Geologist
District Office, Department of Mining and Geology
Thiruvananthapuram

Sir,

Sub: Application for grant of Quarrying Lease- reg;

Submitting herewith duly filled Form - B in triplicate for the grant of Granite Building Stone quarrying lease in Re-Sy no,555/2, Block No. 37 over an extend of 04.09.65 Ha at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.

Kindly do the needful to issue the Letter of Intent to proceed further to prepare the mining plan and apply for environment clearance from DEIAA.

Thanking You,
Yours Faithfully


Rajesh Jha
Chief Executive Officer




KANTHARAJ K.
RGP/GOA/138/2000/A

Enclosures attached.

Adani Vizhinjam Port Private Limited
2nd Floor, Vipanchika Tower, Thycad
Thiruvananthapuram
Kerala-695014

www.adani.com

CIN -U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat



FORM B (See Rule 27)

APPLICATION FOR GRANT/RENEWAL OF QUARRYING LEASE

(For all types of lands)

(To be submitted in triplicate)

From

Mr Rajesh Jha

Chief Executive Officer- Adani Vizhinjam Port Private Limited

2nd Floor, Vipanchika Tower, Thycaud

Thiruvananthapuram- 695014.

To

The Director of Mining and Geology

Thiruvananthapuram

Through

The Geologist, District Office,

Kollam

Sir,

1. I/we /am/are submitting this application for the grant/renewal of a

Quarrying lease under the Kerala Minor Mineral Concession Rules, 2015.

2. A sum of Rs 10,000 or ~~20,000~~ being the application fee in respect of this application payable under sub-rule (1) of Rule 28 / sub-rule (2) of Rule 28 of the said rules has been deposited (Strike off which is not applicable).

3. The required particulars are given below:

(i) Name and complete address of the applicant	Rajesh Jha
--	------------



	<p>Chief Executive Officer- Adani Vizhinjam Port Private Limited</p> <p>2nd Floor, Vipanchika Tower, Thycaud</p> <p>Thiruvananthapuram-695014.</p>
(ii) Is the applicant a private individual/private company /Public company/firm or association	Private Limited Company
(iii) In case the applicant is	
(a) an individual, his nationality	Not Applicable
(b) a private company, the names and nationality of all members and place of registration	<p>1. Mr Karan Adani - Indian</p> <p>2. Dr Malay Mahadevia - Indian</p> <p>3. Mr Rajesh Kumar Jha - Indian</p> <p>4. Dr Chitra Bhatnagar - Indian</p> <p>Place of Registration - Ahmedabad</p>
(c) a public company, the names and nationality of the Directors, the percentage of share capital held by Indian National and place of Incorporation.	Not Applicable
(d) a firm or association, the names and nationality of all the partners of the firm or members of the Association and place of registration.	Not Applicable



2



(iv) Profession or nature of business of the applicant.	Port Development
(v) Whether the application is for a fresh lease or for renewal of a lease previously granted.	Fresh Lease
(vi) Minor Mineral or minerals which the applicant intends to mine.	Granite Building Stone
(vii) Period for which the quarrying lease required.	10 years
(viii) Approximate quantity of mineral Expected to be raised per year.	50,00,00MT per year
(ix) Manner in which the minor mineral raised is to be utilized.	
(a) for manufacture	Yes (Own Metal crusher unit) and the products will utilize for Breakwater Construction of Vizhinjam Port Project.
(b) for sale	No. Purely for Vizhinjam Port Breakwater Construction Purpose. Government of Kerala work.
(c) any other purpose	Nil
In case of manufacture, the industries in connection with which it is required should be specified.	Purely for Vizhinjam Port Breakwater Construction Purpose. Government of Kerala work.
(x) Details of the area in respect of which quarrying lease is required.	District :Thiruvananthapuram
Attested copies of the survey map of the area with survey numbers clearly marked should be attached	Taluk : Chirayinkeezhu Panchayat : Nagaroor Village : Nagaroor Re-Sy no:555/2



to each copy of the application	Re SURVEY NO	SUB DIVISION NO	AREA IN HECTARES
	555	2	04.0965
	Total		04.0965
	Total area applied:04.0965 Ha survey map certified by Tahasildar enclosed.		
(xi) Nature of tenure of the land over which quarrying lease is applied for (Documentary proof to show the land owners right if any, over the mineral should be submitted in the case of lands in which the minerals vest partly with the Government and partly with the registered holder of the land	Government Land, NOC reference no B7-40269/2017 dated 30.04.2018 issued by District Collector Thiruvananthapuram. NOC enclosed as attachment.		
	1. Copy of TPR		
	2. Copy of BTR		
	3. FMB Sketch (Field No.555/2, 8) of the area certified by Tahasildar, Chirayinkeezhu		
	4. Demarcation Certificate No. 634/2018 dated 05/05/2018 issued by the Village Officer, Nagroor		
	5. (SakshyaPathram) Certificate No. 633/2018 dated 05/05/2018 of Village Officer, Nagroor		



	6. Copy of NOC No. B7-40269/17 dated 30/04/2017 of the District Collector, Thiruvananthapuram.
(xii) No. and date of the income-tax clearance certificate attached.	Affidavit on Income Tax enclosed.
(xiii) Financial resources of the Applicant.	Own Fund
(xiv) Particulars of receipted treasury chalan attached for the Amount referred to at 2 above.	Chalan No. M dated //2018 of District Treasury, Kollam
(xv) Any other particulars which the Applicant wishes to furnish.	NIL

I/We do hereby declare that the particulars furnished above are correct and am/are ready to furnish any other details including security deposit etc, as may be required by you.

Yours Faithfully

[Signature]

(Signature of the Applicant)



Place:

Date:

Received at (place).....

On (date).....

at (hour).....

Initials of Receiving Officer



GOVERNMENT OF KERALA

CHALAN

ORIGINAL

FORM T. R. 12

[See Rules 102 (c) and 124 of Kerala Treasury Code]

Chalan for Payment of Money into the
District Treasury/Sub Treasury/
State Bank of India/State Bank of Travancore

At
Computer Seq. No. Date

Head of Account 0853-102-99 (01)
Maj. Srg. Min. Sd. Ds. Ch. S. Ds.

*DDO Code: (Depty) 450 (DDO) 002

*SDO Code:

By whom paid and name and address of the person on whose behalf money is paid	Purpose of remittance and authority, if any	Amount in ₹	Order to the Bank
27/4/2008 Vipinika Chy. Enol. Travancore	Application fee for @ 1/- Gas	10000	Correct Receive and grant receipt
Signature & Designation of the Departmental Officer counter signing the remittance	Total	10000	Treasury Officer

Total in words ten thousand only

Signature of Remitter

Received ₹ (Rupees)

Date (Seal)

Signature of Treasurer/Cashier Treasury Officer/Bank Manager

Note: 1. The seal/stamp of the Treasury/Bank of collection shall be affixed

2. If remittance is in official capacity (*SDO/DDO), write corresponding code in the column provided

3. If loan repayment of SDO, write instalment number in purpose column.

GCPT. 25/11/75/2018/5.00.000-S-11 - Govt. of Kerala

10000 2710453 201819m



Seal of the Department of Geology, Government of Karnataka, District Office, Thiruvananthapuram. The seal is circular with a purple border. The text around the border reads "DEPARTMENT OF GEOLOGY" at the top and "KARNATAKA STATE" at the bottom, separated by stars. In the center, it says "DISTRICT OFFICE" and "THIRUVANANTHAPURAM".

CHIRAYINKUL TALUK

STATION 1

1:4 Surveys - 1957/58

MAUN INDI

BLOCK No. 39
KARAYAM VILLAGE

BLOCK No. 36
KODUVIZHAKKUR VILLAGE

BLOCK No. 41
ALAKKODE VILLAGE



No. 9363/M3/2018

Directorate of Mining & Geology
 Kesavadasapuram, Pattam Palace .P.O,
 Thiruvananthapuram - 4
 Tel Fax : 0471 2447429
 e-mail: director.dir.dmg@kerala.gov.in
www.dmg.kerala.gov.in
 Date : 04-09-2018

From
 The Director of Mining & Geology

To
 M/s. Adani Vizhinjam Port Private Limited,
 2nd Floor, Vipanchika Tower,
 Thycaud, Thiruvananthapuram District - 695 014
 (Registered Office at: Adani House, Near Mithakhali Six Roads,
 Navrangpura, Ahmedabad, Gujrat State - 380 009)
 (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Sir,

Sub:- Mines and Minerals - Minor Mineral - Granite (Building Stone) -
 Application for quarrying lease under KMMC Rules 2015 - Letter of
 Intent - forwarding of- reg.

Ref:- 1. Your application for quarrying lease dated 13.06.2018.
 2. NOC No. B7-40269/2017 dt. 30.04.2018 issued by District Collector,
 Thiruvananthapuram.
 3. Letter No. 1716/DOT/ML/2018 dtd. 18/08/2018 of the Geologist, District
 Office, Thiruvananthapuram.
 4. Kerala Minor Mineral Concession Rules 2015.

Please refer to the references cited above . As per the reference 1st cited, you have applied for a quarrying lease for a period of 10 years from this office for the extraction of granite building stone from an area of 3.6630 Hectares in Re-Survey Block No. 37, Re - Survey No. 555/2 of Nagaroor Village of Chirayinkeezhu Taluk of Thiruvananthapuram District [as shown in the Survey Map No. B9/9590/18 issued by Tahsildar, Chirayinkeezhu enclosed]. Vide reference cited 2 above, District Geologist, Thiruvananthapuram forwarded your application to this office with recommendations to issue Letter of Intent. On scrutiny of application and other documents received from the Geologist, it is seen that a quarrying lease can be granted to the precise area shown in the map under the provisions contained in the KMMC Rules 2015. However, for granting quarrying lease you have to produce following documents through District Geologist to the satisfaction of this office in accordance with the relevant statutes.

KANTHARAJ K.
 RQF/GOA/130/2000/A



DOCUMENTS TO BE PRODUCED

1. Mining plan approved by the District Geologist as stipulated in the KMMC Rules 2015, for the precise area as per the survey map.
2. Environmental Clearance as stipulated in EIA Notification 2006 for the precise area.
3. Consent to operate quarry from the Kerala State Pollution Control Board for the precise area.
4. Explosive licence from the authorities concerned for appropriate quantity of explosives required for extraction of mineral as mentioned in the approved mining plan.
5. D & O Licence from the Local Self Government authorities concerned for operating quarry in the precise area.

In addition, you shall make arrangements for the survey and demarcation by erection of boundary pillars of the said area by the revenue authority not below the rank of a Tahsildar or Asst. Director of the Department of Survey and Land Records and shall produce a certificate in this regard issued by authorities concerned.

It is further informed that the duration of lease as well as annual production of mineral will be decided based on the approved mining plan and documents submitted.

It is also informed that as per the provisions contained in the KMMC Rules 2015 this letter of intent shall be sufficient for the purpose of issuing necessary licenses/consents/Clearances/NOCs etc. by the other statutory authorities concerned. In the event of granting of quarrying lease you may also need to produce new Possession & Enjoyment Certificate at the time of grant of quarrying lease.

It is further informed that this letter of intent is valid for a period of one year from the date of issue. In case you have any valid reason for seeking extension of period of this LOI, the same may be obtained before the expiry of this LOI. Your application for Quarrying Lease shall be deemed to have been rejected, if you fail to produce above mentioned documents before the expiry of LOI.

Yours faithfully,

John
04/09/2018

ADDITIONAL DIRECTOR OF MINING & GEOLOGY

Encl: Photocopy of Survey Map showing precise area

Copy to:-

1. The District Collector & Chairman, DEIAA, Thiruvananthapuram.
2. The Deputy Chief Controller of Explosives, CSEZ, CGO Complex, Kakkanad, Ernakulam
3. Kerala State Pollution Control Board, District Office, Thiruvananthapuram District.



4. The Secretary, Nagaroor Grama Panchayath, Thiruvananthapuram District

For kind attention of statutory authorities

[The statutory authorities while issuing licence/consents/NOCs based on this letter of intent may refer this letter of intent in the respective licence/consent/clearance /NOC while issuing the same. The statutory authorities may refer the survey map and consider the extent of applied area, quantity of mineral proposed to extract and the period of lease applied for while issuing such documents. The authorities may note that the operation as per their licence shall start only after execution and registration of quarrying lease granted by this office. All the Survey Nos./Re-Survey numbers with Block No. included in the survey map submitted in this connection shall be included in all the aforesaid documents.]

5. The Tahsildar, Taluk Office, Chirayinkeezhu

6. The Geologist, District Office, Thiruvananthapuram (The Geologist shall forward all the above said documents to this office for grant of quarrying lease with recommendations).



B9/9590/1832 നമ്പർ ലഭിച്ച ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്നതിന്

DISTRICT : THIRUVANANTHAPURAM

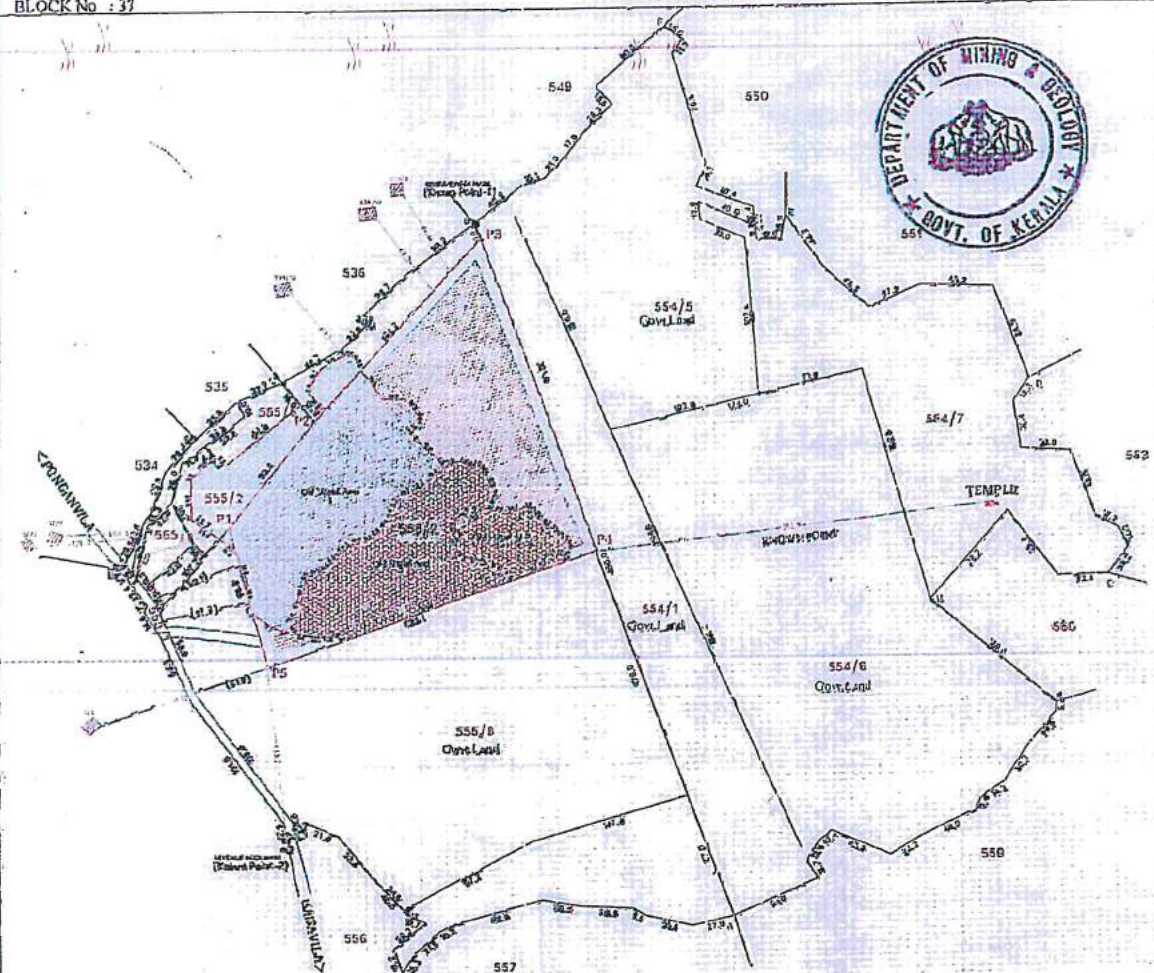
TALUK : CHIRAYINKEEZH

VILLAGE : NAGARDOOR

BLOCK No : 37

Re Sy No. : 555/2

FILE NO :



1 നീസർവ്വ 555/2 ൽ ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലം 1.0527 Hk

2 നീസർവ്വ 555/2 ൽ ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലത്തിന്റെ ചുറ്റളവ് 0.5527 Hk

3 നീസർവ്വ 555/2 ൽ ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന Lease Area = 3.0527 Hk

പഞ്ചായത്ത് റോഡ്

ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലം

പതിനാലു പ്രദേശങ്ങളിൽ

പാറ മുൾക്ക് കയറുന്ന സ്ഥലങ്ങൾ

4 നീസർവ്വ 555/2 ൽ ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലത്തിന്റെ സ്ഥലത്തിന്റെ സ്ഥലങ്ങൾ

555/8 നീസർവ്വ 555/2 ൽ ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലം 0.5527 Hk

1 ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലത്തിന്റെ സ്ഥലത്തിന്റെ സ്ഥലങ്ങൾ 0.5527 Hk

2 ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലത്തിന്റെ സ്ഥലത്തിന്റെ സ്ഥലങ്ങൾ 0.5527 Hk

3 ഭൂമിയിൽ നിന്നും ഭൂമിയിൽ നിന്നും വിട്ടുവെക്കുന്ന സ്ഥലത്തിന്റെ സ്ഥലത്തിന്റെ സ്ഥലങ്ങൾ 0.5527 Hk

Applicant's Name & Address:
M/s C/O ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vigneshwara Temple,
Thiruvananthapuram.

Sl. No.	Particulars	Remarks
1
2
3
4
5

Scale 1cm = 20 m



12
TALUK OFFICE
CHIRAYINKEEZH



നം. ബി7-40269/2017

കളക്ടറേറ്റ്, സിവിൽ സപ്ലൈസ്,
കടപ്പനക്കുന്ന്, തിരുവനന്തപുരം
തീയതി: 30-04-2018.

നിരാക്ഷേപ സാക്ഷ്യപത്രം.

തിരുവനന്തപുരം ജില്ലയിൽ ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ ബ്ലോക്ക് നമ്പർ 37-ൽ റീസർവ്വെ 555/2-ൽ ഉൾപ്പെട്ട സർക്കാർ പാറ ലിസിന് എടുത്ത് ഖനനം ചെയ്യുന്നതിന് NOC അനുവദിക്കുന്നതിലേയ്ക്കായി ശ്രീ. വിഷ്ണു ജി. നായർ, ശ്രീ. ദേവദാസ്, ശ്രീ. രഞ്ജിത് ഭാസി, സതേൺ മൈൻസ് & മിനറൽസ്, M/s ബികോൺസ് ലിമിറ്റഡ് എന്നിവർ അപേക്ഷ സമർപ്പിച്ചിട്ടുള്ളതാണ്. എന്നാൽ വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിന് ആവശ്യമായ പാറയും പാറ ഉല്പന്നങ്ങളും ലഭ്യമല്ലാത്ത സാഹചര്യത്തിൽ ടി പാറ ഖനനം ചെയ്യുന്നതിന് NOC യ്ക്കായി ശ്രീ. സുഷീൽ നായർ, ഹെഡ് കോർപ്പറേറ്റ് അഫയേഴ്സ്, അദാനി ഗ്രൂപ്പ് 16-03-2018-ൽ AVPPL/Gok/2018-19/398 നമ്പർ കത്ത് പ്രകാരം അപേക്ഷ സമർപ്പിച്ചിട്ടുള്ളതാണ്. വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിനായി പാറ ഖനനം ചെയ്യുന്നതിന് NOC അനുവദിക്കുന്നതിനായി 20-04-2018-ലെ VISL/2015-16/EE & E1-4/83-ാം നമ്പർ കത്ത് മുഖേന വിഴിഞ്ഞം ഇന്റർനാഷണൽ സി പോർട്ട് ലിമിറ്റഡ് മാനേജിംഗ് ഡയറക്ടർ & ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ ശുപാർശ ചെയ്തിട്ടുള്ളതാണ്. അദാനി വിഴിഞ്ഞം പോർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡിന് പാറ ലഭ്യമാക്കുന്നതിന് ആവശ്യമായ നടപടികൾ സ്വീകരിക്കുവാൻ 23-04-2018-ലെ 91/E1/2017/F&PD നമ്പർ കത്ത് പ്രകാരം ഫിഷറീസ് & പോർട്ട്സ് (ഇ) വകുപ്പിന്റെ നിർദ്ദേശവും ലഭിച്ചിട്ടുള്ളതാണ്. ഈ സാഹചര്യത്തിൽ നഗരൂർ വില്ലേജിലെ ബ്ലോക്ക് 37-ൽ റീസർവ്വെ 555/2 -ൽ ഉൾപ്പെട്ട 4.9065 ഹെക്ടർ പ്രദേശത്തെ സർക്കാർ പാറ ചുവടെ ചേർത്തിരിക്കുന്ന നിബന്ധനകൾക്ക് വിധേയമായി നിയമാനുസൃതമായി ഖനനം ചെയ്യുന്നതിന് ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, അദാനി വിഴിഞ്ഞം പോർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡിന് നിരാക്ഷേപ സാക്ഷ്യപത്രം അനുവദിക്കുന്നു.

നിബന്ധനകൾ

1) ഈ NOC പ്രകാരം ഖനനം ചെയ്യുന്ന പാറ വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിന് മാത്രം

വിനിയോഗിക്കേണ്ടതാണ്. ഖനനം ചെയ്യുന്ന പാറ വിപണനം ചെയ്യാൻ പാടുള്ളതല്ല.

Kantharaj K
KANTHARAJ K
RQP/GOA/130/2000
DEPARTMENT OF MINING & GEOL
DISTRICT OFFICE
KERALA STATE

- 2) NOC അനുവദിച്ച തീയതി മുതൽ രണ്ട് വർഷത്തിനുള്ളിൽ പാരിസ്ഥിതിക അനുമതി നേടിയിരിക്കേണ്ടതാണ്.
- 3) സർക്കാരിന്റെയോ മറ്റ് പൊതുവായ ആവശ്യങ്ങൾക്കോ സർക്കാർ/ജില്ലാ ഭരണ കൂടം നിശ്ചയിക്കുന്ന നിരക്കിൽ പാറയും പാറ ഉത്പ്പന്നങ്ങളും നൽകേണ്ടതാണ്.
- 4) NOC അനുവദിച്ച തീയതി മുതൽ രണ്ട് വർഷത്തിനുള്ളിൽ ഖനനം ചെയ്യുന്ന പ്രവർത്തനങ്ങൾ ആരംഭിച്ചിട്ടില്ലെങ്കിൽ ഈ NOC അസാധുവാകുന്നതാണ്.
- 5) ഖനന പ്രവർത്തനങ്ങൾ അദാനി ഗ്രൂപ്പിന്റെ നേരിട്ടുള്ള നിയന്ത്രണത്തിൽ ആയിരിക്കേണ്ടതും മറ്റുള്ളവർ മുഖേന നടത്തുവാൻ പാടില്ലാത്തതുമാണ്.
- 6) പാരിസ്ഥിതിക അനുമതിയും നിയമപരമായ ആവശ്യമുള്ള മറ്റ് എല്ലാ അനുമതിയും നേടിയ ശേഷം മാത്രമേ ഖനനം ആരംഭിക്കാൻ പാടുള്ളൂ.
- 7) 2015-ലെ കെ.എം.എം.സി ചട്ടങ്ങളിലെയും 1957-ലെ കെ. എൽ.സി ആക്ടിലെയും വ്യവസ്ഥകൾ കർശനമായി പാലിക്കേണ്ടതാണ്.
- 8) പാറ ഖനനം നടത്തുന്ന പ്രവർത്തിക്കായി നിയോഗിക്കുന്ന ജോലിക്കാരുടെ വിവരങ്ങൾ അടങ്ങിയ ഒരു രജിസ്റ്റർ സൂക്ഷിക്കേണ്ടതാണ്.
- 9) എക്സ് പ്ലോസീവ് ആക്ട് പ്രകാരമുള്ള നിബന്ധനകൾ കർശനമായി പാലിക്കേണ്ടതും മറ്റ് അടിസ്ഥാന സൗകര്യങ്ങൾ ടി സ്ഥലത്ത് ലഭ്യമാക്കേണ്ടതുമാണ്.
- 10) ഖനനം നിമിത്തം ഉണ്ടാകുന്ന കുഴികൾ മണ്ണിട്ട് മൂടി അപകടരഹിതമാക്കേണ്ടതും കമ്പി വേലി കെട്ടി സംരക്ഷിക്കേണ്ടതുമാണ്.
- 11) നിരാക്ഷേപ സാക്ഷ്യ പത്രത്തിന്റെ കാലാവധി മൈനിംഗ് & ജിയോളജി വകുപ്പ് ലീസ് നൽകുന്ന തീയതി മുതൽ 10 വർഷത്തേയ്ക്കോ, വിഴിഞ്ഞം പദ്ധതിയുടെ നിർമ്മാണ പ്രവർത്തനങ്ങൾ തീരുന്നത് വരെയോ ഏതാണോ ആദ്യം അതുവരെയായിരിക്കുന്നതാണ്.
- 12) തഹസീൽദാർ അംഗീകരിച്ച് നൽകുന്ന സ്പെച്ച് പ്രകാരമുള്ള ഭൂമിയിൽ മാത്രമേ ഖനനം നടത്താൻ പാടുള്ളൂ.



പ്രസ്തുത പദ്ധതി പ്രകാരം പദ്ധതിയിൽ ഉൾപ്പെട്ട മറ്റു ചില സ്ഥലങ്ങൾ ഉൾപ്പെടെ
ഡയറക്ടർ ഡയറക്ടർമാർക്ക് ഈ നിരദ്ദേശ്യ പദ്ധതിയുടെ
പ്രാബല്യത്തിൽ വരുന്നതല്ല

മേൽ വിവരിച്ച നിബന്ധനകൾ ലംഘിക്കപ്പെടുന്ന പക്ഷം ഈ നിരദ്ദേശ്യ പദ്ധതിയുടെ
റദ്ദാക്കി തുടർനടപടികൾ സ്വീകരിക്കുന്നതായിരിക്കും

(ഒപ്പ്)
ജില്ലാ കളക്ടർ

സ്വീകർത്താവ്

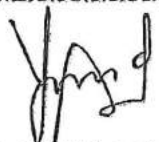
✓ ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, അടാനി പോർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡ്.

പകർപ്പ്.

1. ഗവൺമെന്റ് പ്രിൻസിപ്പൽ സെക്രട്ടറി,
മത്സ്യബന്ധനവും ഇറമുഖവും (ഇ) വകുപ്പ് (ആമുഖ കത്ത് സഹിതം)
2. ഡയറക്ടർ, മൈനിംഗ് & ജിയോളജി, തിരുവനന്തപുരം.
3. തഹസീൽദാർ, കണ്ടൽക്കുന്ന് ചിറയിൻ കീഴ്
4. വില്ലേജ് ഓഫീസർ, കണ്ടൽക്കുന്ന്
5. ജില്ലാ ജിയോളജിസ്റ്റ്, തിരുവനന്തപുരം.
6. MD & CEO, VISL.

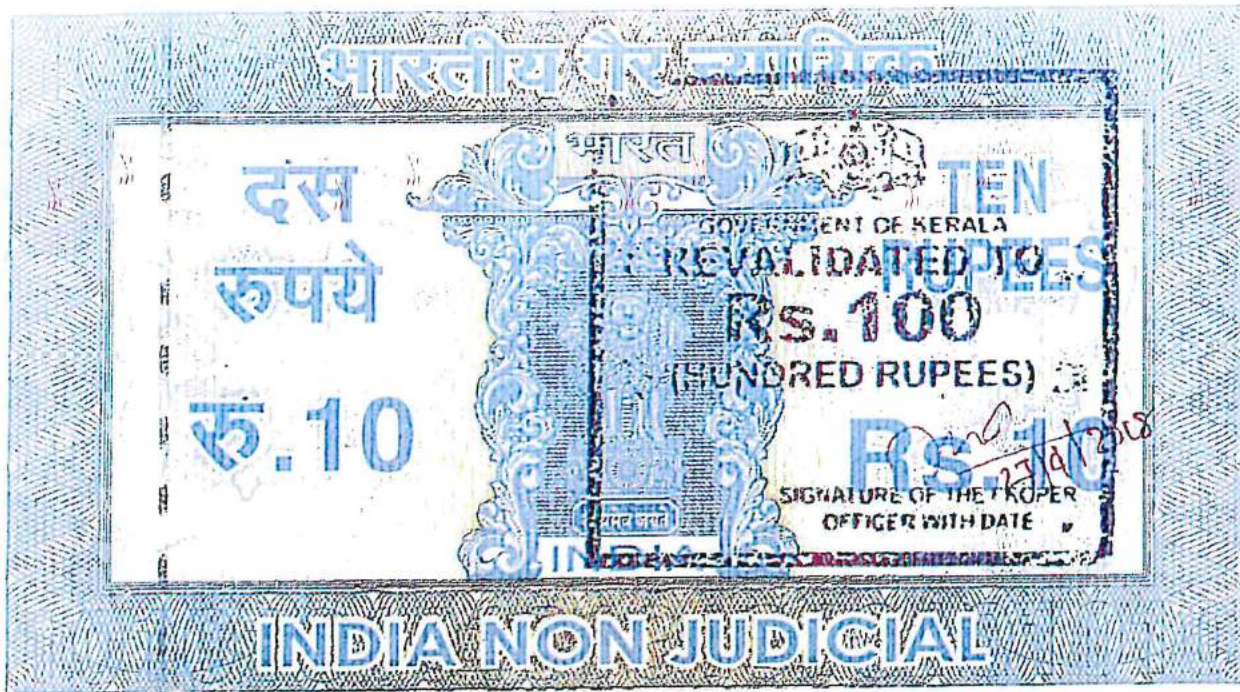
അംഗീകാരത്തോടെ




ഡെപ്യൂട്ടി കളക്ടർ (എൽ.ആർ)



R-7



കേരളം KERALA

AFFIDAVIT

26AA 834156

I, Rajesh Jha, aged 52 years, son of Krishna Chandra Jha,
 Chief Executive Officer, M/s Adani Vizhinjam Port Private Limited
 2nd Floor, Vipanchika Tower, Thycaud Thiruvananthapuram Kerala
 695014 and residing at Apartment No: 12G and 13G, Heera
 Golden Hills, Kanakanagar, Near Museum, Vellayambalam,
 Thiruvananthapuram District- 695005 do hereby solemnly affirm and
 state before the Director of Mining and Geology as follows:-

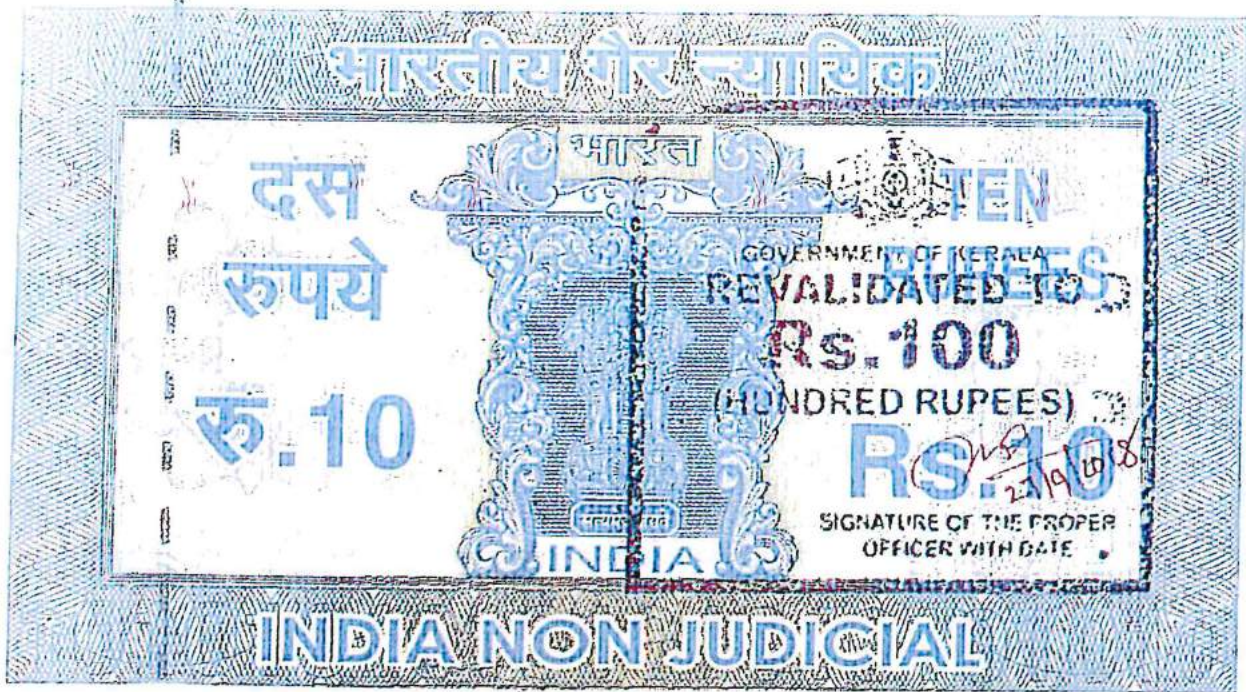


I am the Chief Executive Officer of M/s Adani Vizhinjam Port
 Private Limited. I am duly empowered to sign and submit the
 documents in connection with the Company. The copy of Board
 Resolution empowering me is enclosed.

KANTHARAJ K.
 RQP/GOA/13012000/A

T.N. OMANA
 Advocate & Notary
 Thiruvananthapuram Revenue District
 BALAKRISHNAN NAIR
 Vendor, Vanchigoor
 Thiruvananthapuram





കേരളം KERALA

26AA 834157

2. I hereby swear that, fencing will be provided surrounding for preventing accidents by falling of human being, animals and materials into the quarry in an area 4.0965 Ha comprised in Resurvey No. 555/2 Block no. 37, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District

3. I also swear that all effective preventive measures will be taken by me for the safety of labours as well as general public.

Date: 12/06/18.

Witness

1. Sudheesh Man

2. Anan Mohan



Signature and address

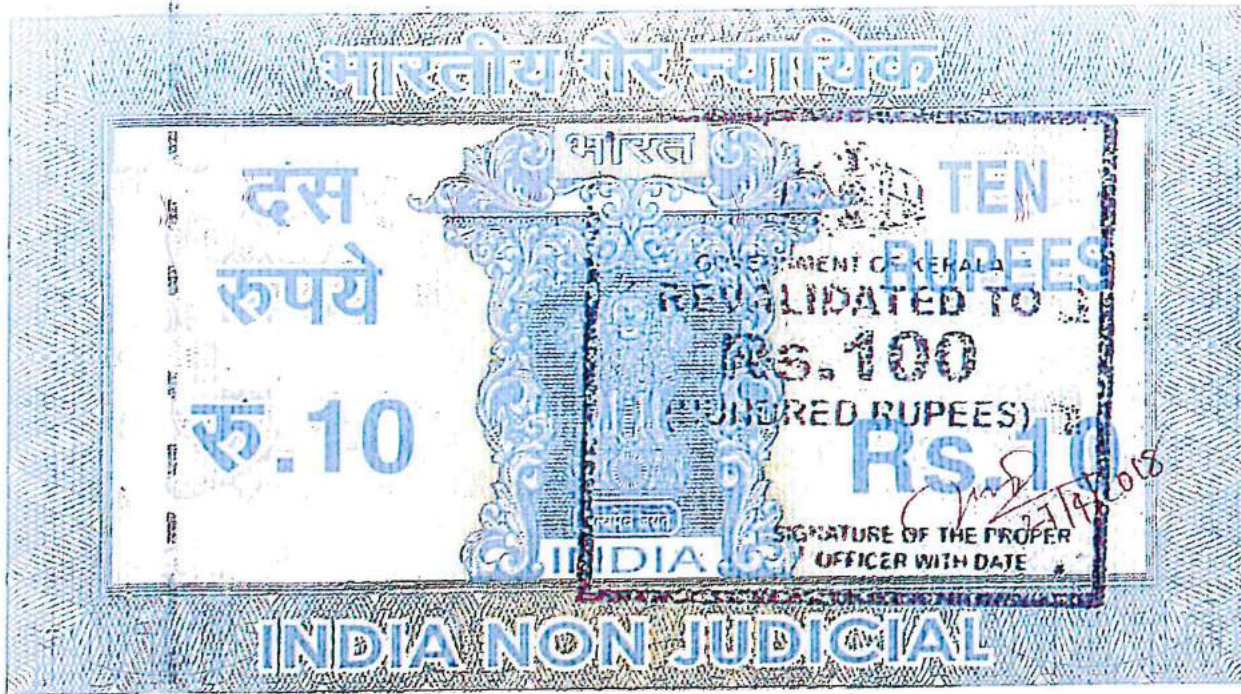
Sworn and signed before me
T.N. OMANA
2018

T.N. OMANA
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State South India

N. BALAKRISHNAN NAR
Vendor, Vanchigoor
Thiruvananthapuram



5-4 MAY 2018



കേരളം KERALA

AFFIDAVIT

26AA 834154

I, **Rajesh Jha**, aged **52** years, son of **Krishna Chandra Jha**,
Chief Executive Officer, M/s Adani Vizhinjam Port Private Limited
2nd Floor, Vipanchika Tower, Thycaud Thiruvananthapuram Kerala
695014 and residing at Apartment No: 12G and 13G, Heera
Golden Hills, Kanakanagar, Near Museum, Vellayambalam,
Thiruvananthapuram District- 695005 do hereby solemnly affirm and
state before the Director of Mining and Geology as follows:-

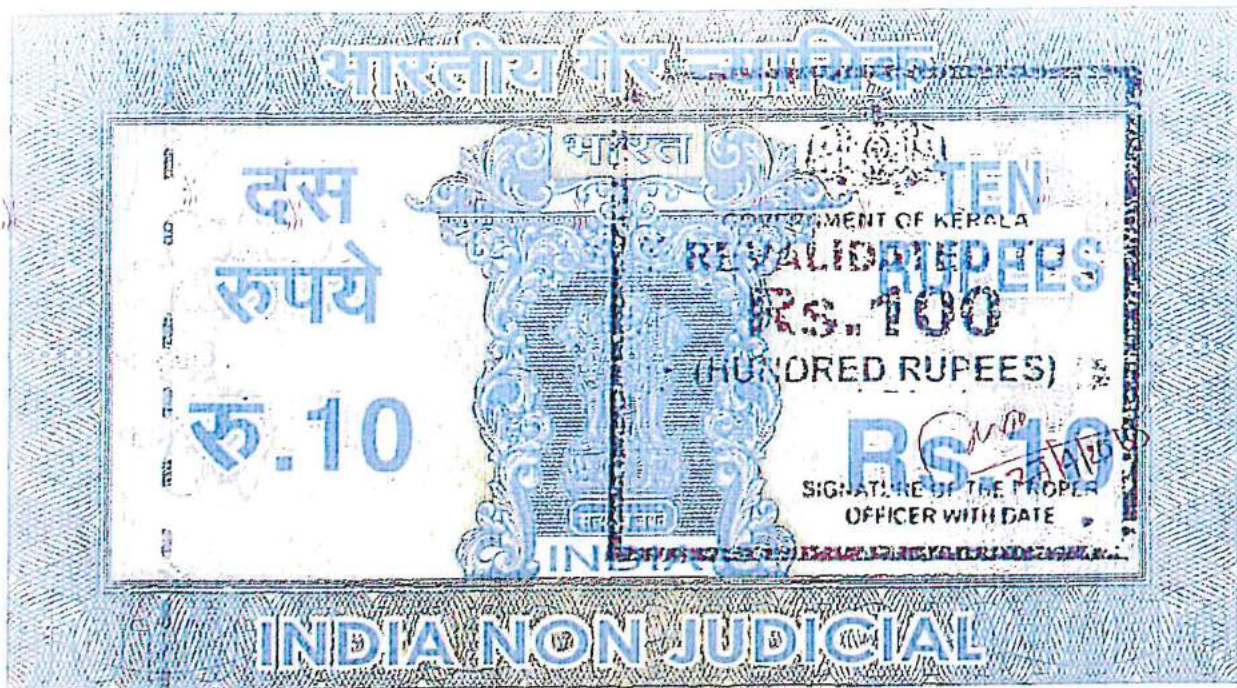
1. I am the Chief Executive Officer of M/s Adani Vizhinjam Port Private Limited. I am duly empowered to sign and submit the documents in connection with the Company. The copy of Board Resolution empowering me is enclosed.

T.N. Chandra
Advocate & Notary
Thiruvananthapuram Revenue District
Kerala State
Vendor, Panthevoor
Thiruvananthapuram

ceo
Adani

Siraj P
Adani

Rajesh
4 MAY 2018
DIRECTORATE OF MINING & GEOLOGY
GOVERNMENT OF KERALA
THIRUVANANTHAPURAM



2. I will take proper care in the management of environment Ecology and waste disposal required by the concerned authorities while

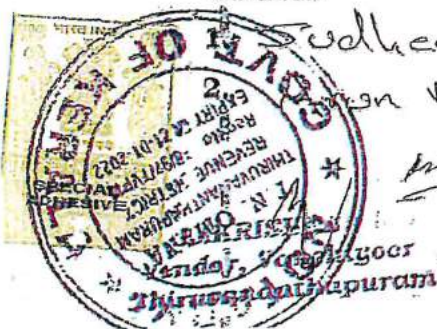
carrying our quarrying operations in an area 4.0965 Ha comprised in Resurvey No. 555/2 Block no. 37, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.

3. I undertake not to cause any environmental problems due to the mining activity and I will not use the explosives in a hazardous way for giving chance of any complaint from neighbours. I further undertake to reclaim the mining pits by using over burden and top soil available in the land

Date: 12/06/2018

Signature and address

Witness



26AA 834158

[illegible]

1. I am the Chief Executive Officer of M/s Adani Vizhinjam Port Private Limited. I am duly empowered to sign and submit the documents in connection with the Company. The copy of Board Resolution empowering me is enclosed.

7. N. BALAKRISHNAN
Advocate
Vanchinathanpuram
Kerala
N. BALAKRISHNAN, TALL
Vendor, Vanchinathanpuram
Thiruvananthapuram

KANTHARAJ K.
RQP/GOA/130/2000/A

4 MAY 2018



കേരളം KERALA

26AA 834159

2. The firm has filed up to date Income Tax Return
3. Paid the Income Tax assessed thereon.
4. Paid the Income tax on the basis of Self-assessment as provided in the Income Tax Act, 1961; and
5. What is stated above is true to the best of my knowledge and belief.

Date: 12/06/2018.

Signature and address

Witness

1. Sudheesh. m
2. Arun Mohan



T.N. OMAIA
Advocate
Thiruvananthapuram

N. BALAKRISHNAN
Vendor, Vanchiyoor
Thiruvananthapuram

4 MAY 2018





CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE MINING PLANS

(Under Rule 22C of Mineral Concession Rules, 1960)

Shri KANTHARAJ K resident

of SURLA - GOA, son

of KEMPANNA K, having given satisfactory

evidence of his qualifications and experience is hereby granted recognition
under Rule 22C of the Mineral Concession Rules, 1960 as a Qualified
Person to prepare Mining Plans.

His registration number is RQP/GOA/130/2000/A



This recognition is valid for a period of two years

ending 5.10.2002

Regional Controller of Mines
Indian Bureau of Mines
Goa Regional Office

Place : Margao

Date : 6.10.2000.

KANTHARAJ K
RQP/GOA/130/2000/A



दि. 21/10/22 तक अर्जोपस्थापित किया गया
 Received upto 21/10/22
 28/10/22
 क्षेत्रीय निरीक्षक
 Regional Controller of Mines
 भारतीय खनन विभाग
 Indian Bureau of Mines
 अहमदाबाद - गेवा
 Ahmedabad - Gueva



दि. 21/10/22 तक अर्जोपस्थापित किया गया
 Received upto 21/10/22
 28/10/22
 क्षेत्रीय निरीक्षक
 Regional Controller of Mines
 भारतीय खनन विभाग
 Indian Bureau of Mines
 अहमदाबाद - गेवा
 Ahmedabad - Gueva



TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF RESERVES ESTIMATION OF
NAGAROOR QUARRY OF M/s. ADANI VIZHINJAM PORT PVT. LTD.

ABSTRACT - CROSS SECTION WISE

BETN. CR. SEC.	AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
E : 2050	875.00	50.00	43,750.00	2.50	109,375.00	109,375.00	-
E : 2100	2,475.00	50.00	123,750.00	2.50	309,375.00	309,375.00	-
E : 2150	4,600.00	50.00	230,000.00	2.50	575,000.00	575,000.00	-
E : 2200	4,640.00	50.00	232,000.00	2.50	580,000.00	580,000.00	-
E : 2250	1,640.00	50.00	82,000.00	2.50	205,000.00	205,000.00	-
E : 2300							
TOTAL	14,230.00	50.00	711,500.00	2.50	1,778,750.00	1,778,750.00	-

ABSTRACT - BENCH WISE

BENCH RL	AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100 %	WASTE @ 0 %
106.00	165.00	50.00	8,250.00	2.50	20,625.00	20,625.00	-
100.00	535.00	50.00	26,750.00	2.50	66,875.00	66,875.00	-
94.00	670.00	50.00	33,500.00	2.50	83,750.00	83,750.00	-
88.00	925.00	50.00	46,250.00	2.50	115,625.00	115,625.00	-
82.00	1,170.00	50.00	58,500.00	2.50	146,250.00	146,250.00	-
76.00	1,275.00	50.00	63,750.00	2.50	159,375.00	159,375.00	-
70.00	1,275.00	50.00	63,750.00	2.50	159,375.00	159,375.00	-
64.00	1,255.00	50.00	62,750.00	2.50	156,875.00	156,875.00	-
58.00	1,235.00	50.00	61,750.00	2.50	154,375.00	154,375.00	-
52.00	1,325.00	50.00	66,250.00	2.50	165,625.00	165,625.00	-
46.00	1,155.00	50.00	57,750.00	2.50	144,375.00	144,375.00	-
40.00	1,075.00	50.00	53,750.00	2.50	134,375.00	134,375.00	-
34.00	1,180.00	50.00	59,000.00	2.50	147,500.00	147,500.00	-
28.00	990.00	50.00	49,500.00	2.50	123,750.00	123,750.00	-
TOTAL	14,230.00	50.00	711,500.00	2.50	1,778,750.00	1,778,750.00	-

M. KANTHARAJ K.

TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF PRODUCTION PROGRAMME FOR 1ST YEAR
OF NAGAROOOR QUARRY OF M/s. ADANI VIZHINJAM PORT PVT. LTD.

ABSTRACT - CROSS SECTION WISE

BETN. CR. SEC.	AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100%	WASTE @ 0 %
E : 2050	12.50	50.00	625.00	2.50	1,562.50	1,562.50	-
E : 2100	225.00	50.00	11,250.00	2.50	28,125.00	28,125.00	-
E : 2150	945.00	50.00	47,250.00	2.50	118,125.00	118,125.00	-
E : 2200	1,372.50	50.00	68,625.00	2.50	171,562.50	171,562.50	-
E:2250	640.00	50.00	32,000.00	2.50	80,000.00	80,000.00	-
TOTAL	3,195.00	50.00	159,750.00	2.50	399,375.00	399,375.00	-

ABSTRACT - BENCH WISE

BENCH RL	AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100%	WASTE @ 0 %
106.00	165.00	50.00	8,250.00	2.50	20,625.00	20,625.00	-
100.00	535.00	50.00	26,750.00	2.50	66,875.00	66,875.00	-
94.00	670.00	50.00	33,500.00	2.50	83,750.00	83,750.00	-
88.00	925.00	50.00	46,250.00	2.50	115,625.00	115,625.00	-
82.00	900.00	50.00	45,000.00	2.50	112,500.00	112,500.00	-
TOTAL	3,195.00	250.00	159,750.00	12.50	399,375.00	399,375.00	-



Antony

KANTHARAJ K.
CORPORATE ENGINEER

**TABLE SHOWING THE DETAILS OF CALCULATION OF AREA, VOLUME AND TONNAGE OF PRODUCTION PROGRAMME FOR 2ND YEAR
OF NAGAROOR QUARRY OF M/s. ADANI VIZHINJAM PORT PVT. LTD.**

BETN. CR. SEC.	AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100%	WASTE @ 0 %
E : 2050	192.50	50.00	9,625.00	2.50	24,062.50	24,062.50	-
E : 2100	477.50	50.00	23,875.00	2.50	59,687.50	59,687.50	-
E : 2150	762.50	50.00	38,125.00	2.50	95,312.50	95,312.50	-
E : 2200	725.00	50.00	36,250.00	2.50	90,625.00	90,625.00	-
E:2250	247.50	50.00	12,375.00	2.50	30,937.50	30,937.50	-
TOTAL	2,405.00	50.00	120,250.00	2.50	300,625.00	300,625.00	-

ABSTRACT - BENCH WISE

BENCH RL	AV. AREA	Sec Int.	VOLUME	Sp. Gr. / Bu. Dn.	TONNAGE	MINEABLE @ 100%	WASTE @ 0 %
82.00	270.00	50.00	13,500.00	2.50	33,750.00	33,750.00	-
76.00	1,175.00	50.00	58,750.00	2.50	146,875.00	146,875.00	-
70.00	960.00	50.00	48,000.00	2.50	120,000.00	120,000.00	-
TOTAL	2,405.00	50.00	120,250.00	2.50	300,625.00	300,625.00	-





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METAMORPHOSISSM

LABORATORY PRIVATE LIMITED

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

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ANNEXURE NO. 14

TEST REPORT

No.20181273

AMBIENT AIR QUALITY DATA

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Quarry Area - 3.6630 Ha
3. Name of the project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Month of sampling : May-2018.
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO ₂ µg /m ³	NO ₂ µg /m ³	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	Ammonia µg /m ³
Sample no.	08182826	08182825	0118	P10589269	--
Date of Sampling	06.05.2018	8.10	11.01	16.18	15.73
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	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

[Signature]
Laboratory Head
Dr. Shanth A. Thimmaiah



[Signature]
KANTHARAJ K.
AQ/1805/139/0000/A



JAS-ANZ



TC-5841

"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.



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TEST REPORT

No.20181370

AMBIENT AIR QUALITY DATA

1. Name of the Project : Building Stone Quarry at Nagaroor village (kadavila)
2. Location Name : Near Human Settlement @ 330 Mtrs
3. Name of project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State
4. Month of sampling : May-2018
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO ₂ µg /m ³	NO ₂ µg /m ³	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	Ammonia µg /m ³
Sample no.	0818210B	0818209B	0818207B	0818208B	-
Date of Sampling	06.05.2018	06.05.2018	06.05.2018	06.05.2018	-
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	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

(Signature)

Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

IAS-ANZ



ISO 9001:2015
OHSAS 18001:2007

"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.



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TEST REPORT

No.20181274

AMBIENT AIR QUALITY DATA

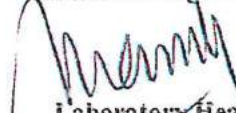
1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 450 Mtrs (Kadavila Bus stop)
3. Name of the project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Month of sampling : May-2018
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO ₂ µg /m ³	NO ₂ µg /m ³	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	Ammonia µg /m ³
Sample no.	08182828	08182827	0070	PT0570034	--
Date of Sampling	08182828	08182827	0070	PT0570034	--
06.05.2018	7.67	12.06	24.12	16.49	--
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	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


Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

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TEST REPORT

No.20181275

AMBIENT AIR QUALITY DATA

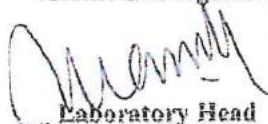
1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 900 Mtrs
3. Name of the project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Month of sampling : May-2018
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Ammonia µg/m ³
Sample no.	08182830	08182829	0256	PT0628886	--
Date of Sampling	06.05.2018	8.10	12.69	23.36	16.18
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP/44 - Gravimetric method	MLPL/SOP/41 - Indophenol blue method
NAAQ Standards	80	80	100	60	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



Laboratory Head
Dr. Shanth A. Thimmaiah



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TEST REPORT

No.20181276

AMBIENT AIR QUALITY DATA

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 825 Mtrs
3. Name of the project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State,
4. Month of sampling : May-2018
5. Duration of sampling : 8 Hours
6. Date of reporting : 30.05.2018

Parameter	SO ₂ µg/m ³	NO ₂ µg/m ³	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	Ammonia µg/m ³
Sample no.	08182832	08182831	0123	PT0569932	-
Date of Sampling	06.05.2018	8.52	11.85	22.74	15.72
Protocol / Method	IS:5182 (Part 2) - Improved West and Gaeke method	IS:5182 (Part 6) - Jacob and Hochheiser method	IS:5182 (Part 23) - Gravimetric method	MLPL/SOP44 - Gravimetric method	MLPL/SOP41 - Indophenol blue method
NAAQ Standards	80	80	100	60	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 **

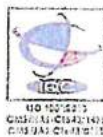
Authorized Signatory

(Signature)
Laboratory Head
Dr. Shanth A. Thimmaiah



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TEST REPORT

ANNEXURE NO. 15

No.20181265

ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 450 Mtrs(Kadavila Bus stop)- Open well water
3. Name of Project Proponent : M/s. Adani Yezhinjan Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Ground water
6. Sample Number : 08182970
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

9. Date of Reporting		20.05.2018		Standard IS 10500: 2012 (2 nd Revision) mdt.1		
Sr. No.	Parameters	Protocol	Unit	Result	Acceptable Limit	Permissible limit in the absence of alternate source
A.	PHYSICAL PARAMETERS					
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH @ 25°C	IS:3025 (Part 11)	--	6.33	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	BDL	1	5
B.	CHEMICAL PARAMETERS					
4.	Conductivity @ 25°C	IS:3025 (Part 14)	µS/cm	328.0	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	183.6	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO ₃	IS: 3025 (Part 21)	mg/L	95.12	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	31.58	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	3.93	30	100
10.	Total Alkalinity as CaCO ₃	IS:3025 (Part 23)	mg/L	95.88	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	0.67	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	19.0	250	1000
13.	Sulphate as SO ₄	IS 3025 (Part 24)	mg/L	4.42	200	400
14.	Nitrate as NO ₃	IS 3025 (Part 60)	mg/L	3.04	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand (COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4500-H ₂ B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
C.	MICROBIOLOGICAL PARAMETERS					
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note: The tests marked with an * are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL: Below Detection Limit; NA= Not Analysed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory

Shanth A. Thimmaiah
Laboratory Head

Dr. Shanth A. Thimmaiah



KANTHARAJ K.
REP/COA/30/2000/A



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TEST REPORT

No.20181266

ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 900 Mtr towards West- Open well water
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila),
Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Ground water
6. Sample Number : 08182971
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

9. Date of Reporting		30.05.2018		Standard IS 10500: 2012 (2 nd Revision) mdt.1		
Sr. No.	Parameters	Protocol	Unit	Result	Acceptable Limit	Permissible limit in the absence of alternate source
A. PHYSICAL PARAMETERS						
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	--	6.44	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	BDL	1	5
B. CHEMICAL PARAMETERS						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	79.0	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	62.0	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO ₃	IS: 3025 (Part 21)	mg/L	10.12	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	2.42	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	1.9	30	100
10.	Total Alkalinity as CaCO ₃	IS:3025 (Part 23)	mg/L	14.28	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	0.69	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	7.60	250	1000
13.	Sulphate as SO ₄	IS 3025 (Part 24)	mg/L	4.52	200	400
14.	Nitrate as NO ₃	IS 3025 (Part 60)	mg/L	0.60	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4500-H ₂ B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
C. MICROBIOLOGICAL PARAMETERS						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note: The tests marked with an * are not accredited by NABL. The results & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL: Below Detection Limit; NA= Not Analysed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory

Shanth A. Thimmaiah
Laboratory Head

Dr. Shanth A. Thimmaiah



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TEST REPORT

No.20181267

ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila).
2. Location Name : Near Human Settlement @ 330 Mtr towards NNW - open well water
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Ground water
6. Sample Number : 08182972
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

Sr. No.	Parameters	Protocol	Unit	Result	Standard IS 10500: 2012 (2 nd Revision) mdt.1	
					Acceptable Limit	Permissible limit in the absence of alternate source
A.	PHYSICAL PARAMETERS					
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	--	6.94	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	1.2	1	5
B.	CHEMICAL PARAMETERS					
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	32.9	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	26.8	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO ₃	IS: 3025 (Part 21)	mg/L	10.12	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	3.24	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	BDL	30	100
10.	Total Alkalinity as CaCO ₃	IS:3025 (Part 23)	mg/L	14.28	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	BDL	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	9.50	250	1000
13.	Sulphate as SO ₄	IS 3025 (Part 24)	mg/L	1.36	200	400
14.	Nitrate as NO ₃	IS 3025 (Part 60)	mg/L	1.06	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4500-H+B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
C.	MICROBIOLOGICAL PARAMETERS					
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note: The tests marked with an * are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL: Below Detection Limit; NA= Not Analysed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory

(Signature)
Laboratory Head

Dr. Shanthi A. Thimmaiah



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TEST REPORT

No.20181268

ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Near Human Settlement @ 825 Mtr towards NNE- Open well water
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila),
Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Ground water
6. Sample Number : 08182973
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

9. Date of Reporting		30.03.2018		Standard IS 10500: 2012 (2 nd Revision) mdt. I		
Sr. No.	Parameters	Protocol	Unit	Result	Acceptable Limit	Permissible limit in the absence of alternate source
A. PHYSICAL PARAMETERS						
1.	Colour	IS:3025 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	--	8.06	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	9.2	1	5
B. CHEMICAL PARAMETERS						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	129.5	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/l.	94.4	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/l.	-	Not Specified	Not Specified
7.	Total Hardness as CaCO ₃	IS: 3025 (Part 21)	mg/l.	54.64	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/l.	17.81	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/l.	2.45	30	100
10.	Total Alkalinity as CaCO ₃	IS:3025 (Part 23)	mg/l.	59.16	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/l.	BDL	1	1.5
12.	Chloride as Cl	IS:3025 (Part 32)	mg/l.	7.60	250	1000
13.	Sulphate as SO ₄	IS 3025 (Part 24)	mg/l.	8.31	200	400
14.	Nitrate as NO ₃	IS 3025 (Part 60)	mg/l.	BDL	45	No Relaxation
15.	Dissolved Oxygen	IS3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/l.	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition. 4500-H+B	mg/l.	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
C. MICROBIOLOGICAL PARAMETERS						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note: The tests marked with an * are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL: Below Detection Limit; NA= Not Analyzed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory

(Signature)
Laboratory Head

Dr. Shanth A. Thimmaiah



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TEST REPORT

No.20181269

ANALYSIS REPORT OF WATER QUALITY

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Vamanapuram River water (Near Sri. Krishna Temple)-Surface water
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Surface water
6. Sample Number : 08182974
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

9. Date of Reporting		: 30.05.2018		Standard IS 10500: 2012 (2 nd Revision)mdt.1		
Sr. No.	Parameters	Protocol	Unit	Result	Acceptable Limit	Permissible limit in the absence of alternate source
A. PHYSICAL PARAMETERS						
1.	Colour	IS:3023 (Part 4)	Hazen	-	5	15
2.	pH@ 25°C	IS:3025 (Part 11)	--	7.83	6.5 to 8.5	No Relaxation
3.	Turbidity	IS:3025 (Part 10)	NTU	BDL	1	5
B. CHEMICAL PARAMETERS						
4.	Conductivity@ 25°C	IS:3025 (Part 14)	µS/cm	90.0	Not Specified	Not Specified
5.	Total Dissolved solids	IS:3025 (Part-16)	mg/L	36.4	500	2000
6.	Total Suspended Solids	IS 3025 (Part 17)	mg/L	-	Not Specified	Not Specified
7.	Total Hardness as CaCO ₃	IS: 3025 (Part 21)	mg/L	20.24	200	600
8.	Calcium as Ca	IS 3025 (Part 40)	mg/L	6.47	75	200
9.	Magnesium as Mg	IS 3025 (Part 46)	mg/L	1.0	30	100
10.	Total Alkalinity as CaCO ₃	IS:3025 (Part 23)	mg/L	42.84	200	600
11.	Fluorides as F	IS 3025 (Part 60)	mg/L	0.92	1	1.5
12.	Chlorides as Cl	IS:3025 (Part 32)	mg/L	11.40	250	1000
13.	Sulphate as SO ₄	IS 3025 (Part 24)	mg/L	1.26	200	400
14.	Nitrate as NO ₃	IS 3025 (Part 60)	mg/L	0.89	45	No Relaxation
15.	Dissolved Oxygen	IS:3025 (Part 38)	mg/L	-	Not Specified	Not Specified
16.	Chemical Oxygen Demand(COD)	IS 3025 (part 58): 2006 (RA 2012)	mg/L	BDL	Not Specified	Not Specified
17.	Biochemical Oxygen Demand 3 d 27°C (BOD)	APHA 22nd Edition, 4500-H ₂ B	mg/L	BDL	Not Specified	Not Specified
18.	Iron as Fe	IS 3025 (Part 53)	mg/L	BDL	0.3	No Relaxation
C. MICROBIOLOGICAL PARAMETERS						
19.	Coliform organism/100ml*	IS:1622-1981	MPN	NA	Shall not be detected in any 100 ml sample.	
20.	E.Coli Bacteria/100ml*	IS:1622-1981	--	NA		

Note : The tests marked with an * are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL: Below Detection Limit; NA= Not Analysed

INFERENCE	As per IS Standards Report Status: All tested parameters are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory

(Signature)
Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

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TEST REPORT

ANNEXURE NO. 16.

No.20181277

AMBIENT NOISE MEASUREMENT

1. Name of the project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location name : Quarry Area - 3.6630 Ha
3. Name of the project proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Measurement : 14.05.2018
5. Name of instrument : Digital sound level meter Equinox & EQ-107
6. Date of reporting : 30.05.2018

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Quarry Area - 3.6630 Ha	08182987	IS:9989 -1981	68.2	75.6	70.0	-	-	-


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
(D)	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 higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

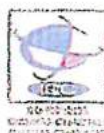
End of Report

Authorized Signatory


Laboratory Head
Dr. Shanth A. Thimmiah



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TEST REPORT

No.20181278

AMBIENT NOISE MEASUREMENT

1. Name of the project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location name : Near Human Settlement @ 450 Mtrs (Kadavila Bus stop)
3. Name of the project proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Measurement : 14.05.2018
5. Name of instrument : Digital sound level meter Equinox & EQ-107
6. Date of reporting : 30.05.2018

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 450 Mtrs (Kadavila Bus stop)	08182986	IS:9989-1981	69.8	79.3	74.3	-	-	-

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
(D)	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 higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory

Laboratory Head
Dr. Shanth A. Thimmaiah



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TEST REPORT

No.20181279

AMBIENT NOISE MEASUREMENT

1. Name of the project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location name : Near Human Settlement @ 900 Mtrs
3. Name of the project proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Measurement : 14.05.2018
5. Name of instrument : Digital sound level meter Equinox & EQ-107
6. Date of reporting : 30.05.2018

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 900 Mtrs	08182985	IS:9989-1981	64.3	78.3	70.3	-	-	-

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
(D)	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 higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory

Shanth A. Thimmiah
Laboratory Head
Dr. Shanth A. Thimmiah



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TEST REPORT

No.20181280

AMBIENT NOISE MEASUREMENT

1. Name of the project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location name : Near Human Settlement @ 330 Mtr
3. Name of the project proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Measurement : 14.05.2018
5. Name of instrument : Digital sound level meter Equinox & EQ-107
6. Date of reporting : 30.05.2018

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 330 Mtr	08182984	IS:9989-1981	60.0	76.4	70.8	-	-	-

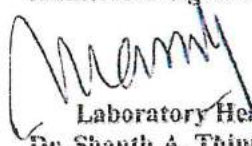
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

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 higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory


Laboratory Head
Dr. Shanth A. Thimmaiah



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TEST REPORT

No.20181281

AMBIENT NOISE MEASUREMENT

1. Name of the project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location name : Near Human Settlement @ 825 Mtrs
3. Name of the project proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Measurement : 14.05.2018
5. Name of instrument : Digital sound level meter Equinox & EQ-107
6. Date of reporting : 30.05.2018

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Near Human Settlement @ 825 Mtrs	08182983	IS:9989-1981	60.1	78.9	74.1	-	-	-

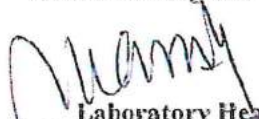
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

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 higher than the permissible limits applicable to industrial area. Employees exposed /working advised to wear PPE's.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory


Laboratory Head
Dr. Shanth A. Thimmaiah



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ANNEXURE NO. 17.

TEST REPORT

No.20181270

ANALYSIS REPORT OF SOIL SAMPLE

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Soil @ Quarry Area -3.6630 Ha
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila),
Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Soil Sample
6. Sample Number : 08182978
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

Sr. No.	Parameters	Protocol	Unit	Result
Sample Number				
1	pH @ 25°C	IS:2720 (Part 26)	--	5.70
2	Conductivity @ 25°C	IS:1476 :2000	µs/cm	20.4
3	Total Organic Matter	IS:2720 (Part 22)	%	1.13
4	Moisture	IS:2720 (Part II)	%	20.95
5	Available Nitrogen as N	IS:14686:1999	%	5.04
6	Available potassium as K	MLPL/SOP/32	Kg/ha	-
7	Available Phosphorus as PO ₄	IS:10158-1982	%	BDL
8	Sand*	IS:1498-1970	%	-
9	Silt*	IS:1498-1970	%	-
10	Clay*	IS:1498-1970	%	-
11	Soil Type	Nil	Nil	-

Note: The tests marked with an * are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL= Below Detection Limit; NA= Not Analysed

INFERENCE	Report Status: All parameters meet the requirements and are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory

(Signature)
Laboratory Head

Dr. Shanth A. Thimmaiah



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TEST REPORT

No.20181271

ANALYSIS REPORT OF SOIL SAMPLE

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Soil Near Human Settlement @ 450 Mtrs(Kadavila Bus stop)
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila), Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Soil Sample
6. Sample Number : 08182979
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

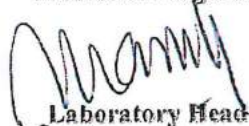
Sr. No.	Parameters	Protocol	Unit	Result
Sample Number				
1	pH @ 25°C	IS:2720 (Part 26)	--	5.61
2	Conductivity @ 25°C	IS:1476 :2000	µs/cm	70.0
3	Total Organic Matter	IS:2720 (Part 22)	%	0.60
4	Moisture	IS:2720 (Part II)	%	16.51
5	Available Nitrogen as N	IS:14686:1999	%	3.36
6	Available potassium as K	MLPL/SOP/32	Kg/ha	-
7	Available Phosphorus as PO ₄	IS:10158-1982	%	BDL
8	Sand*	IS:1498-1970	%	-
9	Silt*	IS:1498-1970	%	-
10	Clay*	IS:1498-1970	%	-
11	Soil Type	Nil	Nil	-

Note: The tests marked with an * are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL= Below Detection Limit; NA= Not Analysed

INFERENCE	Report Status: All parameters meet the requirements and are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory


Laboratory Head

Dr. Shanth A. Thimmiah



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TEST REPORT

No.20181272

ANALYSIS REPORT OF SOIL SAMPLE

1. Name of the Project : Building Stone Quarry at Nagaroor village (Kadavila)
2. Location Name : Soil Near Human Settlement @ 330 Mtr
3. Name of Project Proponent : M/s. Adani Vizhinjam Port Pvt. Ltd., Nagaroor Village (Kadavila),
Chirayinkeezhi Taluk, Thiruvananthapuram District, Kerala State.
4. Date of Sampling : 10.05.2018
5. Particulars of Sample Collected : Soil Sample
6. Sample Number : 08182980
7. Date of Sample Receipt : 16.05.2018
8. Analysis Started On : 16.05.2018
9. Date of Reporting : 30.05.2018

Sr. No.	Parameters	Protocol	Unit	Result
Sample Number				
1	pH @ 25°C	IS:2720 (Part 26)	--	6.11
2	Conductivity @ 25°C	IS:1476 :2000	µs/cm	98.8
3	Total Organic Matter	IS:2720 (Part 22)	%	0.99
4	Moisture	IS:2720 (Part II)	%	25.77
5	Available Nitrogen as N	IS:14686:1999	%	2.52
6	Available potassium as K	MLPL/SOP/32	Kg/ha	-
7	Available Phosphorus as PO ₄	IS:10158-1982	%	0.08
8	Sand*	IS:1498-1970	%	-
9	Silt*	IS:1498-1970	%	-
10	Clay*	IS:1498-1970	%	-
11	Soil Type	Nil	Nil	-

Note: The tests marked with an * are not accredited by NABL. The result & inference pertains to the sample tested only and parameters as per the requisition of the client. BDL= Below Detection Limit; NA= Not Analysed

INFERENCE	Report Status: All parameters meet the requirements and are within acceptable limits.
Sample Collected by	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru

** End of Report **

Authorised Signatory

[Signature]
Laboratory Head
Dr. Shanth A. Thimmalah



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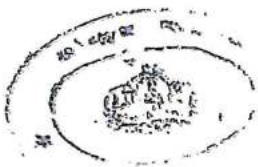
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No: 1099/18

അപേക്ഷാ സ്ഥലം ഫീൽഡിൽ പ്രത്യേകം അടയാളപ്പെടുത്തിയിരിക്കുന്നു എന്ന വില്ലേജ് ഓഫീസറുടെ സർട്ടിഫിക്കറ്റ് (Demarcation Certificate)

ശ്രീ/ശ്രീമതി CEO അദാനി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് (പേരും വിലാസവും രേഖപ്പെടുത്തുക) എന്നയാളുടെ _____ സ്ഥാപനത്തിന്റെ/കമ്പനിയുടെ മാനേജിങ് പാർട്ണറുടെ/ മാനേജിങ് ഡയറക്ടറുടെ പേരിൽ _____ സബ് രജിസ്ട്രാഫീസിൽ _____ നമ്പറിൽ രജിസ്റ്റർ ചെയ്ത ആധാരപ്രകാരം ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ 555/2 സർവ്വേ നമ്പർ പ്രകാരമുള്ള 04-8779 ഹെക്ടർ സർക്കാർ ഭൂമി (കുടുതൽ സർവ്വേ നമ്പറുകൾ എഴുതാനുണ്ടെങ്കിൽ താഴെ പട്ടികയിൽ വിവരിച്ചിട്ടുള്ള ഭൂമി എന്ന് രേഖപ്പെടുത്തി വീവരങ്ങൾ രേഖപ്പെടുത്താനുണ്ടെങ്കിൽ താഴെ പട്ടികയിൽ കൊടുക്കുക) ഭൂമിയിൽ ക്വാറിയിങ് ലീസിനായി അപേക്ഷിക്കാൻ ഉദ്ദേശിച്ചിരിക്കുന്ന 3.6630 ഹെക്ടർ ഭൂമി പ്രത്യേകം അളന്ന് /വേർതിരിച്ച് ആയതിന്റെ അതിർത്തികളിൽ കോൺക്രീറ്റ്/കരിങ്കല്ല്/അയേൺ പില്ല്വുകൾ സ്ഥാപിച്ച് പ്രത്യേകം വേർതിരിച്ചിട്ടുണ്ടെന്ന് സാക്ഷ്യപ്പെടുത്തുന്നു.

ഈ സർട്ടിഫിക്കറ്റ് മൈനിങ് & ജിയോളജി, തിരുവനന്തപുരം ഹാജരാക്കാൻ വേണ്ടി മാത്രം.



[Handwritten signature]
14.5.18
District Officer
Kollam

[Handwritten signature]
KANTHARAJ K.
RGP/ISOA/130/2000/A



No. 1100/18

നോൺ അസെൻമെന്റ് സർട്ടിഫിക്കറ്റ്

ശ്രീ/ശ്രീമതി CEO അടങ്ങി വിഴിഞ്ഞം പോർട്ട് പ്രൈവറ്റ് ലിമിറ്റഡ് (പേരും വിലാസവും രേഖപ്പെടുത്തുക) എന്നയാളുടെ _____ സ്ഥാപനത്തിന്റെ/കമ്പനിയുടെ മാനേജിങ് പാർട്ണറുടെ/ മാനേജിങ് ഡയറക്ടറുടെ പേരിൽ _____ സബ് രജിസ്ട്രാഫീസിൽ _____ നമ്പറിൽ രജിസ്റ്റർ ചെയ്ത ആധാരപ്രകാരം ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ 555/2 സർവ്വേ നമ്പർ പ്രകാരമുള്ള 94.8779 ഹെക്ടർ സർക്കാർ ഭൂമി (കൂടുതൽ സർവ്വേ നമ്പരുകൾ എഴുതാനുണ്ടെങ്കിൽ താഴെ പട്ടികയിൽ വിവരിച്ചിട്ടുള്ള ഭൂമി എന്ന് രേഖപ്പെടുത്തി വിവരങ്ങൾ രേഖപ്പെടുത്താനുണ്ടെങ്കിൽ താഴെ പട്ടികയിൽ കൊടുക്കുക). റവന്യൂ വകുപ്പ് മറ്റ് പ്രത്യേക ആവശ്യങ്ങൾക്ക് പതിച്ചു കൊടുത്തതല്ലെന്നും റിസർവ് വനത്തിൽ ഉൾപ്പെടുന്നതല്ലെന്നും ടി വകുപ്പിൻമേൽ കോടതി/ബാങ്ക് അറ്റാച്ച്മെന്റ് ഇല്ലായെന്നും ടി ഭൂമി ആദിവാസി വിഭാഗങ്ങൾക്ക് അവകാശപ്പെട്ടതല്ലായെന്നും ടി ഭൂമിയുടെ 50 മീറ്റർ പരിധിയിൽ /സമീപത്തെയും ആദിവാസി സെറ്റിൽമെന്റുകൾ ഇല്ലായെന്നും സാക്ഷ്യപ്പെടുത്തുന്നു.

ഈ സർട്ടിഫിക്കറ്റ് മൈനിങ് & ജിയോളജി, തിരുവനന്തപുരം ഹാജരാക്കാൻ വേണ്ടി മാത്രം.



[Handwritten Signature]
Village Officer
Nagur



[Handwritten Signature]
KANTHARAJ K.
RO/100A/130/2000/A

No. 1716/DOT/ML/2018

DEPARTMENT OF MINING & GEOLOGY
District Office, Thiruvananthapuram
email : geo.thi.dmg@kerala.gov.in
Phone: 0471-2442055

Dated : 26-09-2018

From
The Geologist

To
M/s. Adani Vizhinjam Port Pvt Limited,
2nd Floor, Vipanchika Tower, Thycaud
Thiruvananthapuram

Sir,

Sub:- Mining and Geology – Mines & Minerals – Approval of Eco-Friendly Mining Plan – Granite Building Stone Quarry at Survey Nos. **555/2**, Government land of **Nagaroor** Village, **Chirayinkeezhu** Taluk, Thiruvananthapuram District, Kerala State – reg.

The mining plan for the building stone quarry project at Survey Nos. **555/2**, Government land of **Nagaroor** Village, **Chirayinkeezhu** Taluk, Thiruvananthapuram District, Kerala State is hereby approved vide the powers delegated to the District Geologist for the approval of mining plan for the minor minerals vide Kerala Minor Mineral Concession Rules, 2015 with the following conditions:-

1. That you will follow the prescribed Rules & Regulations of Central Government and State Government issued from time to time in regard to mining.
2. That you will follow the Mine Safety Rules and Regulations.
3. That you will store the mining waste in the earmarked location/dumping yard only as specified in the plan.
4. That you will carry out the plantation as committed in the plan.
5. That provision shall be made for the housing facility for the labour with all basic infrastructure facilities including safe drinking water, toilets etc. within the site.

Yours Faithfully



GEOLOGIST

KANTHARAJ H.
RGP/GOA/130/2000





***Proceedings of the State Environment Impact Assessment
Authority Kerala***

*Present: Dr.H.Nagesh Prabhu, IFS (Rtd.), Chairman, Dr. K.Jayachandran, Member &
Dr.Usha Titus I.A.S Member Secretary.*

Sub: SEIAA- Environmental Clearance 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 - Granted – Orders issued.

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, KERALA

No. 1200/EC2/2018/SEIAA

Dated, Thiruvananthapuram 01.03.2019

- Ref: 1. Application received on 31.12.2018 from Mr.Rajesh Jha, Chief Executive Officer, M/s Adani Vizhinjam Port Private Limited, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram – 695014
2. Minutes of the 90th meeting of SEAC held on 4th January, 2019
3. Minutes of the 92nd meeting of SEAC held on 22.01.2019
4. Minutes of the 89th meeting of SEIAA held on 27th February 2019.
5. Affidavit received on 28.02.2019 from Sri.Manoranjan Tripathy, Deputy General Manager- Projects, Adani Vizhinjam Port Pvt.Ltd.

ENVIRONMENTAL CLEARANCE NO.02/2019

Mr.Rajesh Jha, Chief Executive Officer, M/s Adani Vizhinjam Port Private Limited, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram – 695014, vide the hardcopy of application received on 31.12.2018, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala for an area of 3.6630 Ha. The project comes under Category B2, Activity 1(a), (i) as per the Schedule of EIA Notification 2006.

2. The proposed project site falls within Latitude 8°43'42.88" N to 8°33'51.74" N Longitude 76°50'15.26" E to 76°50'23.24" E . The lease area consists of 3.6630 hectares,

Muthu
KANTHARAJ K.
RO/ICDA/130/2008/4



which belongs to Government (Purambooke) land. The proposed project is for quarrying of 5,12,500 tonnes per annum. The daily water demand will be about 4 KLD, in which 2 KLD for domestic, 1KLD for plantation and 1KLD for dust suppression. The total project cost is 750 lakhs.

3. The proposal was placed in the 90th meeting of SEAC held on 4th January, 2019 and in the 92nd meeting of SEAC held on 22.01.2019. The Committee decided to recommend to issue EC subject to the following observations and conditions in addition to the general conditions.

1. *The NE and SW portion of the proposed quarry area is already mined to the localized baseline. Therefore, the area remaining to be mined out is the eastern portion of the proposed land.*
2. *On completion of the proposed mining activity, one quarter of the hillock under government land will vanish.*
3. *The geological reserve estimated is 51,96,250 tons out of which the mineable reserve is 17,78,750 tone (up to the bench level of 28m AMSL) and blocked reserve is 34,17,500 tons. The mineable reserve up to 40m AMSL is 15,07,500 tons. It means that if the total mineable quantity is allowed to be extracted, the mine will go below the present ground level of 40m AMSL by a depth of 12m creating a pit.*
4. *The reclamation and rehabilitation plan indicates that after the extraction over five years, there will a pit of 3 Ha out of which 0.95 Ha will be converted as a water pond and balance area of 2.05 Ha will be retained as pit.*
5. *The proposal for year-wise mining indicates that the extraction will be to the tune of 1,52,500 tons (1st year), 4,99,375 tons (2nd year), 5,12,500 tons (3rd year), 5,11,875 tons (4th year) and 1,02,500 tons (5th year). However, the proposal does not mention about the requirement for the next two years, during which it is understood that the breakwater construction will be over.*
6. *If we consider that the breakwater construction will be completed in two years and the quantity of stone projected for extraction in the first two years is the actual requirement for the proponent, then the quantity extracted will be 6,51,875 tons, i.e., 37% of the mineable reserve. If the mining is allowed upto the bench level of 70m as per the mine plan, the quantity extractable is 7,51,875 tons, i.e. 15% more than the requirement.*



7. Kerala experiences intermittent micro earthquakes such as the ones in Nedumkandam in 1988 with 4.5 magnitude, Vadakkencherry in 1994 with 4.3 magnitude, Erattupetta in 2000 and 2001 with magnitudes 5 and 4.8 respectively, off the coast of Thiruvananthapuram in 2001 with magnitude 4.5 etc. Based on the studies on the causative factors of micro tremors in Kerala, it is understood that variation in hydraulic pressure in the near-surface joints and fractures, increased pore-pressure and its uncertain variations etc lead to disturbance in the subsurface rock formations. Studies also indicated that from among the micro-tremors recorded in the seismograph installed in Peechi between 2000 and 2008, 45% occurred between July and October and 29% between November and January when there is significant rainfall and groundwater recharge. It indicates that the landuse changes, hydraulic pressure build up, pore-pressure variations etc. could influence occurrence of micro-tremors. There have been micro-tremors centered around Vamanapuram in September 1988, Parippalli in December 1994, Kilimanur in August 2006 and Attingal in January 2008. It is suspected that the subsurface rock formations do not have adequate strength to absorb the high magnitude variations in the landuse pattern, landform changes, hydraulic pressure variations etc.. Therefore, there need to be utmost restraints in disturbing the natural landforms of the region.
8. The earlier quarrying of the hillock has left a vertical fall of 70m which is very dangerously poised. If mining is allowed as per mining rules, the vertical fall will become a bench cut which will improve the safety aspect of the frontal portion of the quarry.
9. Since the proposal is to extract stone from one portion of the hillock, there will not be complete removal of the hillock, thus overcoming the implications on micro-climate of the region.
10. There are other quarries in the vicinity of the proposed quarry, but not within 500m as per a document produced by the proponent. It may be verified whether the proponent has submitted the relevant documents along with the application for EC, so as to ensure that there are no quarries within the radius of 500m.
11. The mining is proposed with Non-electric detonator (NONEL) method thereby minimizing air blast, fly rock and ground vibration.
12. The proponent should be directed to constitute a Local Area Monitoring Committee, involving the Grama Panchayat.



13. No environmental management intervention could adequately mitigate the impacts caused due to the activities linked to quarrying/mining. However, the demand for building stones for essential developmental activities need to be met. Therefore, it is desirable to restrict mining to the minimum essential requirement so as to minimize the environmental impact as well as to protect the resource for future demand of development activities. Hence, mining should not be allowed for extracting the whole of mineable quantity but be permitted to meet the essential requirement. This approach will also minimize the change in landform.

14. The proponent may be permitted to 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.

15. The proponent should be asked to comply with all mandatory environmental management conditions that are stipulated while giving EC for such mining projects.

16. The social and environmental needs of the locality should be assessed in consultation with the Local Governments based on which the Corporate Social & Environmental Responsibility should be exercised.

4. The proposal was placed in the 89th meeting of SEIAA held on 27th February 2019. Authority decided to recommend for issuance of EC with general conditions in tune with KMMC Rules 2015 and its amendments and subject to the following specific conditions.

1. The mining should be conducted with Non-electric detonator (NONEL) method thereby minimizing air blast, fly rock and ground vibration.
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.
3. The proponent shall file an affidavit that he will expend Rs.15 lakhs as part of CER in consultation with Local Self Government.
4. The proponent should follow the closure plans (progressive closure and final closure) as per KMMC Rules.

The proponent has submitted notarised affidavit committing the CSR activities vide reference 5th cited.

5. Environmental Clearance as per the EIA Notification 2006 is hereby accorded for the quarry project of Mr.Rajesh Jha, Chief Executive Officer, M/s Adani Vizhinjam Port Private



Limited, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram – 695014 in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala for an area of 3.6630 Ha, subject to the specific conditions as in para 4th above, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I, EMP, PFR and Mining plan submitted to SEIAA. The assurances and clarifications given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects stipulated for mining (items 1 to 48), appended hereto will be applicable and have to be strictly adhered to.

6. The Clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above undertakings and the conditions and the undertakings in Chapter 2 (Mining) & (Blasting), Chapter 3 (Mines Drainage), Chapter 4 (Stacking of Mineral rejects and Disposal of waste) Chapter 8 (Progressive Mine Closure Plan) & EMP of the Mining Plan as submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

7. Validity of the Environmental Clearance will be five years from the date of this clearance, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.

8. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.

- i. Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.
- ii. Instances of violation if any shall be reported to the District Collector, Thiruvananthapuram.



- iii. The given address for correspondence with the authorised signatory of the project is Mr.Rajesh Jha, Chief Executive Officer, M/s Adani Vizhinjam Port Private Limited, 2nd floor, Vipanchika Tower, Thycaud, Thiruvananthapuram – 695014.

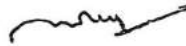
Sd/-

Dr.Usha Titus I.A.S
Member Secretary, SEIAA

To,

Mr.Rajesh Jha,
Chief Executive Officer,
M/s Adani Vizhinjam Port Private Limited,
2nd floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram – 695014

Forwarded/By order


Administrator, SEIAA

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.
2. The Principal Secretary to Government, Environment Department, Government of Kerala.
3. District Collector, Thiruvananthapuram
4. Director, Mining & Geology, Thiruvananthapuram -4.
5. The Member Secretary, Kerala State Pollution Control Board
6. District Geologist, Thiruvananthapuram
7. Tahsildhar, Chirayinkeezhu Taluk, Thiruvananthapuram district
8. Village Officer, Nagaroor Village (Kadavila), Thiruvananthapuram
9. Chairman, SEIAA.
10. Website.
11. S/f
12. O/c



STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA
GENERAL CONDITIONS (for mining projects)

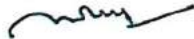
1. A separate environmental management and monitoring cell with qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
2. Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
3. Sprinklers shall be installed and used in the project site to contain dust emissions.
4. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
5. In view of the deep pits left after the excavation, stacking at maximum top level should be carried out.
6. Corporate Environment Responsibility agreed upon by the proponent should be implemented.
7. The project proponent shall comply the conditions stipulated by the statutory authorities concerned.
8. Tarring /multiple options on the access roads shall be undertaken so as to reduce dust pollution during movement of vehicle.
9. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
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.
11. Ground level should be fixed in individual cases separately
12. No mining operations should be carried out at places having a slope greater than 45°.
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.
14. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
15. Garland drains with clarifiers to be provided in the lower slopes around the core area 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 should assess the number of trees in each project site before the issuance of EC so as to ensure the promptness in planting.
17. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
18. 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.
19. 50 m buffer distance should be maintained from forest boundaries.
20. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
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.
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.
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.
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.



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 and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
26. The Environmental Clearance shall be put on the website of the company by the proponent.
27. Proponent shall submit half yearly reports in soft copy and SEIAA will upload it on the website.
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
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.
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.
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, 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 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.
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.
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 PM₁₀ 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.
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.
36. Measures should be taken for control of noise levels below 85 dBA in the work environment.
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.
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.
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.
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.
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.



42. The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license or consent given by any other authority for the same project.
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.
44. The mining operation shall be restricted to above ground water table and it should not intersect 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.
46. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
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.
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.


For Member Secretary, SEIAA Kerala



PLATES



PLATE NO. 1



REFERENCE

- 5.0 kms radius
- Quarry area
- settlements
- Road
- River / nallah
- plantation

ENVIRONMENTAL MONITORING LOCATION

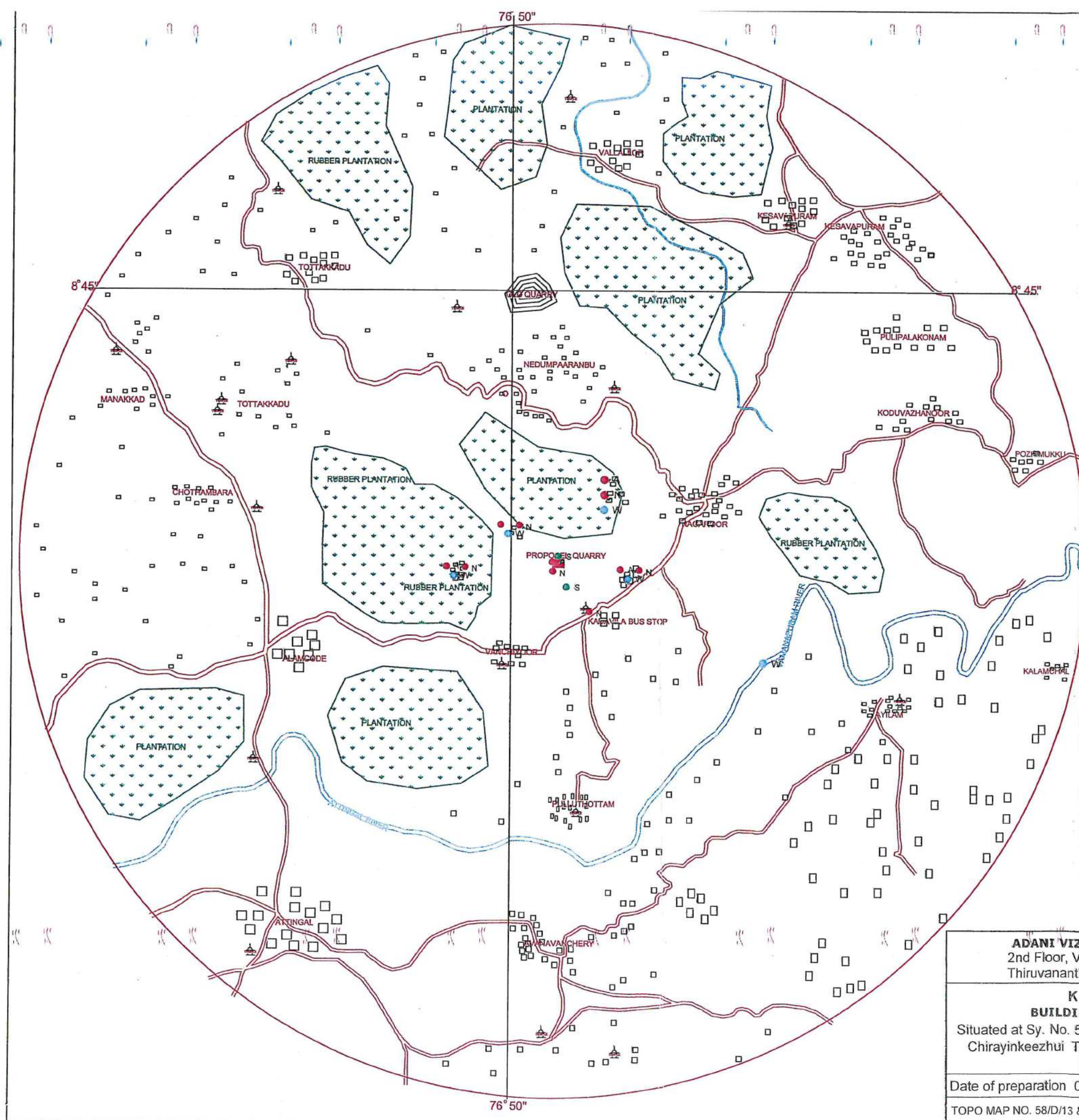
- A AIR
- N NOISE
- W WATER
- S SOIL



Handwritten signature

KANTHARAJ K.
ROPI/DOA/130/2000/A

ADANI VIZHINJAM PORT PVT. LTD. 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram - 695 014, Kerala	
KEY PLAN BUILDING STONE QUARRY Situated at Sy. No. 555/2, Nagaroor Village (kadavila), Chirayinkeezhu Taluk, Thiruvananthapuram Dist, Kerala State.	
Date of preparation 01-08-2018	Scale 1 : 13500
TOPO MAP NO. 58/D/13 & 58/D/14	EXTENT : 3.6630 Ha



KERALA DISTRICT MAP

Location and accessibility map

Legend

- Nagaroor quarry
- Nagaroor quarry - Kadavala
- Path Measure
- Town Hall Attingal

Google Earth
Image 02/18/2013 10:40:10
© 2013 Google

KOLLAM



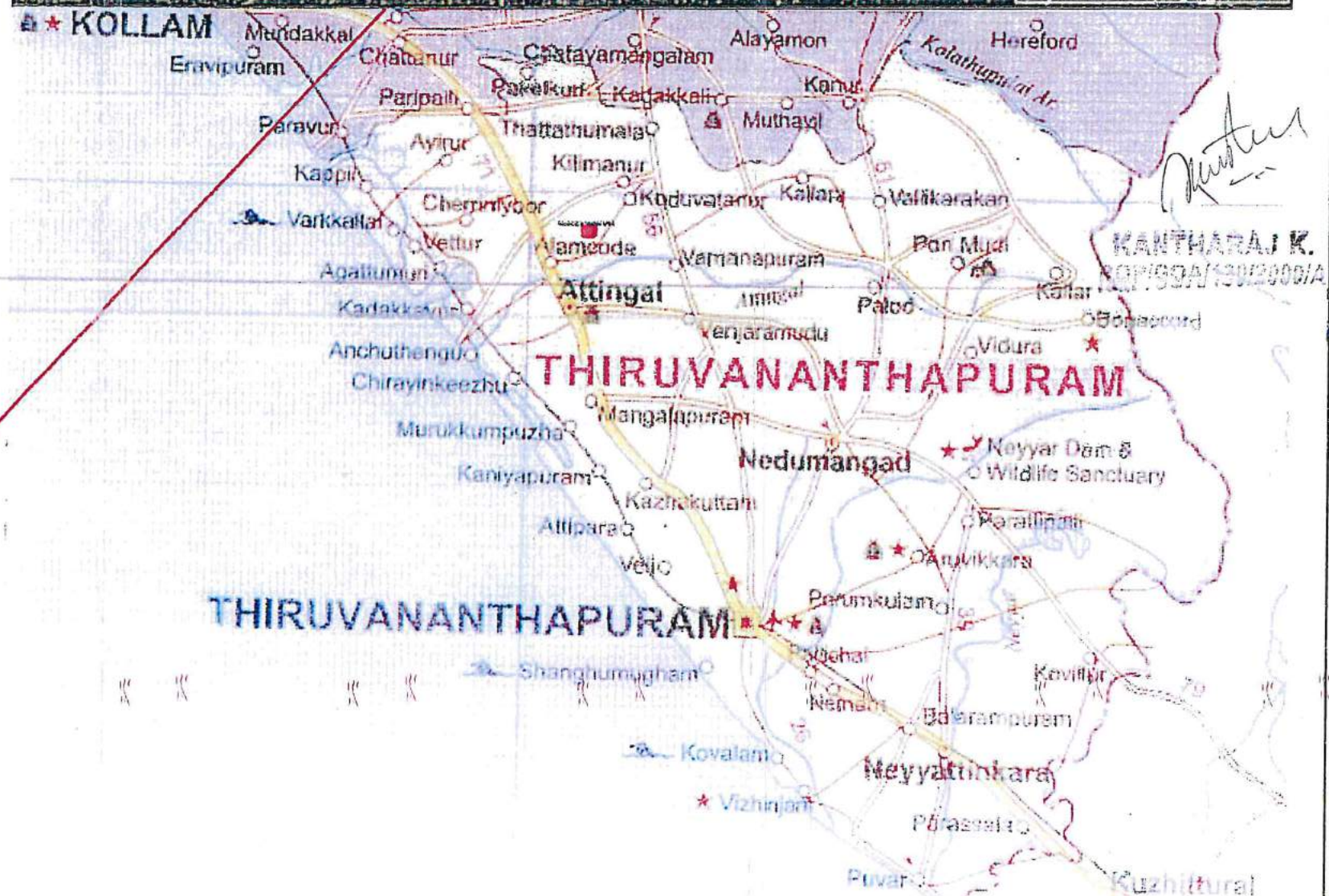
LEGEND

- State Boundary
- District Boundary
- State Capital
- District HQ

Map not to Scale

Copyright © 2013 www.mapsofworld.com

(Updated on 30th May, 2013)



BLOCK MAP SHOWING THE AREA APPLIED FOR GRANT OF BUILDING STONE QUARRY AND TO OBTAIN ENVIRONMENTAL CLEARANCE BY M/s. ADANI VIZHIJAM PORT PVT. LTD.

PLATE NO. 3

BLOCK No. 39
KARAYARAM VILLAGE

No. 1104/18

BLOCK No. 38
KODUVAZHANNUR VILLAGE

BLOCK No. 41
ALAMKODE VILLAGE

KANTHARAJ K.
RGP/DOA/138/2000/A



Handwritten signature/initials

Handwritten signature/initials
10/10/00
4.8.16
Vizhijam
Koduvazhannur

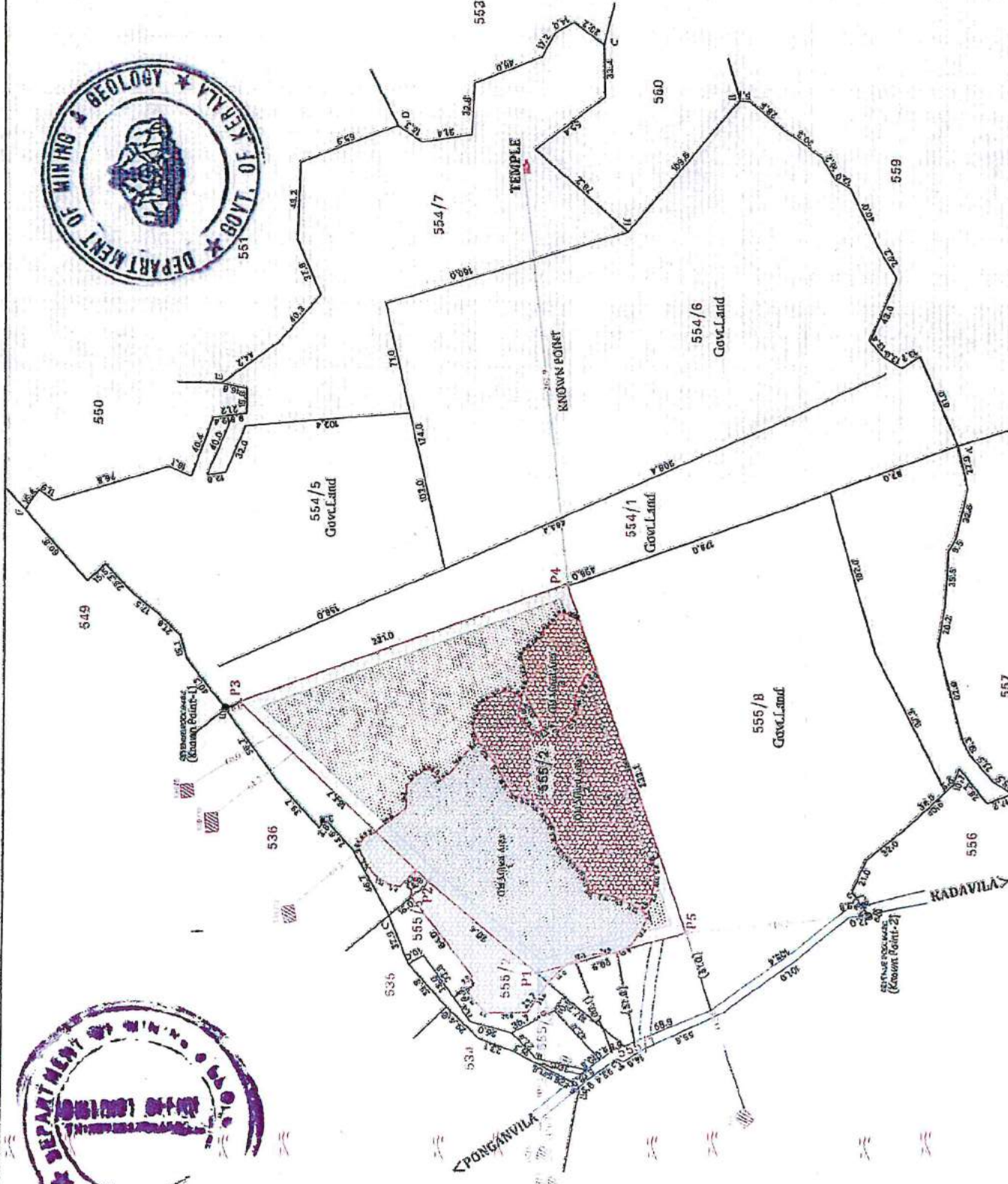
19/9530/1820 നമ്പർ ചെമ്പൻ പ്രകാരം നഷ്ടം ഉണ്ടായ സമീപത്തുള്ള അടൽ ഹബ്ബ
SURVEY MAP-NAGAROO VILLAGE (PROPOSED QUARRY OF M/K.C.
DISTRICT : THIRUVANANTHAPURAM

TALUK : CHIRAYINKEEZH
VILLAGE : NAGAROOR

BLOCK No : 37

Re Sy No. : 555/2

FILE NO.:



റീസർവ്വെ ടയർ/2 ൽ ചെന്നുവെക്കുകയും ആവശ്യപ്പെടുന്ന സ്ഥലം 30827 H3

റീസർവെ 555/2 ന്റെ വേനനാശമതിക്കായി ആവശ്യപ്പെടുന്ന സ്ഥലത്തിന്റെ ചുറ്റളവുള്ള ബഹൽ എറിയ 0.5855 ഹെ

നീ സർവ്വേ 555/2 ൽ പ്രണവനുമതിക്കായി ആവശ്യപ്പെടുന്ന
Lease Area = 3.6630 Ha

പഞ്ചായത്ത് ഓഫീസ്

ബനനസ്പഥത്തിലേക്കുള്ള വഴി

പരിസ്ഥിതി പ്രദേശത്തിന്റെ പീട

പ്രമാണമാർക്ക് കാണുന്ന സർട്ടിഫിക്കറ്റുകൾ


 റീസർവ്വൈ 555/2 ആ പ്രണയമതിക്കായി ആവശ്യപ്പെടുന്ന സ്ഥലത്ത് സ്ഥലപ്പിടുത്ത സ്റ്റേറ്റ് ഓഫീസുകൾ

555/3 നീസർവ്വെ 555/2 ന്റെ ആകെ വിസ്തീർണ്ണം 4.8779 Ha 4.8779 Ha

ചിന്തനസമൃദ്ധിക്കായി ആവശ്യപ്പെടുന്നസ്ഥലത്തിൽ മൂന്ന് ഏക്കറേയോ 26 M താഴ്ചയിൽ വന്നു ചെൽതൊയി കാണപ്പെടുന്ന സ്പ്രൈംഗിനീമിറ്റോ = ഗ്രേബി H.

H.S.R. = 0.64%
വിസ്തീർണ്ണം

പ്രദേശത്തിൽ കടലിന്റെ ആവശ്യപ്പെടുന്ന സ്ഥലത്തിന്നു പുറത്ത് വരുന്ന സ്ഥലം

പ്രണവസംഗീതത്തിലൂടെയും ആധുനികരസസ്ഥലത്തിൽ മ്യൂസിക് ഏകദേശം 12 M	
ഇത്തരത്തിൽ വേറെ പെരുമാറ്റങ്ങൾ കണ്ടെടുക്കുന്ന സ്ഥലം, വിസ്തൃതിയും = 0.4585 H	
2-	

3 ചെമ്പനാമ്പലത്തിലായി ആവശ്യപ്പെടുന്നസീമയ്ക്കിടയിൽ 6 മ. അഴിമതിയിൽ ചെമ്പനാമ്പലം സീമയ്ക്കിടയിൽ 0.2255 മ.

Scale 1 cm = 20 m

GPS READING		
BOUNDARY PILLAR	LATITUDE	LONGITUDE
001	14°23'56"N	102°01'15"E
002	14°13'41"N	102°01'27"E
003	14°03'11"N	102°01'31"E
004	13°53'46"N	102°01'31"E

Office Use: Adm. Serv. Div.
 Division: Adm. Serv. Div.

Applicant Designation & Address:
 M/s CLEO ADANI VIZHINJAM PORT Pvt. Ltd.
 2nd Floor, Vignadulka Tower,
 Thycaud, Thiruvananthapuram.

Mutter

KONTAKT K.
PERSONEN

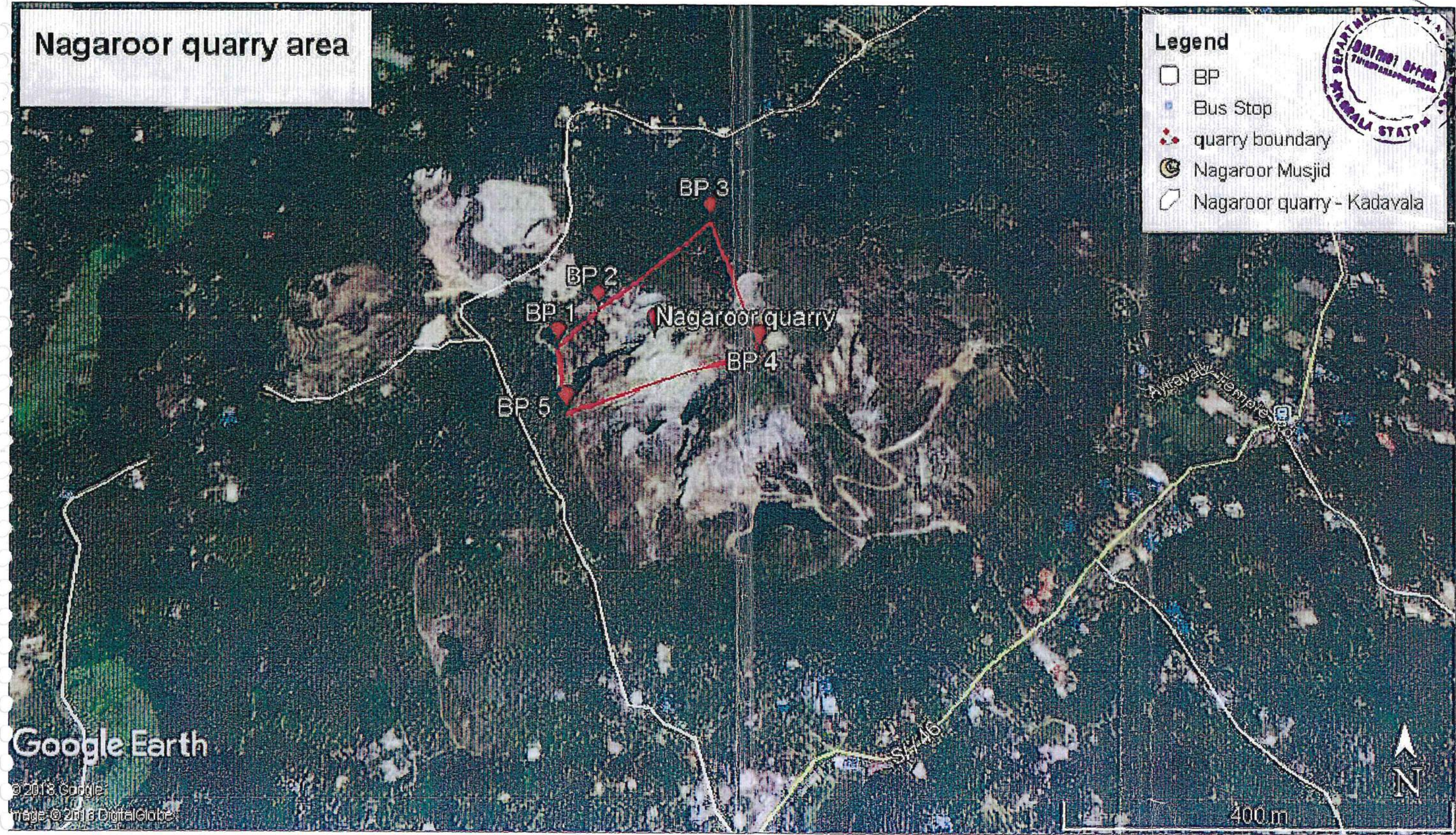


✓ TASHL DARR

PLATE NO. 7

Nagaroor quarry area

- Legend**
- BP
 - Bus Stop
 - quarry boundary
 - Nagaroor Musjid
 - Nagaroor quarry - Kadavala

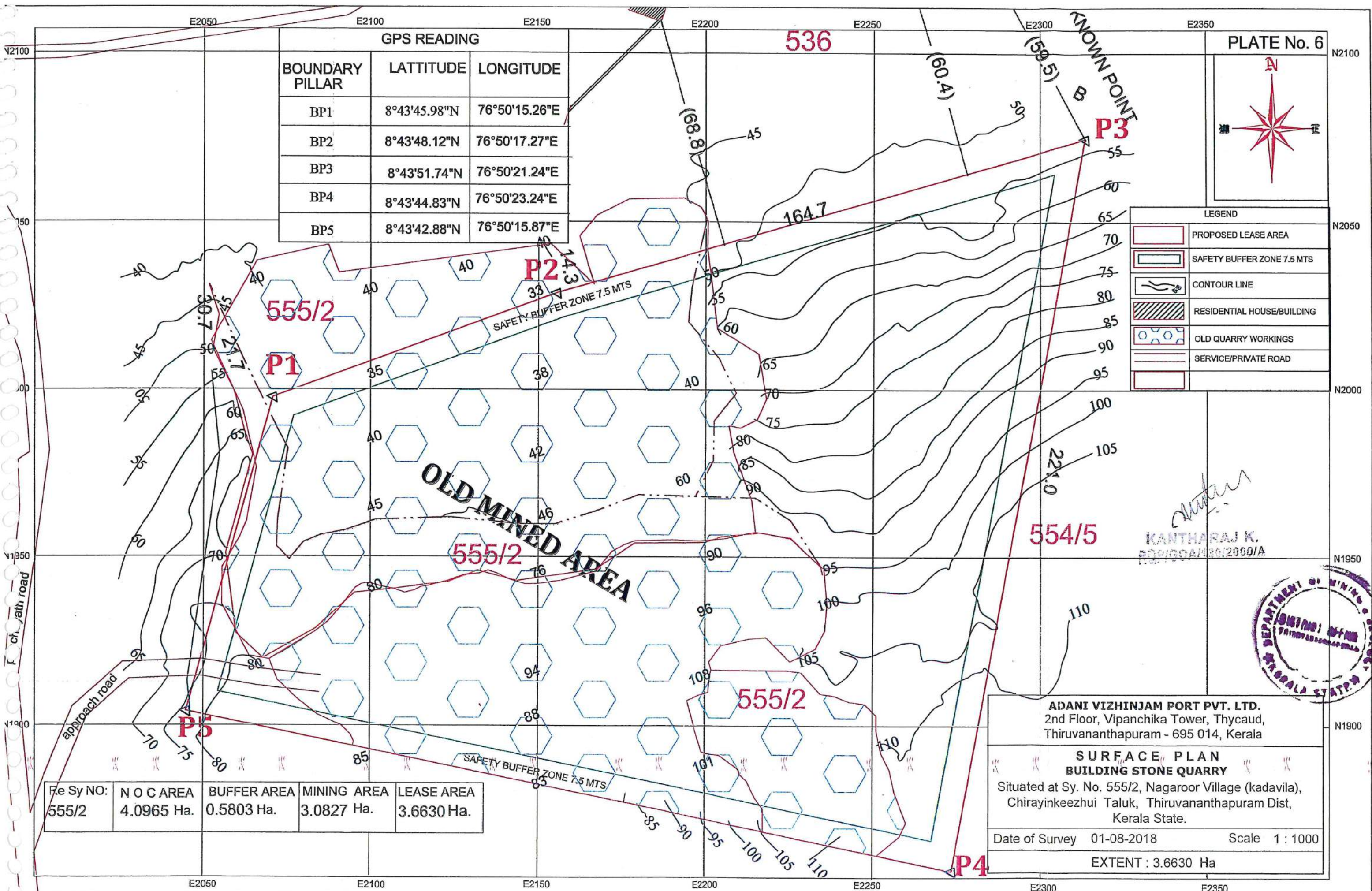


Google Earth

© 2018 Google
Image © 2018 DigitalGlobe

PLATE NO. 5.

Mustafa
KANTHARAJ K.
RQ/IGQA/130/2000/A



GPS READING		
BOUNDARY PILLAR	LATTITUDE	LONGITUDE
BP1	8°43'45.98"N	76°50'15.26"E
BP2	8°43'48.12"N	76°50'17.27"E
BP3	8°43'51.74"N	76°50'21.24"E
BP4	8°43'44.83"N	76°50'23.24"E
BP5	8°43'42.88"N	76°50'15.87"E

LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD

Re Sy NO:	N O C AREA	BUFFER AREA	MINING AREA	LEASE AREA
555/2	4.0965 Ha.	0.5803 Ha.	3.0827 Ha.	3.6630 Ha.

ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

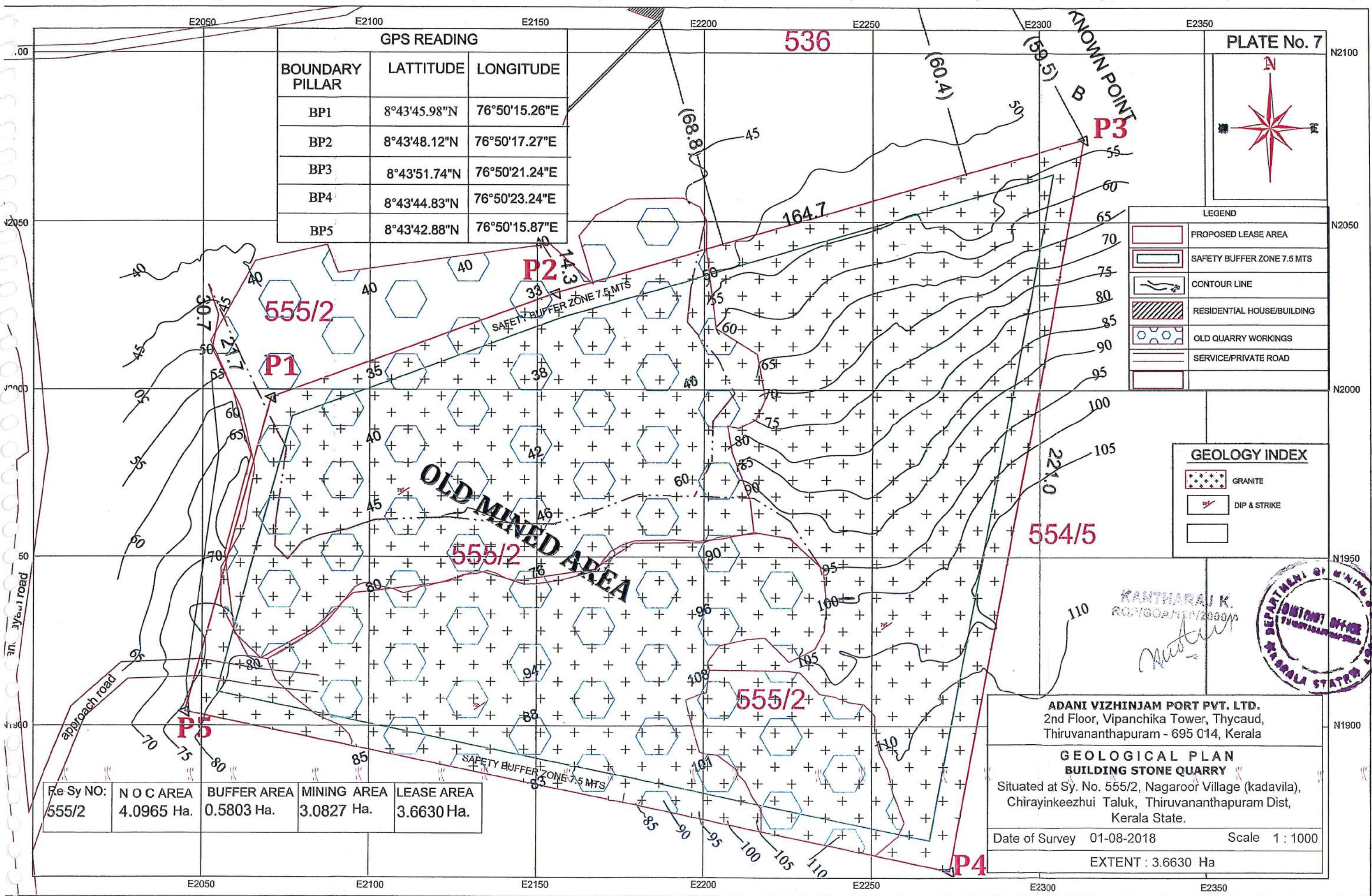
**SURFACE PLAN
BUILDING STONE QUARRY**
Situating at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezh Taluk, Thiruvananthapuram Dist,
Kerala State.

Date of Survey 01-08-2018 Scale 1 : 1000

EXTENT : 3.6630 Ha

KANTHARAJ K.
P2/100/2000/A





GPS READING		
BOUNDARY PILLAR	LATTITUDE	LONGITUDE
BP1	8°43'45.98"N	76°50'15.26"E
BP2	8°43'48.12"N	76°50'17.27"E
BP3	8°43'51.74"N	76°50'21.24"E
BP4	8°43'44.83"N	76°50'23.24"E
BP5	8°43'42.88"N	76°50'15.87"E



LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD

GEOLOGY INDEX	
	GRANITE
	DIP & STRIKE

Re Sy NO:	N O C AREA	BUFFER AREA	MINING AREA	LEASE AREA
555/2	4.0965 Ha.	0.5803 Ha.	3.0827 Ha.	3.6630 Ha.

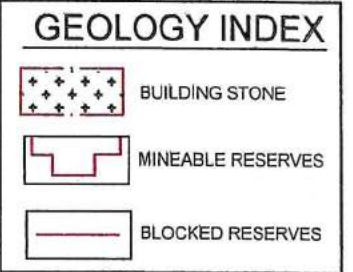
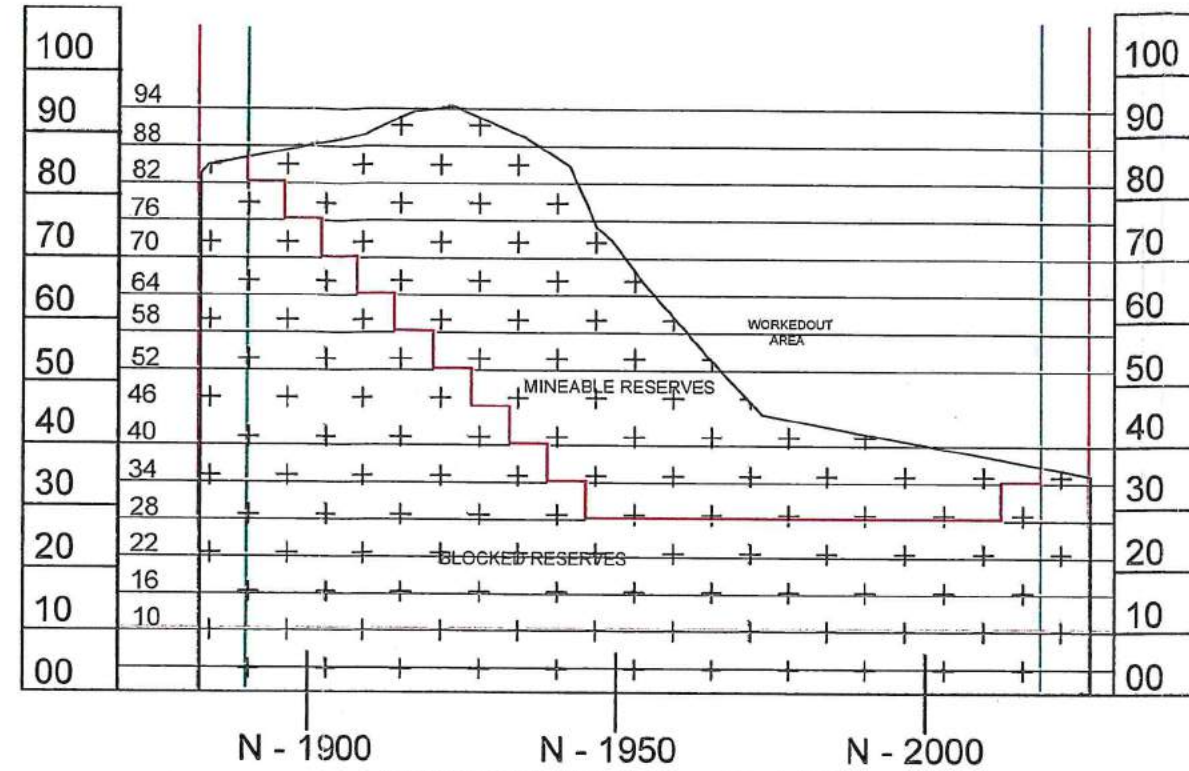
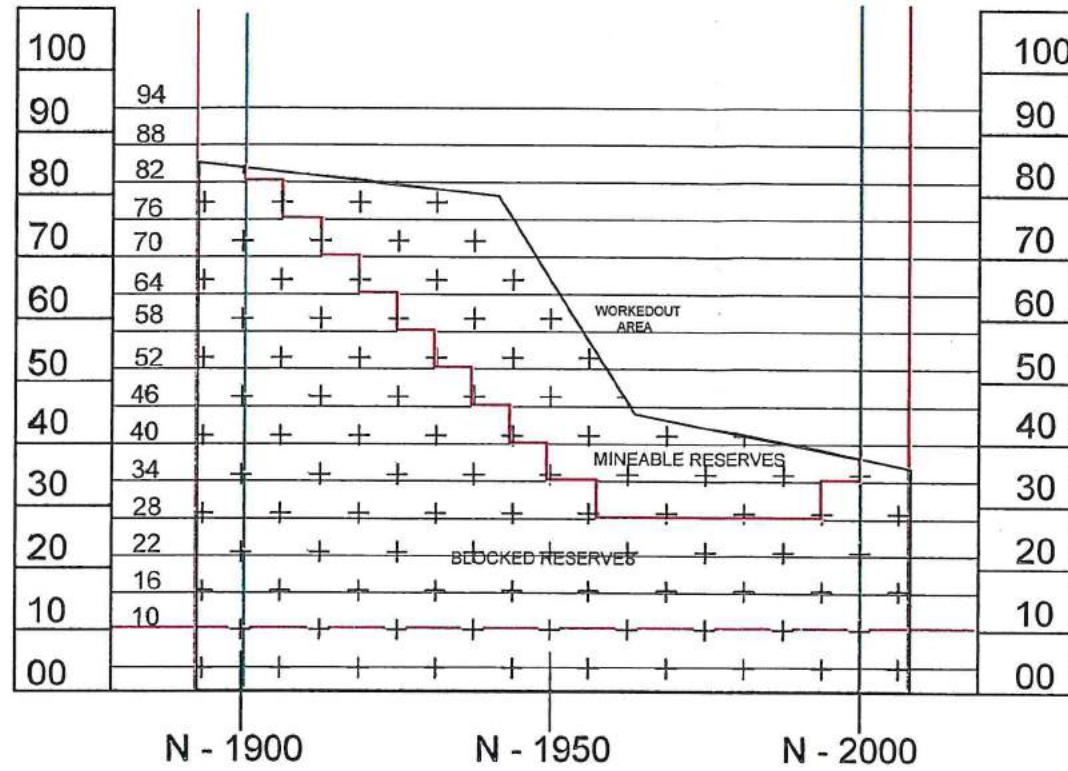
ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

**GEOLOGICAL PLAN
BUILDING STONE QUARRY**
Situated at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezh Taluk, Thiruvananthapuram Dist,
Kerala State.

Date of Survey 01-08-2018 Scale 1 : 1000

EXTENT : 3.6630 Ha



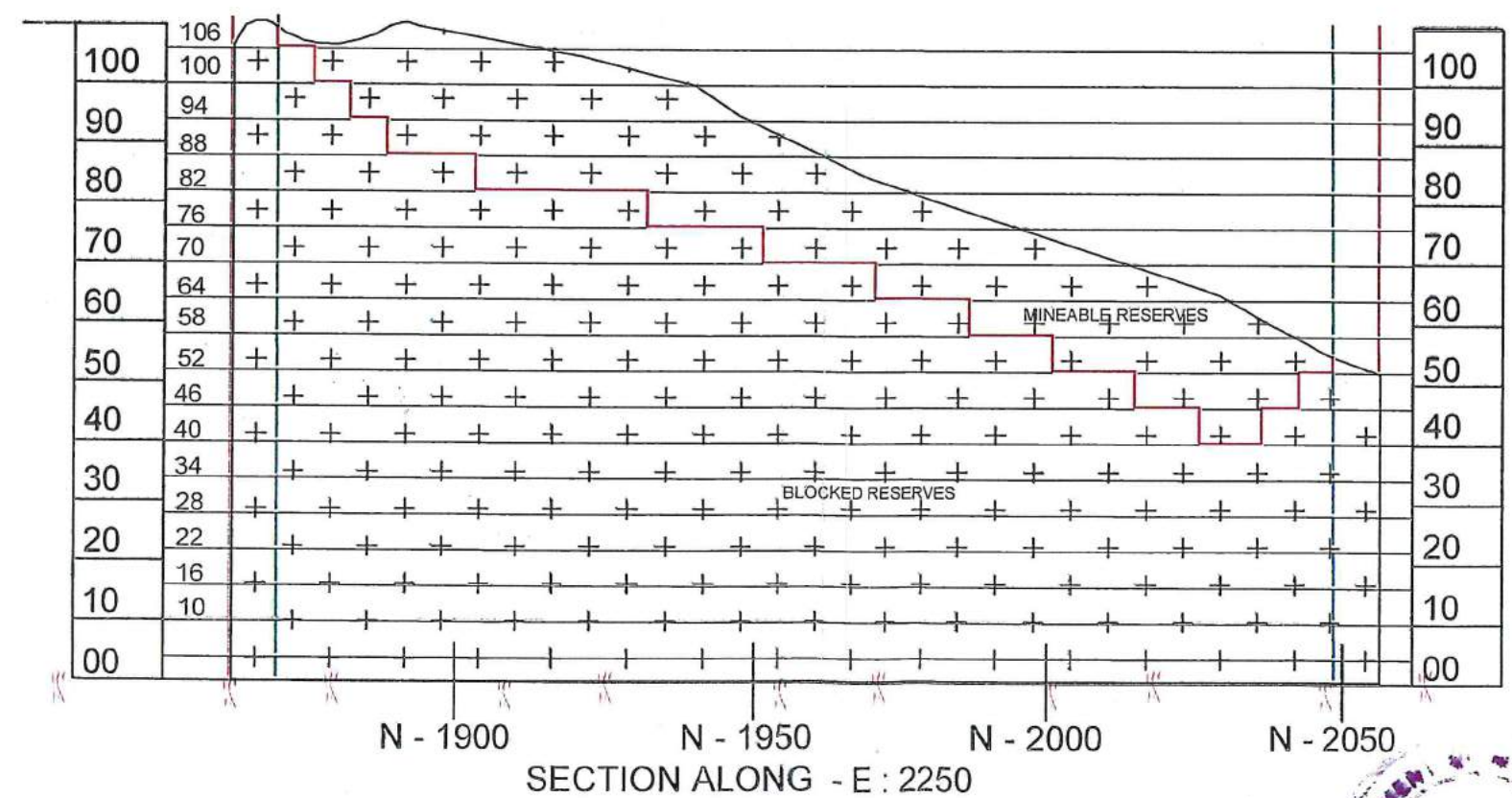
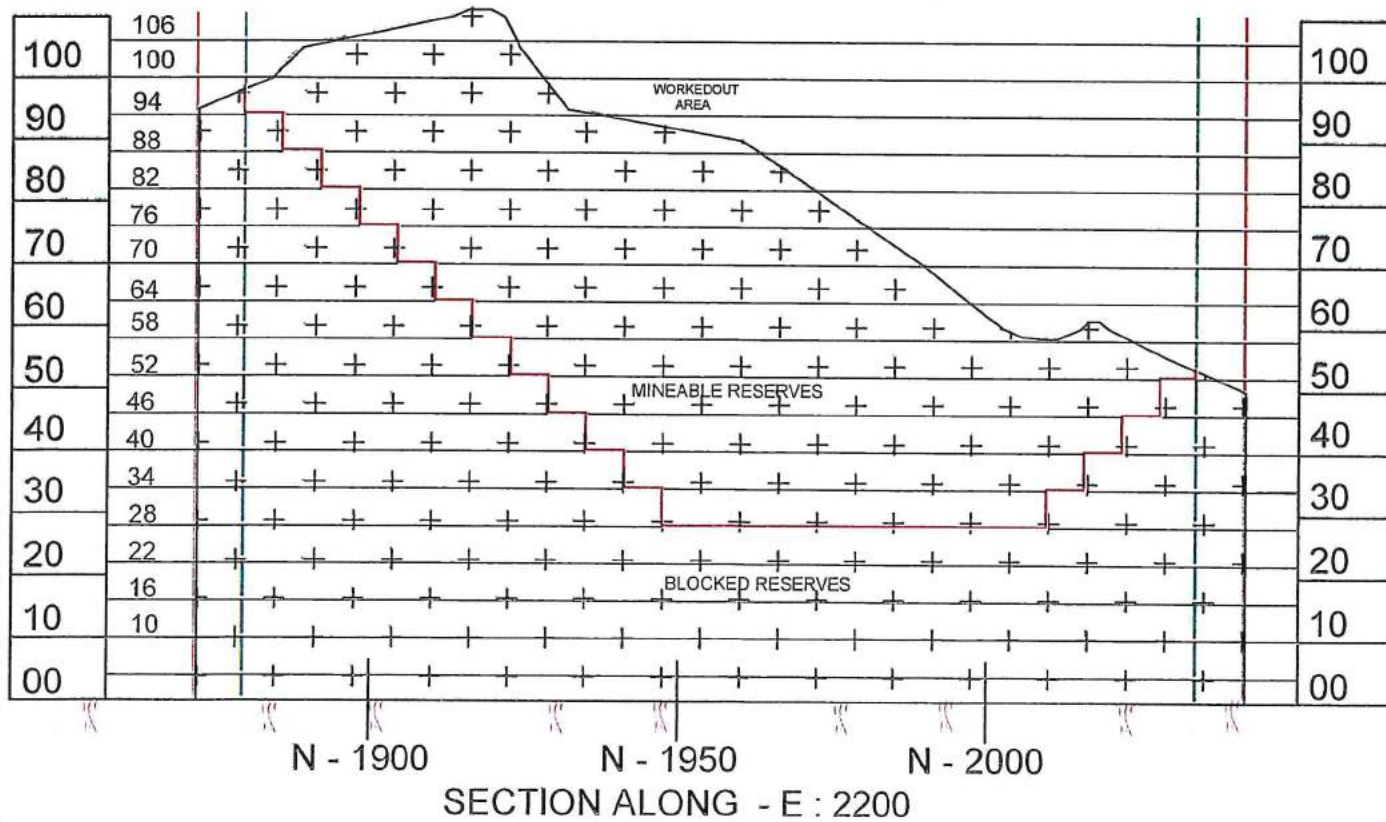


ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

GEOLOGICAL CROSS SECTION
BUILDING STONE QUARRY
Situating at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezhu Taluk, Thiruvananthapuram Dist,
Kerala State.

Updated as on : 01-08-2018 Scale 1 : 1200

EXTENT : 3.6630 Ha



Master

KARTHARAJ K.
REGD 3-1001/000/1

STATE OF KERALA



GPS READING		
BOUNDARY PILLAR	LATTITUDE	LONGITUDE
BP1	8°43'45.98"N	76°50'15.26"E
BP2	8°43'48.12"N	76°50'17.27"E
BP3	8°43'51.74"N	76°50'21.24"E
BP4	8°43'44.83"N	76°50'23.24"E
BP5	8°43'42.88"N	76°50'15.87"E



LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD

REFERENCE

PRODUCTION	
1ST YR.	
2ND YR.	
PLANTATION	
1ST YR.	
2ND YR.	

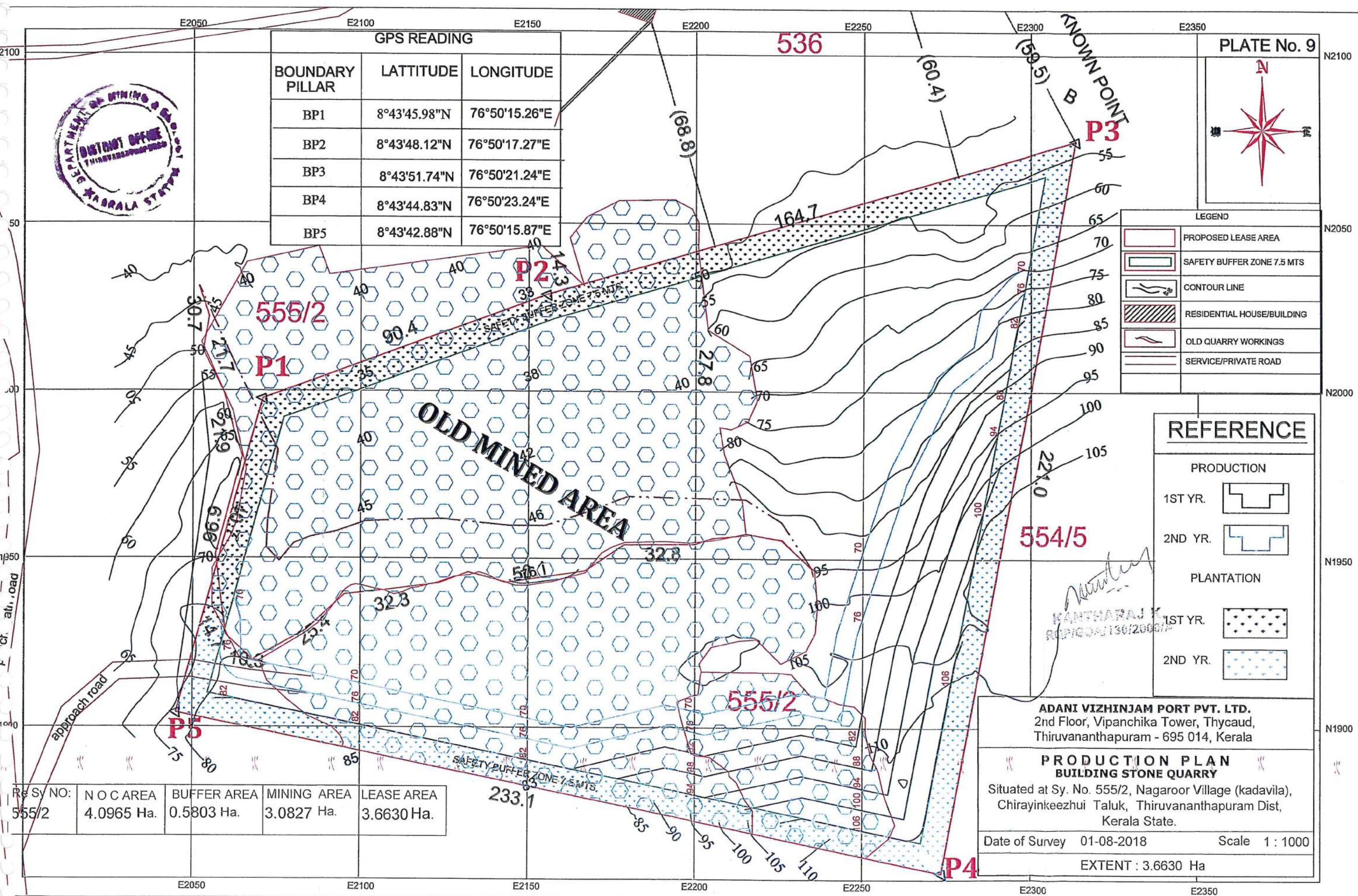
ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

PRODUCTION PLAN BUILDING STONE QUARRY

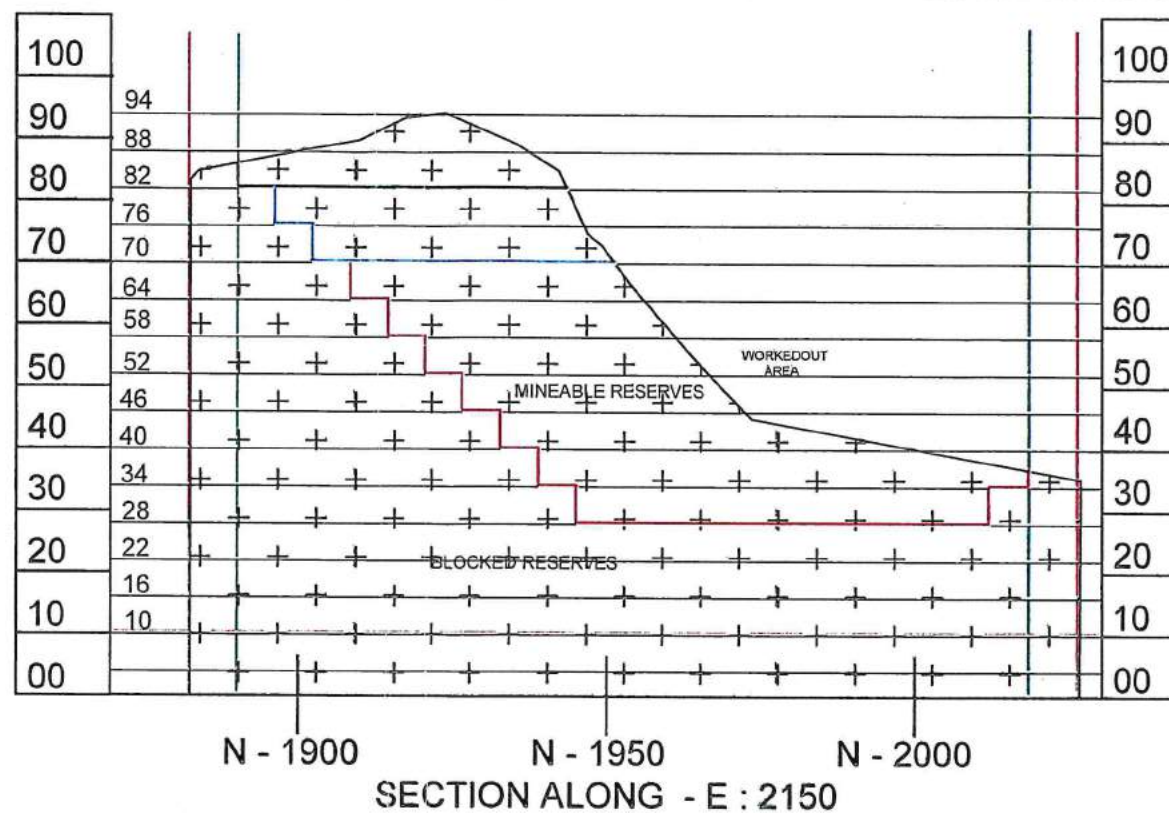
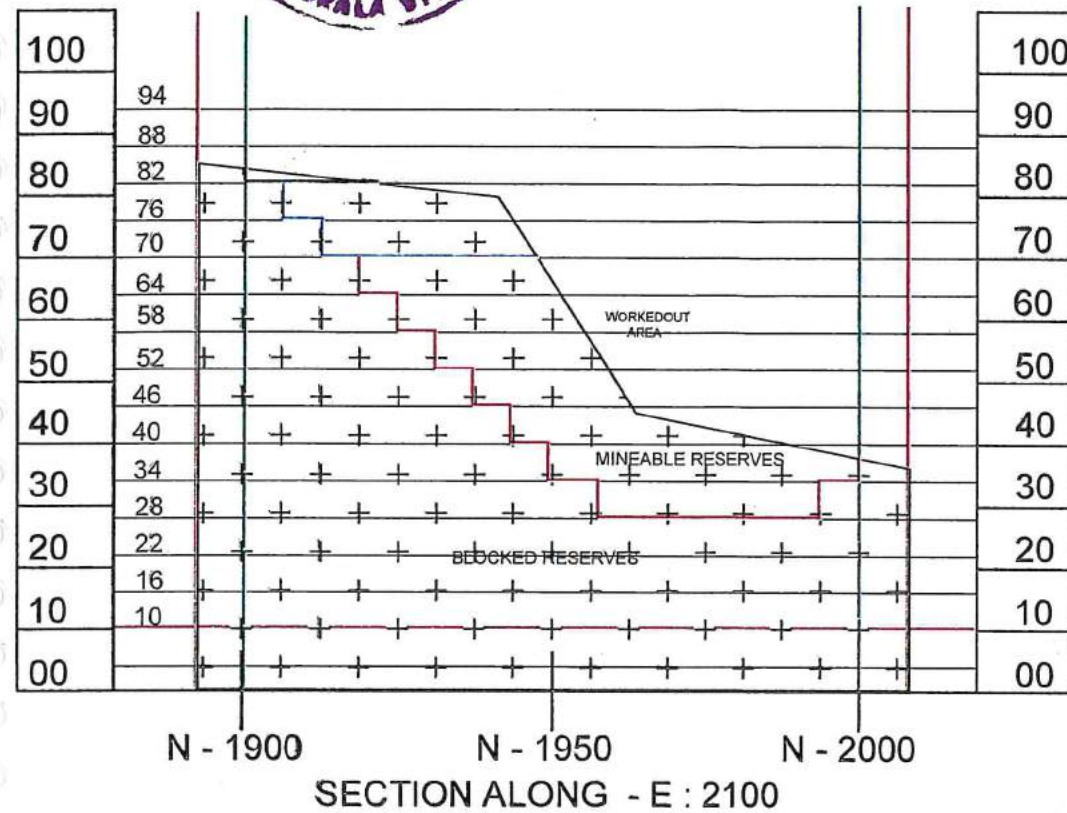
Situated at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezh Taluk, Thiruvananthapuram Dist,
Kerala State.

Date of Survey 01-08-2018 Scale 1 : 1000

EXTENT : 3.6630 Ha



Re Sy NO:	N O C AREA	BUFFER AREA	MINING AREA	LEASE AREA
555/2	4.0965 Ha.	0.5803 Ha.	3.0827 Ha.	3.6630 Ha.



REFERENCE

PRODUCTION

1ST YR.

2ND YR.

GEOLOGY INDEX

BUILDING STONE

MINEABLE RESERVES

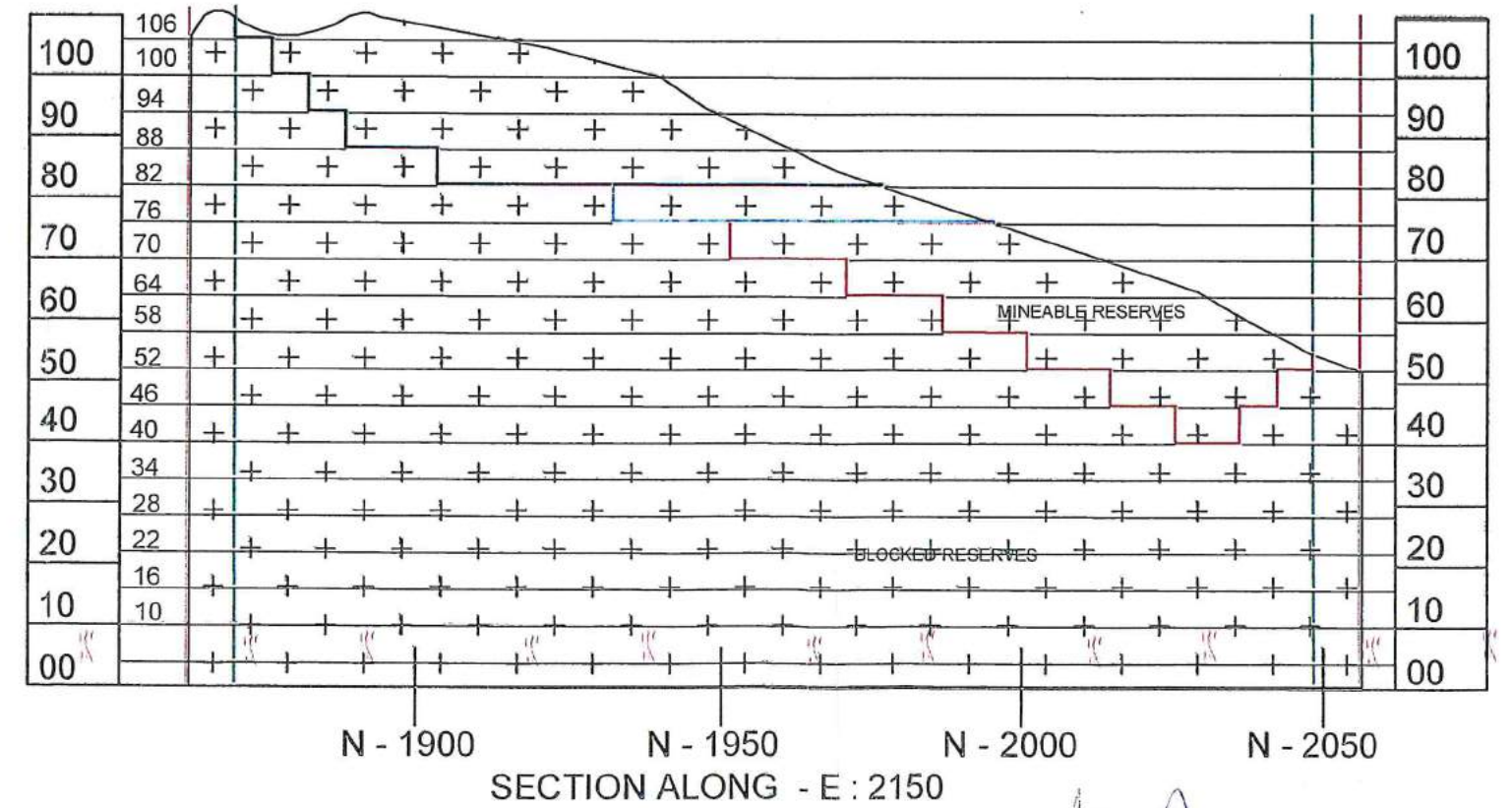
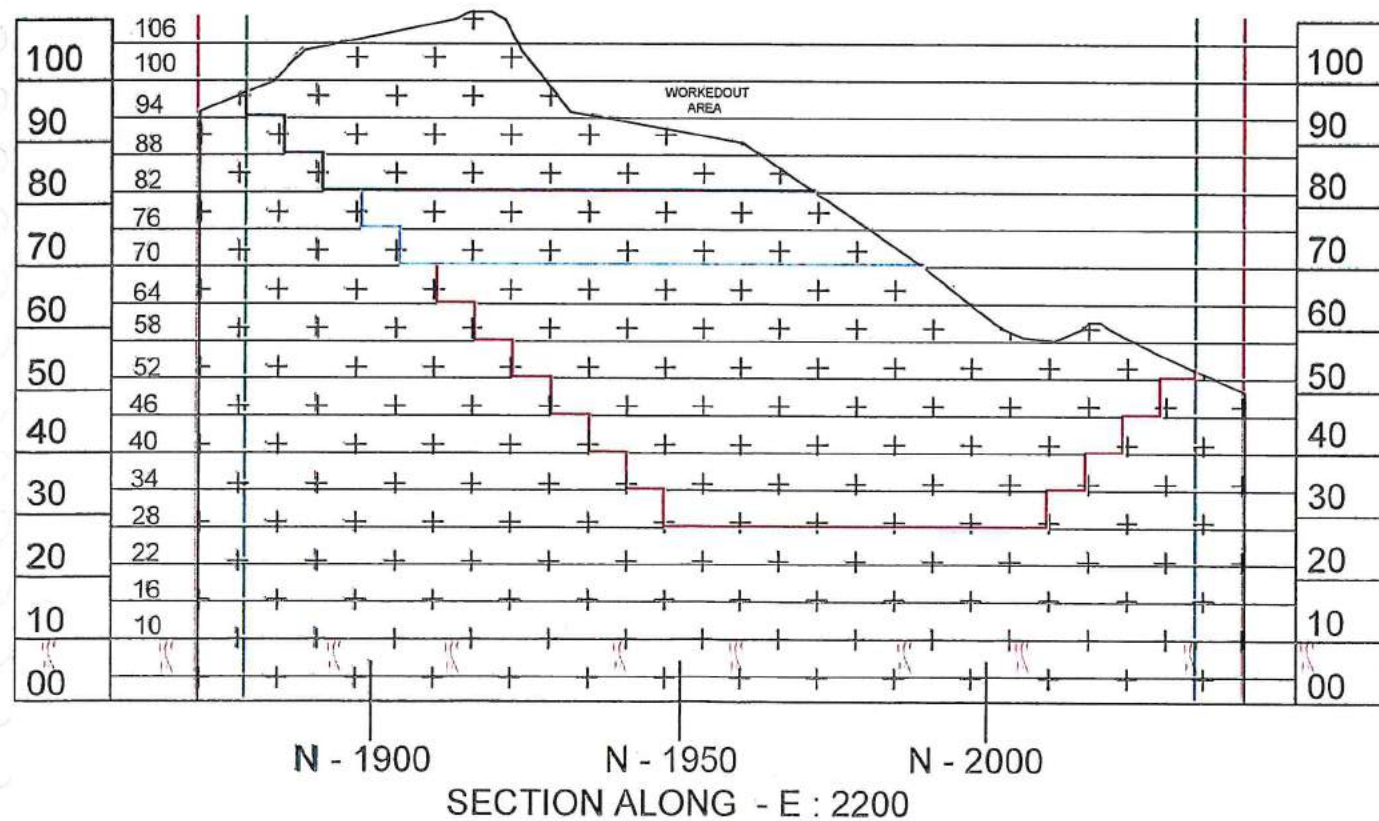
BLOCKED RESERVES

ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

PRODUCTION CROSS SECTION
BUILDING STONE QUARRY
Situated at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezhu Taluk, Thiruvananthapuram Dist,
Kerala State.

Updated as on: 01-08-2018 Scale 1 : 1200

EXTENT : 3.6630 Ha



[Signature]
KANTHARAJ K.
BQ/COA/133/2009/A

E1800

E2000

E2200

E2400

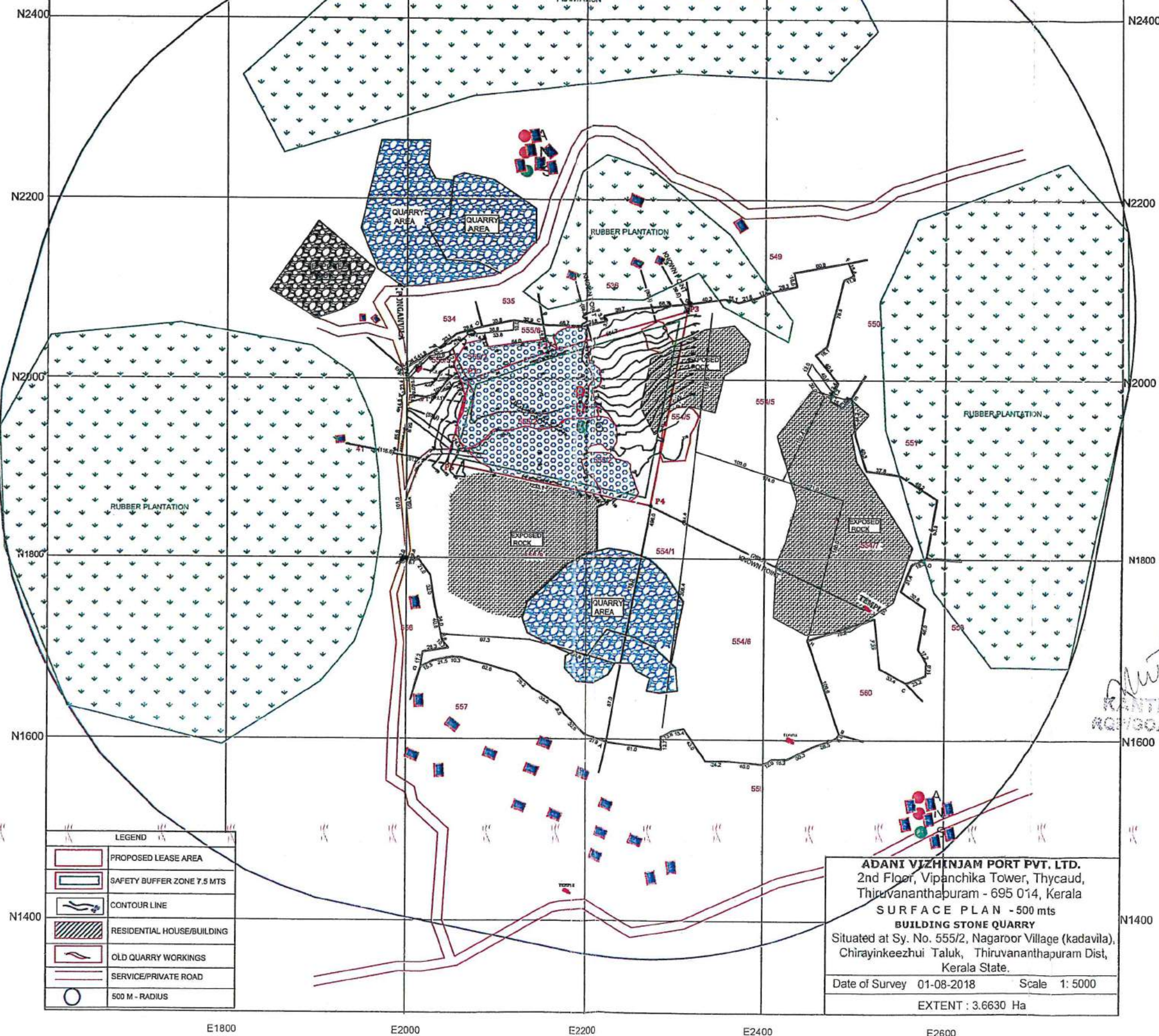
E2600

PLATE NO. 11

GPS READING		
BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'45.98"N	76°50'15.26"E
BP2	8°43'48.12"N	76°50'17.27"E
BP3	8°43'51.74"N	76°50'21.24"E
BP4	8°43'44.83"N	76°50'23.24"E
BP5	8°43'42.88"N	76°50'15.87"E

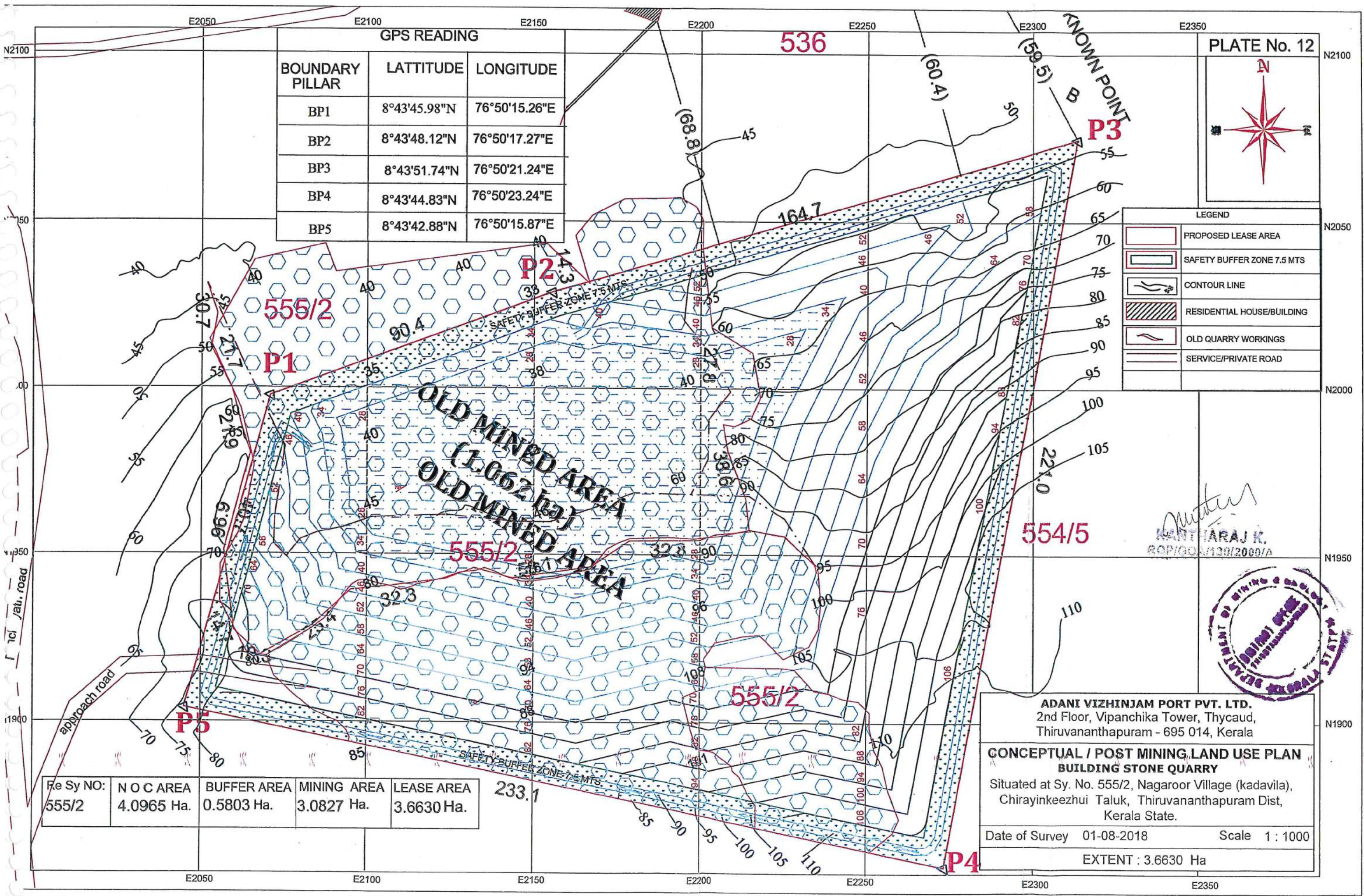
ENVIRONMENTAL
MONITORING
LOCATION

● A AIR
● N NOISE
● W WATER
● S SOIL



KANTHARAJ K.
AC/GOA/100/2008/A

ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala
SURFACE PLAN - 500 mts
BUILDING STONE QUARRY
Situated at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezhu Taluk, Thiruvananthapuram Dist,
Kerala State.
Date of Survey 01-08-2018 Scale 1: 5000
EXTENT : 3.6630 Ha



GPS READING		
BOUNDARY PILLAR	LATTITUDE	LONGITUDE
BP1	8°43'45.98"N	76°50'15.26"E
BP2	8°43'48.12"N	76°50'17.27"E
BP3	8°43'51.74"N	76°50'21.24"E
BP4	8°43'44.83"N	76°50'23.24"E
BP5	8°43'42.88"N	76°50'15.87"E

PLATE No. 12



LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD

OLD MINED AREA
(1.062 Ha)
OLD MINED AREA

Re Sy NO:	N O C AREA	BUFFER AREA	MINING AREA	LEASE AREA
555/2	4.0965 Ha.	0.5803 Ha.	3.0827 Ha.	3.6630 Ha.

ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

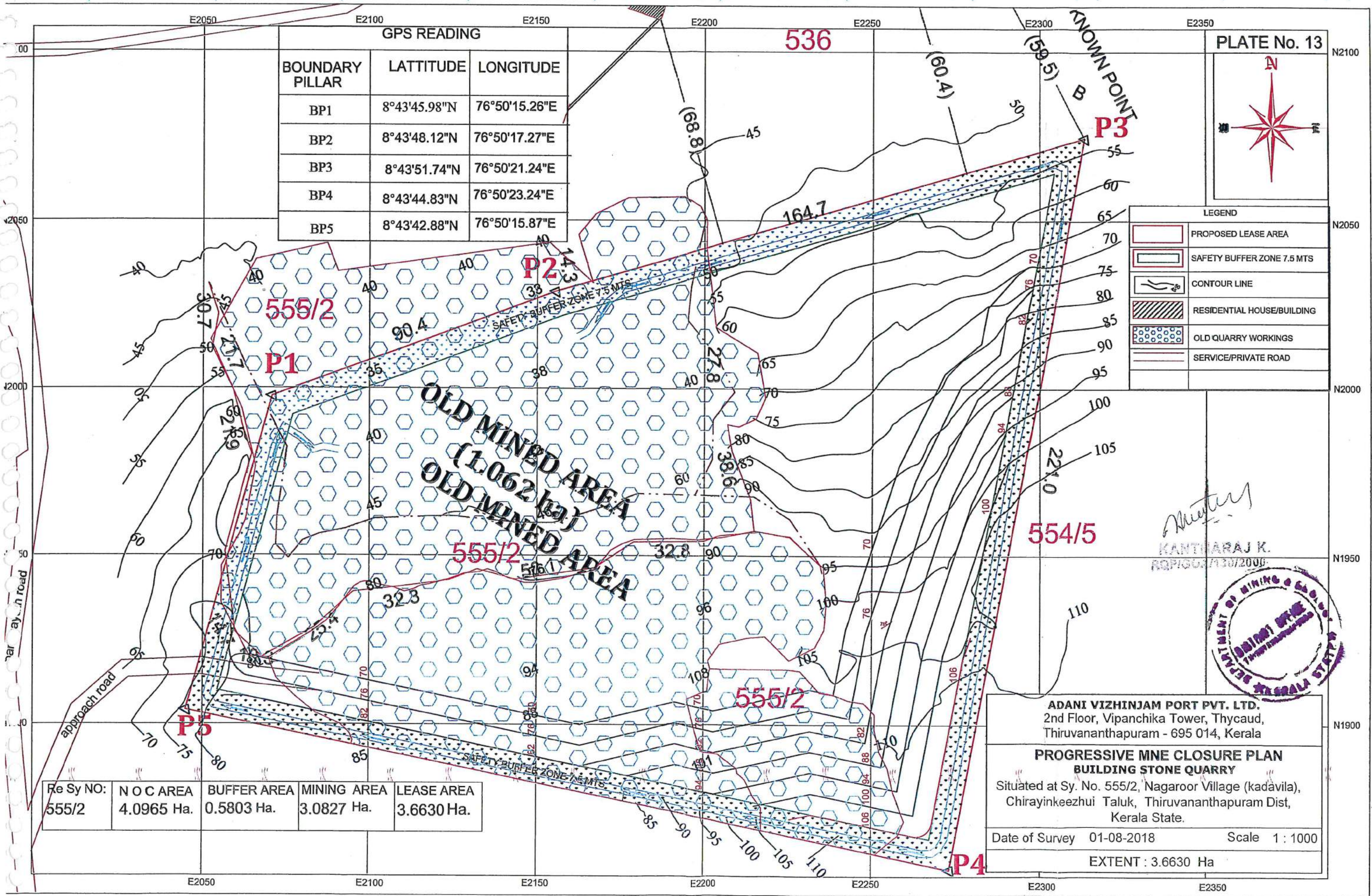
CONCEPTUAL / POST MINING LAND USE PLAN
BUILDING STONE QUARRY
Situatd at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezhul Taluk, Thiruvananthapuram Dist,
Kerala State.

Date of Survey 01-08-2018 Scale 1 : 1000

EXTENT : 3.6630 Ha

Muthu
KANTHARAJ K.
ROPIGOL/120/2000/A





GPS READING		
BOUNDARY PILLAR	LATTITUDE	LONGITUDE
BP1	8°43'45.98"N	76°50'15.26"E
BP2	8°43'48.12"N	76°50'17.27"E
BP3	8°43'51.74"N	76°50'21.24"E
BP4	8°43'44.83"N	76°50'23.24"E
BP5	8°43'42.88"N	76°50'15.87"E



LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD

Re Sy NO:	N O C AREA	BUFFER AREA	MINING AREA	LEASE AREA
555/2	4.0965 Ha.	0.5803 Ha.	3.0827 Ha.	3.6630 Ha.

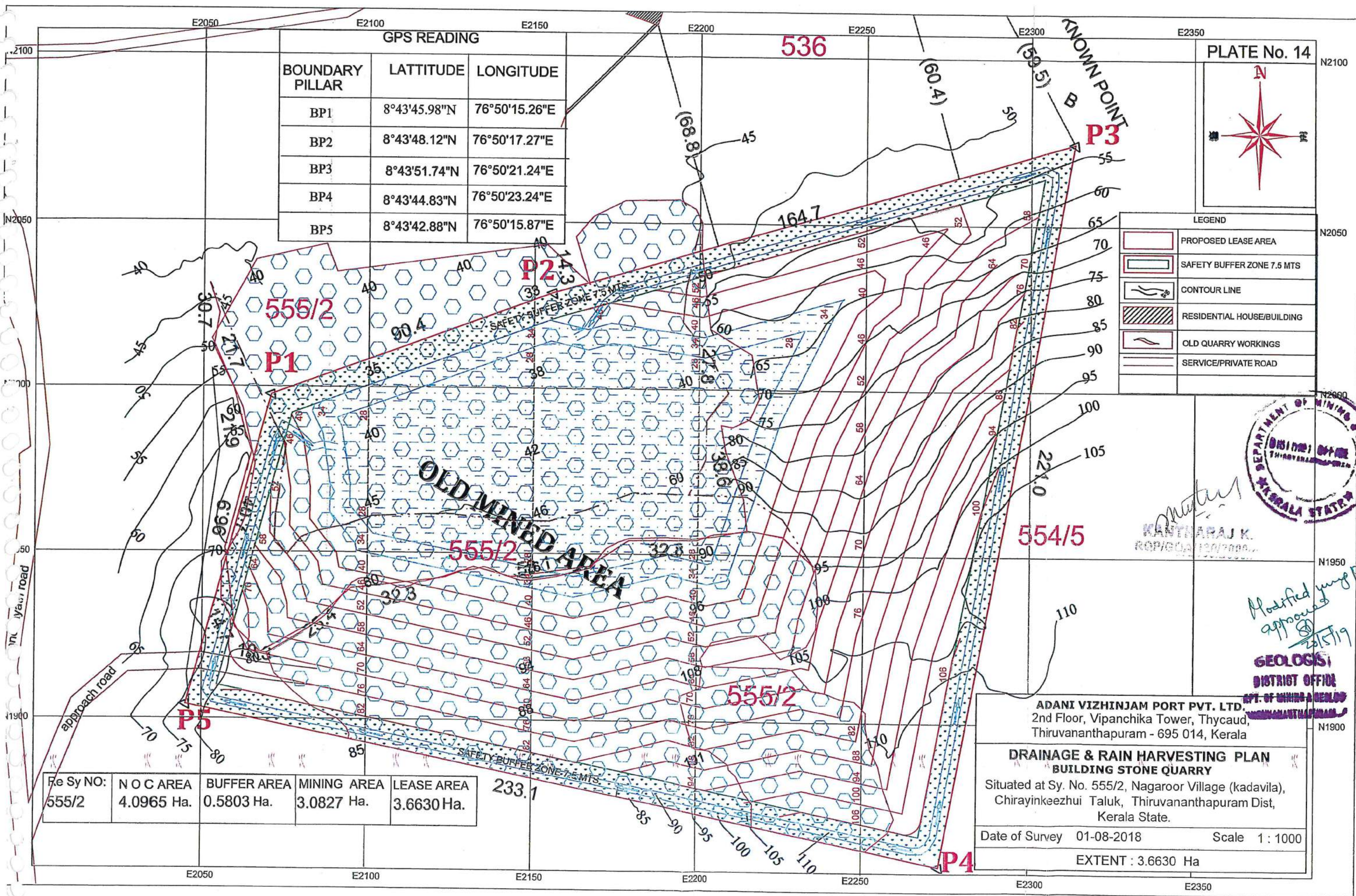
ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

PROGRESSIVE MNE CLOSURE PLAN
BUILDING STONE QUARRY
Situating at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezh Taluk, Thiruvananthapuram Dist,
Kerala State.

Date of Survey 01-08-2018 Scale 1 : 1000

EXTENT : 3.6630 Ha

Mutyar
KANTHARAJ K.
RSP/IGUA/130/2006



GPS READING		
BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP1	8°43'45.98"N	76°50'15.26"E
BP2	8°43'48.12"N	76°50'17.27"E
BP3	8°43'51.74"N	76°50'21.24"E
BP4	8°43'44.83"N	76°50'23.24"E
BP5	8°43'42.88"N	76°50'15.87"E



LEGEND	
	PROPOSED LEASE AREA
	SAFETY BUFFER ZONE 7.5 MTS
	CONTOUR LINE
	RESIDENTIAL HOUSE/BUILDING
	OLD QUARRY WORKINGS
	SERVICE/PRIVATE ROAD



KANTHARAJ K.
ROPI/GOA/120/2000

Modified and approved
20/5/19

GEOLOGIST
DISTRICT OFFICE
DEPT. OF MINING & GEOL.

ADANI VIZHINJAM PORT PVT. LTD.
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram - 695 014, Kerala

DRAINAGE & RAIN HARVESTING PLAN
BUILDING STONE QUARRY

Situated at Sy. No. 555/2, Nagaroor Village (kadavila),
Chirayinkeezh Taluk, Thiruvananthapuram Dist,
Kerala State.

Date of Survey 01-08-2018 Scale 1 : 1000

EXTENT : 3.6630 Ha

Re Sy NO:	N O C AREA	BUFFER AREA	MINING AREA	LEASE AREA
555/2	4.0965 Ha.	0.5803 Ha.	3.0827 Ha.	3.6630 Ha.

Annexure 3: Constitution of the Environmental Management and Monitoring Cell

Constitution of the Environmental Management and Monitoring Cell

As per the Environmental Clearance granted for Building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, General Conditions Point No. 1 States that: *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.*

Therefore, an environmental management and monitoring cell was constituted by Adani Vizhinjam Port Pvt. Ltd. (AVPPL) with the following members:

1. Mr. Hebin C. (Committee In-Charge)
2. Mr. P. kumar (Mine Manger)
3. Mr. Saravanan (Asst. Mine Manager)
4. Mr. Athul Gopal (Mining Team)
5. Mr. Vaddi Venkat (Techno-Commercial Team)
6. Mr. Nilanjan Battacharya (Finance Team)
7. Mr. Manoranjan Tripathy (Projects Team)
8. Dr. Anil Balakrishnan (CSR Team)
9. Mr. Jesse Fullonton (Environment team)
10. Mr. Kanwar Malik (Horticulture Team)

Meeting of the environmental management and monitoring cell will be held once a month in the Conference room of AVPPL at Second Floor, Vipanchika Tower, Thycaud, Trivandrum, Kerala-695 014.

Annexure 4: Consent to Operate (CTO)

FILE NO : PCB/TVM-DO/ICE/10171298/2019

Date of issue : 05/03/2019



KERALA STATE POLLUTION CONTROL BOARD

CONSENT TO

OPERATE/AUTHORISATION/REGISTRATION

ISSUED UNDER

The Water (Prevention & Control of Pollution) Act, 1974

The Air (Prevention & Control of Pollution) Act, 1981

and

The Environment (Protection) Act, 1986

As per Application No. :10171298

Dated:02-03-2019

TO

M/s BUILDING STONE QUERY OF ADANI VIZHINJAM PORT PRIVATE LIMITED

Nagaroor Village

CHIRAYINKEEZHU

Consent No. :PCB/TVM-DO/ICO/QRY/103 /2019

Valid Upto :27/02/2021

1. GENERAL

1.1. This integrated consent is granted subject to the power of the Board to withdraw consent, review and make variation in or revoke all or any of the conditions as the Board deems fit.

1	VALIDITY	27/02/2021
2	Name and Address of the establishment	BUILDING STONE QUERY OF ADANI VIZHINJAM PORT PRIVATE LIMITED AT NAGARROOR VILLAGE 695601
3	Communication	Telephone :0-9099938893 Fax :079-25555602 E-mail:shalinm.shah@adani.com
4	Occupier Details	Rajesh Jha CEO Adani Vizhinjam Port Private Limited Adani House, Near Mithakhali Six Roads, Navrangpura, Ahmedabad-380009
5	Local Body	Nagaroor Village, Chirayinkeez taluka, Thiruvananthapuram district
6	Survey Number	555/2
7	Village	Nagroor
8	Taluk	CHIRAYINKEEZHU
9	District	THIRUVANANTHAPURAM
10	Capital Investment(Rs in Lakhs)	750 LAKHS
11	Scale	Medium
12	Category	RED
13	Annual fee(Rs)	Rs.60000/-
	Total Fee remitted(Rs)	Rs.125000/-
14	RAW MATERIAL	PRODUCTS
	Stones Quarrying	Quarrying of maximum 7 Lakh tons of building stone with in 2 year
15	Total Power Required (HP)	NIL

2. CONDITIONS AS PER

The Water(Prevention and Control of Pollution)Act, 1974

- 2.1 In case of generation of trade effluent from the industry, effluent treatment system consisting of treatment units having adequate capacity established as per the Integrated Consent to Establish issued shall be operational at all times during which the industry is functional. Additional facilities required, if any, to achieve the standards laid down by the Board u/s 17(1) (g) of the Water Act shall also be made along with.
- 2.2 Water consumption: NIL
- 2.3 Effluent generation:

2.4 The characteristics of effluent after treatment shall confirm to the following tolerance limits:

Sl.NO.	Characteristics	Unit	Tolerance Limit	
			Sewage	Trade Effluent

2.5 Mode of disposal of treated effluent:

3. CONDITIONS AS PER

The Air(Prevention and Control of Pollution)Act, 1981

3.1 Adequate air pollution control measures shall be operational at all times during the functioning of the industry. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be made along with.

Stack No.	Sources of Emission	Emission Rate(Nm3/Hr)	Stack Height above		Control Equipment
			Ground Level	Roof Level	

3.2 Emission characteristics shall not exceed the following:

Sl.No.	Parameter	Limiting Standards (mg/Nm3)
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4. CONDITIONS AS PER

The Environment (Protection) Act, 1986.

4.1 The operation of the industry shall be strictly in compliance with the provisions of the Noise Pollution (Regulation and Control) Rules 2000.

4.2 Used lead acid batteries shall be disposed of as per the Batteries (Management and Handling) Rules, 2001

4.3 Hazardous waste generated, if any, shall be handled as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

4.3.1 Activities for which Authorisation is granted

Collection	✓	transport	✓
Reception		Storage	✓
Treatment		Reprocessing/Disposal	

4.3.2 Type, quantity and mode of storage/collection/disposal of hazardous wastes shall be as follows:

Sl.No.	Hazardous Waste	Schedule Category	Quantity Tonne/year
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Mode of	
Storage	Disposal

4.4 E-waste shall be disposed off safely as per the E-Waste (Management) Rules, 2016.

5. SPECIFIC CONDITIONS

5.1 Quarrying is restricted to the land bearing Sy nos: 555/2

5.2 This consent is granted subject to the power of the Board to review and make variations in all or any of the conditions as per section 21 of the Air (Prevention and Control of Pollution) Act 1981 and section 25 of the Water (Prevention and Control of pollution) Act 1974.

5.3 Any change in the particulars furnished in the references and/or in the identity of the occupier / authorized agent shall be intimated to the Board within a week.

5.4 It is the responsibility of occupier to ensure that quarrying activities are restricted to only area shown in the attached drawing and at a distance more than 50 m from the nearby residential buildings, places of worship, public buildings, public road having vehicular traffic, river or lake, railway line and bridges.

5.5 After excavation at the site is completed, the land may be reclaimed or used for rain water harvesting with protective barriers/any other suitable purpose like aquaculture approved by the authority.

5.6 All the necessary control measures provided should be maintained properly to ensure that the system is adequate to control the air and water pollution caused by the functioning of the unit within the limit.

5.7 Regular wetting of the roads in the premises of the quarry and approach roads near the quarry shall be done for avoiding excessive dust emission within and outside the boundary of the unit.

5.8 Boundary of quarrying area shall be fenced and demarcated.

5.9 Fugitive emission from the quarry premises and road leading to quarry shall be suppressed using water sprinkling.

5.10 The suspended particulate matter (SPM) at boundary of the premises of the quarry shall not exceed the following limit applicable to that area as per the National Ambient Air Quality Standards.

a) The PM 10 in ambient air at the boundary shall not exceed 100 microg/m³

b) The PM 2.5 in ambient air at 1m outside the boundary shall not exceed 60 microg/m³.

5.11 The sound level measured at 1.0 m outside the boundary shall not exceed the limit as per the Ambient Air Quality Standards in respect of Noise.

5.12 The operation of the unit shall be commenced/done only after obtaining clearances from all concerned authorities.

5.13 The quarry shall be operated only from 6am to 6pm.

5.14 Quarrying shall be limited to a maximum of 7 Lakh tons of building stone with in 2 year.

5.14 For renewal of the consent in case of continuance of operation of the industry, application in the prescribed form shall be submitted through the web portal of the Board <http://krocmms.nic.in> for renewing the Consent on or before two month in advance to expiry date. Late application will be accepted with 10% (for application before expiry date) & 50% of yearly fee as late fee for application after due date.

5.15 This Consent is granted on the basis of minutes of the State Environment Impact Assessment Authority (SEIAA) Kerala Held on 27/02/2019 (Item No:89.02), Affidavit and other documents furnished by the applicant. If any document is found false, the consent issued will be cancelled/ revoked.

5.16 The Environmental Clearance shall be submitted to this Office with in ten days, failing which the consent will be automatically cancelled.

DATE :05/03/2019

SIGNATURE & SEAL OF ISSUING AUTHORITY
ENVIRONMENTAL ENGINEER,
DISTRICT OFFICE,
THIRUVANANTHAPURAM



To

Building Stone Query of ADANI VIZHINJAM PORT PRIVATE LIMITED
AT Nagaroor Village

- 1. This digitally signed document is legally valid as per the Information Technology Act 2000**
2. For verifying this document please go to krocmms.nic.in and search using date of issue/name of the unit/Application Number in “Consent Granted Applications” link in the home page of the Board’s Online Consent Management and Monitoring System.

DISTRICT : THIRUVANANTHAPURAM

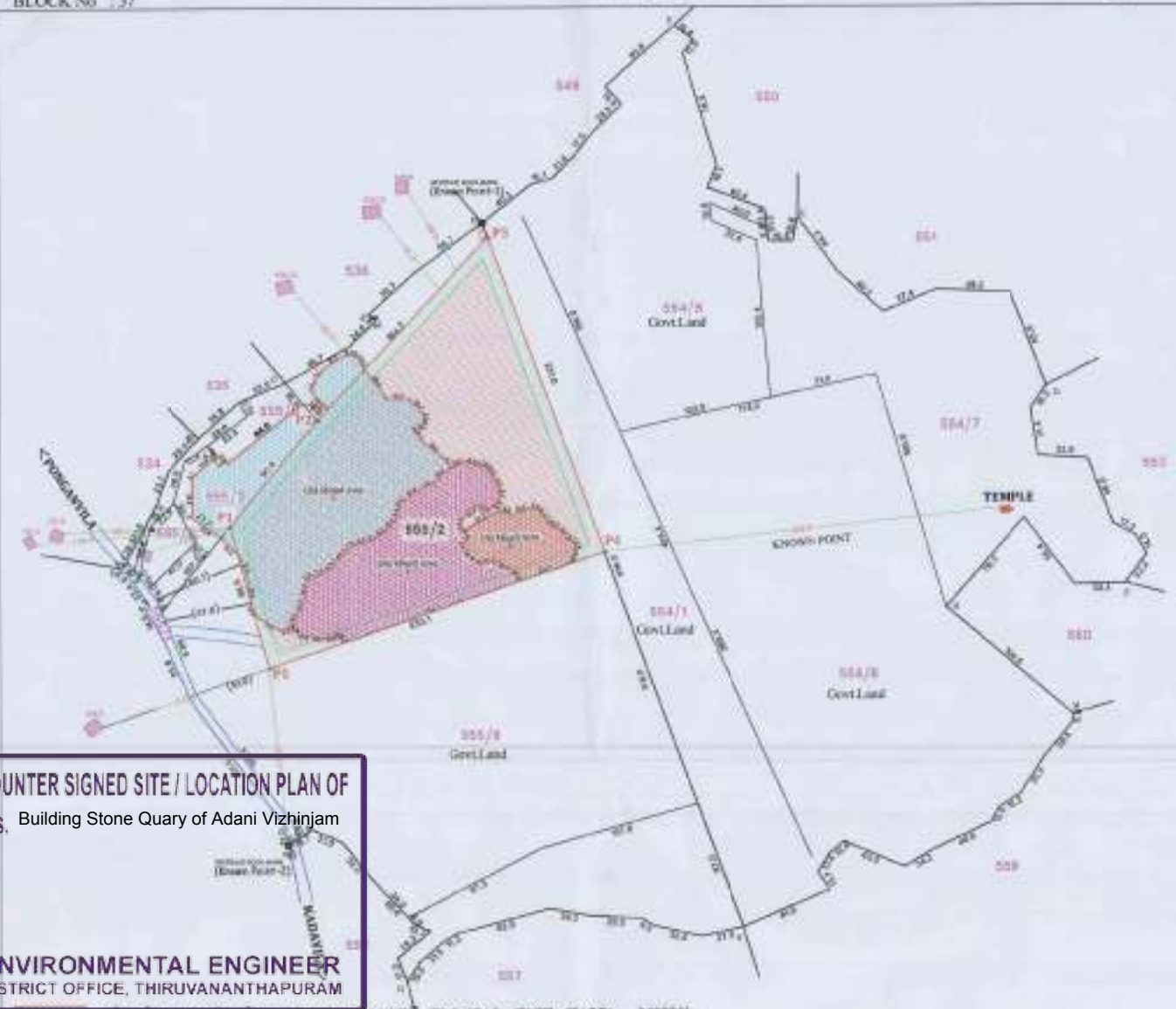
FILE NO.:

TALUK : CHIRAYINKEEZH

VILLAGE : NAGARBOOR










BLOCK No 37

Re Sy No. : 555/2



COUNTER SIGNED SITE / LOCATION PLAN OF
M/s. Building Stone Quarry of Adani Vizhinjam

ENVIRONMENTAL ENGINEER
DISTRICT OFFICE, THIRUVANANTHAPURAM

- | | |
|---|--|
|  | 11/10/2022-2 555/2 ൽ ഖനനാനുരണിക്കുമായി ആവശ്യപ്പെടുന്ന സ്ഥലം 3.6827Ha |
|  | റീസർവ്വേ 555/2 ൽ ഖനനാനുരണിക്കുമായി ആവശ്യപ്പെടുന്ന സ്ഥലത്തിന്റെ ചുറ്റുമുള്ള ബഫർ ഏരിയ 0.5803Ha |
|  | റീ സർവ്വേ 555/2 ൽ ഖനനാനുരണിക്കുമായി ആവശ്യപ്പെടുന്ന Lease Area =3.6630Ha |
|  | പഞ്ചായത്ത് ഓഫീസ് |
|  | ഖനനസ്ഥലത്തിലേക്കുള്ള വഴി |
|  | പതിനാലു പ്രദേശത്തുള്ള വീട് |
|  | പാറ ഭാഗ്ഗ് കടന്നു നീങ്ങുന്ന സ്ഥലം |
|  | റീസർവ്വേ 555/2 ൽ ഖനനാനുരണിക്കുമായി ആവശ്യപ്പെടുന്ന സ്ഥലത്തെ സ്ഥിരീകരിക്കുന്ന സ്ഥലം |
|  | റീസർവ്വേ 555/2 ന്റെ ആകെ വിസ്തീർണ്ണം 4.8774 Ha |

Submitted before The Mining and Geology Department

2019 年 12 月 31 日		
资产类别	账面余额	减值准备
应收账款	1,000,000.00	100,000.00
其他应收款	500,000.00	50,000.00
长期股权投资	2,000,000.00	200,000.00
固定资产	8,000,000.00	800,000.00
无形资产	1,500,000.00	150,000.00
商誉	3,000,000.00	300,000.00
其他资产	1,000,000.00	100,000.00
合计	17,000,000.00	1,700,000.00

Office Use: *Ad. 3*
 Directors only: *no endorsement*

Applicant Designation & Address

MA CEO ADARSH VIZHINJAM PURI Pvt. Ltd.
2nd Floor, Vijaya Vittala Tower,
Thiruvallur, Thiruvananthapuram.

Scale 1 cm = 20 m



95
TAYLOR, DAN
COLUMBIANA

**Annexure 5: Govt. Land NoC from
Trivandrum District Collector**

നിരാക്ഷേപ സാക്ഷ്യപത്രം.

തിരുവനന്തപുരം ജില്ലയിൽ ചിറയിൻകീഴ് താലൂക്കിൽ നഗരൂർ വില്ലേജിൽ ബ്ലോക്ക് നമ്പർ 37-ൽ റീസർവ്വെ 555/2-ൽ ഉൾപ്പെട്ട സർക്കാർ പാറ ലിസിന് എടുത്ത് ഖനനം ചെയ്യുന്നതിന് NOC അനുവദിക്കുന്നതിലേയ്ക്കായി ശ്രീ. വിഷ്ണു ജി. നായർ, ശ്രീ. ദേവദാസ്, ശ്രീ. രഞ്ജിത് ഭാസി, സതേൺ മൈൻസ് & മിനറൽസ്, M/s ബികോൺസ് ലിമിറ്റഡ് എന്നിവർ അപേക്ഷ സമർപ്പിച്ചിട്ടുള്ളതാണ്. എന്നാൽ വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിന് ആവശ്യമായ പാറയും പാറ ഉല്പന്നങ്ങളും ലഭ്യമല്ലാത്ത സാഹചര്യത്തിൽ ടി പാറ ഖനനം ചെയ്യുന്നതിന് NOC ത്വായി ശ്രീ. സുഷിൻ നായർ, ഹെഡ് കോർപ്പറേറ്റ് അഫയേഴ്സ്, അദാനി ഗ്രൂപ്പ് 16-03-2018-ൽ AVPPL/Gok/2018-19/398 നമ്പർ കത്ത് പ്രകാരം അപേക്ഷ സമർപ്പിച്ചിട്ടുള്ളതാണ്. വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിനായി പാറ ഖനനം ചെയ്യുന്നതിന് NOC അനുവദിക്കുന്നതിനായി 20-04-2018-ലെ VISL/2015-16/EE & E1-4/83-ാം നമ്പർ കത്ത് മുഖേന വിഴിഞ്ഞം ഇന്റർനാഷണൽ സീ പോർട്ട് ലിമിറ്റഡ് മാനേജിംഗ് ഡയറക്ടർ & ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ ശുപാർശ ചെയ്തിട്ടുള്ളതാണ്. അദാനി വിഴിഞ്ഞം പോർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡിന് പാറ ലഭ്യമാക്കുന്നതിന് ആവശ്യമായ നടപടികൾ സ്വീകരിക്കുവാൻ 23-04-2018-ലെ 91/E1/2017/F&PD നമ്പർ കത്ത് പ്രകാരം ഫിഷറീസ് & പോർട്ട്സ് (ഇ) വകുപ്പിന്റെ നിർദ്ദേശവും ലഭിച്ചിട്ടുള്ളതാണ്. ഈ സാഹചര്യത്തിൽ നഗരൂർ വില്ലേജിലെ ബ്ലോക്ക് 37-ൽ റീസർവ്വെ 555/2 -ൽ ഉൾപ്പെട്ട 4.9065 ഹെക്ടർ പ്രദേശത്തെ സർക്കാർ പാറ ചുവടെ ചേർത്തിരിക്കുന്ന നിബന്ധനകൾക്ക് വിധേയമായി നിയമാനുസൃതമായി ഖനനം ചെയ്യുന്നതിന് ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, അദാനി വിഴിഞ്ഞം പോർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡിന് നിരാക്ഷേപ സാക്ഷ്യപത്രം അനുവദിക്കുന്നു.

നിബന്ധനകൾ

- 1) ഈ NOC പ്രകാരം ഖനനം ചെയ്യുന്ന പാറ വിഴിഞ്ഞം തുറമുഖ നിർമ്മാണത്തിന് മാത്രം വിനിയോഗിക്കേണ്ടതാണ്. ഖനനം ചെയ്യുന്ന പാറ വിപണനം ചെയ്യാൻ പാടുള്ളതല്ല.

- 2) NOC അനുവദിച്ച തീയതി മുതൽ 6 മാസത്തിനുള്ളിൽ പാരിസ്ഥിതിക അനുമതി നേടിയിരിക്കേണ്ടതാണ്.
- 3) സർക്കാരിന്റെയോ മറ്റ് പൊതുവായ ആവശ്യങ്ങൾക്കോ സർക്കാർ/ജില്ലാ ഭരണ കൂടം നിശ്ചയിക്കുന്ന നിരക്കിൽ പാറയും പാറ ഉത്പ്പന്നങ്ങളും നൽകേണ്ടതാണ്.
- 4) NOC അനുവദിച്ച തീയതി മുതൽ രണ്ട് വർഷത്തിനുള്ളിൽ ഖനനം ചെയ്യുന്ന പ്രവർത്തനങ്ങൾ ആരംഭിച്ചിട്ടില്ലെങ്കിൽ ഈ NOC അസാധുവാകുന്നതാണ്.
- 5) ഖനന പ്രവർത്തനങ്ങൾ അദാനി ഗ്രൂപ്പിന്റെ നേരിട്ടുള്ള നിയന്ത്രണത്തിൽ ആയിരിക്കേണ്ടതും മറ്റുള്ളവർ മുഖേന നടത്തുവാൻ പാടില്ലാത്തതുമാണ്.
- 6) പാരിസ്ഥിതിക അനുമതിയും നിയമപരമായ ആവശ്യമുള്ള മറ്റ് എല്ലാ അനുമതിയും നേടിയ ശേഷം മാത്രമേ ഖനനം ആരംഭിക്കാൻ പാടുള്ളൂ.
- 7) 2015-ലെ കെ.എം.എം.സി ചട്ടങ്ങളിലെയും 1957-ലെ കെ. എൽ.സി ആക്ടിലെയും വ്യവസ്ഥകൾ കർശനമായി പാലിക്കേണ്ടതാണ്.
- 8) പാറ ഖനനം നടത്തുന്ന പ്രവർത്തിക്കായി നിയോഗിക്കുന്ന ജോലിക്കാരുടെ വിവരങ്ങൾ അടങ്ങിയ ഒരു രജിസ്റ്റർ സൂക്ഷിക്കേണ്ടതാണ്.
- 9) എക്സ് പ്ലോസിവ് ആക്ട് പ്രകാരമുള്ള നിബന്ധനകൾ കർശനമായി പാലിക്കേണ്ടതും മറ്റ് അടിസ്ഥാന സൗകര്യങ്ങൾ ടി സ്ഥലത്ത് ലഭ്യമാക്കേണ്ടതുമാണ്.
- 10) ഖനനം നിമിത്തം ഉണ്ടാകുന്ന കുഴികൾ മണ്ണിട്ട് മൂടി അപകടരഹിതമാക്കേണ്ടതും കമ്പി വേലി കെട്ടി സംരക്ഷിക്കേണ്ടതുമാണ്.
- 11) നിരാക്ഷേപ സാക്ഷ്യ പത്രത്തിന്റെ കാലാവധി മൈനിംഗ് & ജിയോളജി വകുപ്പ് ലീഡ് നൽകുന്ന തീയതി മുതൽ 10 വർഷത്തേയ്ക്കോ, വിഴിഞ്ഞം പദ്ധതിയുടെ നിർമ്മാണ പ്രവർത്തനങ്ങൾ തീരുന്നത് വരെയോ ഏതാണോ ആദ്യം അതുവരെയായിരിക്കുന്നതാണ്.
- 12) തഹസിൽദാർ അംഗീകരിച്ച് നൽകുന്ന സ്പെച്ച് പ്രകാരമുള്ള ഭൂമിയിൽ മാത്രമേ ഖനനം നടത്താൻ പാടുള്ളൂ.

13) പ്രസ്തുത സ്ഥലം പാറ ഖനനത്തിന് അനുയോജ്യമല്ലായെന്ന് മൈനിംഗ് & ജിയോളജി ഡയറക്ടർക്ക് ബോധ്യപ്പെട്ടുകയാണെങ്കിൽ ഈ നിരാക്ഷേപ സാക്ഷ്യപത്രം പ്രാബല്യത്തിൽ വരുന്നതല്ല.

മേൽ വിവരിച്ച നിബന്ധനകൾ പാലിക്കപ്പെടുന്ന പക്ഷം ഈ നിരാക്ഷേപ സാക്ഷ്യപത്രം റദ്ദാക്കി തുടർനടപടികൾ സ്വീകരിക്കുന്നതായിരിക്കും.

(ഒപ്പ്)
ജില്ലാ കളക്ടർ

സ്വീകർത്താവ്

✓ ജെഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, അദാനി പോർട്ട്സ് പ്രൈവറ്റ് ലിമിറ്റഡ്.

പകർപ്പ്.

1. ഗവൺമെന്റ് പ്രിൻസിപ്പൽ സെക്രട്ടറി,
മത്സ്യബന്ധനവും തുറമുഖവും (ഇ) വകുപ്പ് (ആമുഖ കത്ത് സഹിതം)
2. ഡയറക്ടർ, മൈനിംഗ് & ജിയോളജി, തിരുവനന്തപുരം.
3. തഹസിൽദാർ, കണ്ടൽത്തട് ചിറയിൻ കീഴ്
4. വില്ലേജ് ഓഫീസർ, കണ്ടൽത്തട്
5. ജില്ലാ ജിയോളജിസ്റ്റ്, തിരുവനന്തപുരം.
6. MD & CEO, VISL.



അംഗീകാരത്തോടെ

(Handwritten signature)

ഡെപ്യൂട്ടി കളക്ടർ (എൽ.ആർ)

Annexure 6: Lol from DMG

No. 9363/M3/2018

Directorate of Mining & Geology
Kesavadasapuram, Pattam Palace .P.O,
Thiruvananthapuram - 4
Tel Fax : 0471 2447429
e-mail: director.dir.dmg@kerala.gov.in
www.dmg.kerala.gov.in
Date : 04-09-2018

From
The Director of Mining & Geology

To
✓ M/s. Adani Vizhinjam Port Private Limited,
2nd Floor, Vipanchika Tower,
Thycaud, Thiruvananthapuram District - 695 014
(Registered Office at: Adani House, Near Mithakhali Six Roads,
Navrangpura, Ahmedabad, Gujrat State - 380 009)
(Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Sir,

Sub:- Mines and Minerals - Minor Mineral - Granite (Building Stone) -
Application for quarrying lease under KMMC Rules 2015 - Letter of
Intent - forwarding of- reg.

- Ref:- 1. Your application for quarrying lease dated 13.06.2018.
2. NOC No. B7-40269/2017 dt. 30.04.2018 issued by District Collector,
Thiruvananthapuram.
3. Letter No. 1716/DOT/ML/2018 dtd. 18/08/2018 of the Geologist, District
Office, Thiruvananthapuram.
4. Kerala Minor Mineral Concession Rules 2015.

Please refer to the references cited above . As per the reference 1st cited, you have applied for a quarrying lease for a period of 10 years from this office for the extraction of granite building stone from an area of 3.6630 Hectares in Re-Survey Block No. 37, Re - Survey No. 555/2 of Nagaroor Village of Chirayinkeezhu Taluk of Thiruvananthapuram District [as shown in the Survey Map No. B9/9590/18 issued by Tahsildar, Chirayinkeezhu enclosed]. Vide reference cited 2 above, District Geologist, Thiruvananthapuram forwarded your application to this office with recommendations to issue Letter of Intent. On scrutiny of application and other documents received from the Geologist, it is seen that a quarrying lease can be granted to the precise area shown in the map under the provisions contained in the KMMC Rules 2015. However, for granting quarrying lease you have to produce following documents through District Geologist to the satisfaction of this office in accordance with the relevant statutes.

9

DOCUMENTS TO BE PRODUCED

1. Mining plan approved by the District Geologist as stipulated in the KMMC Rules 2015, for the precise area as per the survey map.
2. Environmental Clearance as stipulated in EIA Notification 2006 for the precise area.
3. Consent to operate quarry from the Kerala State Pollution Control Board for the precise area.
4. Explosive licence from the authorities concerned for appropriate quantity of explosives required for extraction of mineral as mentioned in the approved mining plan.
5. D & O Licence from the Local Self Government authorities concerned for operating quarry in the precise area.

In addition, you shall make arrangements for the survey and demarcation by erection of boundary pillars of the said area by the revenue authority not below the rank of a Tahsildar or Asst. Director of the Department of Survey and Land Records and shall produce a certificate in this regard issued by authorities concerned.

It is further informed that the duration of lease as well as annual production of mineral will be decided based on the approved mining plan and documents submitted.

It is also informed that as per the provisions contained in the KMMC Rules 2015 this letter of intent shall be sufficient for the purpose of issuing necessary licenses/consents/Clearances/NOCs etc. by the other statutory authorities concerned. In the event of granting of quarrying lease you may also need to produce new Possession & Enjoyment Certificate at the time of grant of quarrying lease.

It is further informed that this letter of intent is valid for a period of one year from the date of issue. In case you have any valid reason for seeking extension of period of this LOI, the same may be obtained before the expiry of this LOI. Your application for Quarrying Lease shall be deemed to have been rejected, if you fail to produce above mentioned documents before the expiry of LOI.

Yours faithfully,

False
07/09/2018

6 ADDITIONAL DIRECTOR OF MINING & GEOLOGY

Encl: Photocopy of Survey Map showing precise area

Copy to:-

1. The District Collector & Chairman, DEIAA, Thiruvananthapuram.
2. The Deputy Chief Controller of Explosives, CSEZ, CGO Complex, Kakkanad, Ernakulam
3. Kerala State Pollution Control Board, District Office, Thiruvananthapuram District.



4. The Secretary, Nagaroor Grama Panchayath, Thiruvananthapuram District

For kind attention of statutory authorities

[The statutory authorities while issuing licence/consents/NOCs based on this letter of intent may refer this letter of intent in the respective licence/consent/ clearance /NOC while issuing the same. The statutory authorities may refer the survey map and consider the extent of applied area, quantity of mineral proposed to extract and the period of lease applied for while issuing such documents. The authorities may note that the operation as per their licence shall start only after execution and registration of quarrying lease granted by this office. All the Survey Nos./Re-Survey numbers with Block No. included in the survey map submitted in this connection shall be included in all the aforesaid documents.]

5. The Tahsildar, Taluk Office, Chirayinkeezhu

6. The Geologist, District Office, Thiruvananthapuram (The Geologist shall forward all the above said documents to this office for grant of quarrying lease with recommendations).



**Annexure 7: Purchase and Use of
Explosives Approval from PESO,
Ernakulam**



भारत सरकार

Government of India

वाणिज्य और उद्योग मंत्रालय

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)

Petroleum & Explosives Safety Organisation (PESO)

केन्द्रीय भवन, ब्लॉक सी-2, तीसरी मंजिल, CSEZ पी.ओ.कन्नकनाड कोच्ची- 682037

Kendriya Bhavan, Block C-2, 3rd Floor, CGO Comple Kakkanad,
Ernakulam - 682037

Phone: 0484-2427286/96 Fax: 0484-2427276

No.E/Misc/Expl

Date: 27.3.19

To

✓
Shri. Rajesh Kumer Jha, CEO
M/s Adani Vizhinjam Ports Pvt Ltd
2nd Floor, Vipanchika Tower,
Thycaud,
Thiruvananthapuram

Sub:- Use of explosives in quarry situated at R.S.No.555/2, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District for building the break water structure for construction of deep water multipurpose port at Vizhinjam - regarding.

- Ref (1) Your letter No. Nil dated 25/03/2019.
(2) Letter of Intent issued by Director of Mining & Geology, Thiruvananthapuram vide No. 9363/M3/2018 dated 4.9.18
(3) Approval of Mining plan issued by the Geologist, Thiruvananthapuram District vide No.1716/DOT/ML/2018 dated 26.9.2018
(4) Environmental clearance issued by SEIAA, Thiruvananthapuram vide No.02/2019 dated 1.3.19
(5) NOC issued by District Magistrate, Thiruvananthapuram vide No.B7-40269/2017 dated 30.4.18
(6) D&O licence issued by Nagaroor Gram Panchayath vide No.A2.1379/19 dated 11.3.19
(7) Consent given by KSPCB vide File No.PCB/TVM-DO/ICE/10171298/2019 dated 5.3.19
(8) Deed of Agreement dated 22.3.19 between you and Shri. Binu. V, Managing Partner, M/s Galaxy Rock Sand Industries, Vattakalitha House, Narickal P.O, Punalur, Kollam District.

Sir,

This has reference to your letter cited under ref (1) in regard to quarrying at R.S.No.555/2, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District for supply of granite stones for break water construction at Vizhinjam Port Thiruvananthapuram District. On scrutiny of the documents submitted along with the above letter, it is noted that,

1. Vide ref (2), the Director of Mining & Geology, Thiruvananthapuram vide No. 9363/M3/2018 dated 4.9.18 has issued the letter of Intent in your favour for the quarry situated at R.S.No.555/2, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District and vide ref (3), Mining plan approved by the Geologist, Thiruvananthapuram District for the subject quarry vide NO.1716/DOT/ML/2018 dated 26.9.2018

2. Vide ref (4), the State Environment Impact Assessment Authority, Thiruvananthapuram vide No.02/2019 dated 1.3.19 has issued the Environmental clearance in your favour for the quarry situated at R.S.No.555/2, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.
3. Vide ref (5), the District Magistrate, Thiruvananthapuram has issued the NOC to operate the quarry situated R.S.No.555/2, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District.
4. Vide ref (6), D&O licence issued by Nagaroor Gram Panchayath has issued the D&O licence in your favour vide No.A.1379/19 dated 11.3.19 for the subject quarry.
5. Vide ref (7), the KSPCB has issued the consent to operate the subject quarry vide File No.PCB/TVM-DO/ICE/10171298/2019 dated 5.3.19.
6. Vide ref (8), Shri. Binu. V, Managing Partner, M/s Galaxy Rock Sand Industries, Vattakaitta House, Narickal P.O., Punalur, Kollam District has made an agreement with you to supply high explosives required for blasting operations at your subject quarry from his explosives magazine situated at S.No.289/7, Koodal Village, Konni Taluk, Pathanamthitta District licensed in Form LE-3 of Explosives Rules, 2008 having licence No. E/SE/KL/22/129(E95316) valid upto 31.3.2022 to your quarry site situated at R.S.No.555/2, Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District by transporting through his explosive van licensed in Form LE-7 of Explosives Rules, 2008 having licence No. E/SE/KL/25/37(E29016), Reg.No. KL 02 V 3900.

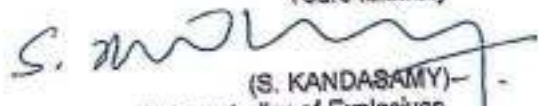
On scrutiny of documents it was observed that the D&O licence issued by Nagaroor Gram Panchayth is valid upto 31.3.2019. Hence you are requested to obtain a valid licence from them for further period as per rules.

It is also noted from your documents, you have employed Director General of Mines Safety, Bangalore, certified personnel viz., Shri. Palanivelu Kumar, First Class Mines Manager, Shri. Rajesh Chandramappa Golsangi, First Class Mines Manager, Shri. Meril Jesudas. A, Second Class Mines Manager, Shri. Peddamallu Jaganmohan Reddy, Mines Foreman and Shri. Ayyappan. S, Mining Mate, for conducting blasting operations at your subject quarry site.

In view of the above, you are requested to approach the District Magistrate, Thiruvananthapuram District for getting permission in regard to purchase and transportation of the explosives from Shri. Binu. V, Managing Partner, M/s Galaxy Rock Sand Industries, Vattakaitta House, Narickal P.O, Punalur, Kollam District, as per your deed of agreement vide ref (8) and submit the same in this office for taking necessary action.

On considering the construction of Vizhinjam Port as nation building measure, you are advised to submit application with relevant documents for obtaining licence in your favour in Form LE-3 for possess and use of explosives from an explosive magazine as per the provision of Explosives Rules, 2008.

Yours faithfully


(S. KANDASAMY)
Dy. controller of Explosives,
For Dy. Chief controller of Explosives,
Ernakulam
For Deputy Chief Controller of Explosives,
Ernakulam

Copy to:

The District Magistrate, Thiruvananthapuram - For necessary action for permission in this regard.

For Dy. Chief controller of Explosives,
Ernakulam

**Annexure 8: D&O License from
Nagaroor Gram Panchayat**



ലൈസൻസ് നമ്പർ A2-1836/2019

തീയതി 01.04.2019

നഗരൂർ ഗ്രാമ പഞ്ചായത്തിൽ നിന്നും

1994 ലെ കേരള പഞ്ചായത്ത് രാജ് ആക്ട് (1994 ലെ 13) 232, 233, 234, 254 എന്നീ

വകുപ്പുകളും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും അനുസരിച്ചു നൽകുന്ന

ഡി & ഒ ലൈസൻസ്

ലൈസൻസിയുടെ പേരും മേൽവിലാസവും	എം.ഡി.ജി.സി.ജെ.ഒ, തോറാറി വിളിഞ്ഞം ചോർട്ട് ലിമിറ്റഡ്, 2 nd ഘോർ, വിപണിപ്പാലം, തിരുവനന്തപുരം.	
സ്ഥാപനത്തിന്റെ പേരും സ്ഥലനാമവും	തോറാറി വിളിഞ്ഞം ചോർട്ട് ഓഫീസ് ലിമിറ്റഡ്	
ലൈസൻസ് നൽകിയിട്ടുള്ള പ്രവർത്തനങ്ങൾ	ചാറ ചെറുനാട് നടത്തുന്നതിന്	
കെട്ടിടത്തിന്റെ നമ്പരും വാർഡ് നമ്പരും	555/2 സർവ്വേ നമ്പർ വെങ്കട്ടവിൽ	
ലൈസൻസ് കാലയളവ്	<u>01-04-2019</u> മുതൽ <u>31.03.2020</u> വരെ	
ഈടാക്കിയ ലൈസൻസ് ഫീസ്	<u>₹10,000/-</u> രൂപ	രസീത് നമ്പർ <u>118040106213</u> <u>29-03-2019</u>
ലൈസൻസ് അനുവദിക്കുന്നതിനായി ഹാജരാക്കിയ നിരീക്ഷണ പത്രങ്ങളുടെ വിവരങ്ങൾ (നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ അധികാരസ്ഥാനം)	1. PCB ന്റെ 5-3-2019 ലെ PCB/TVM-DO/ICOL QRY/103/2019 നം: സാക്ഷ്യപത്രം തിരുവനന്തപുരം 27.02.2019 ലെ 2. ബ്ലോക്ക് ഓഫീസറുടെ ഓഫീസ് ഇൻവോയ്സ് നമ്പർ 1-3-2019 ലെ 1200/EC2/2018/ SCTAA നമ്പർ പാരിസ്ഥിതികാനുമതി ചട്ടം. 3. റെഗുലേഷൻ & ക്ലിയാൻസിംഗ് ഡയറക്ടറുടെ 4-9-2018 ലെ 9363/M3/2018 നം: സാക്ഷ്യപത്രം 4. ബന്ധ: രജിസ്ട്രാർ തിരുവനന്തപുരം 30.04.2018 ലെ ജി.എ.എ. - A0269/2017 നം: നിരീക്ഷണ സാക്ഷ്യപത്രം.	



നഗരൂർ

സെക്രട്ടറി

BIJUKUMAR. M
Secretary

Nagaroor Grama Panchayat

1. കേരളാ പഞ്ചായത്ത് രാജ് ആക്ടും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും ബൈലകളും അനുസരിച്ചു പ്രവർത്തിക്കേണ്ടതാകുന്നു.
2. തൊഴിൽ സ്ഥലവും അതിലുള്ള സാധനസാമഗ്രികളും പഞ്ചായത്തധികാരികൾക്കോ / സെക്രട്ടറി അധികാരപ്പെടുത്തുന്ന മറ്റ് ഉദ്യോഗസ്ഥർക്കോ പരിശോധിക്കുന്നതിന് ലൈസൻസി വേണ്ട സൗകര്യം നൽകേണ്ടതും അവർ ആവശ്യപ്പെട്ടാൽ ഈ ലൈസൻസ് ക്ലാർക്കു കൈമാകുന്നു.
3. എത് സ്ഥലത്തിന്റെ കാര്യത്തിൽ ലൈസൻസ് നൽകിയിരിക്കുന്നുവോ ആ സ്ഥലത്ത് എല്ലാവരും കാണത്തക്ക വിധത്തിലുള്ള ഒരു ഭാഗത്ത് ലൈസൻസി തന്റെ പേരും, ലൈസൻസിന്റെ നമ്പരും ഉദ്ദേശവും കാണിക്കുന്ന ഒരു അടയാളപ്പലക വച്ചിരിക്കേണ്ടതാണ്.
4. പഞ്ചായത്തിൽ നിന്നും അതുവാദം ലഭിച്ചശേഷമല്ലാതെ തൊഴിൽ സ്ഥലം മാറ്റാൻ പാടില്ലാത്തതും തൊഴിൽ നിർത്തുന്ന പക്ഷം വീവരും മുൻകൂട്ടി പഞ്ചായത്തിൽ അറിയിക്കേണ്ടതാകുന്നു.
5. തൊഴിൽ സ്ഥലവും പതിസമങ്ങളും വൃത്തിയായും സാംക്രമികരോഗാണുക്കൾ ഉണ്ടാകാത്ത വിധത്തിലും പൊതുജനോപദ്രവമാകാത്ത വിധത്തിലും വ്യംപാദത്തിനു വച്ചിട്ടുള്ള ഭക്ഷണപദാർത്ഥങ്ങൾ ഈച്ച, അണുക്കൾ, പൊടി മുതലായവയുടെ ശല്യം ഉണ്ടാകാത്ത വിധത്തിലും സൂക്ഷിക്കേണ്ടതാണ്.
6. മാതാപ്രവർത്തി ദിവസത്തിന്റെയും ഒടുവിൽ സ്ഥലം വൃത്തിയാക്കേണ്ടതാണ്.
7. ആ സ്ഥലത്തിന്റെയോ പതിസമങ്ങളിന്റെയോ, ഏതെങ്കിലും ഭാഗത്ത് വീഴുകയോ നിക്ഷേപിക്കപ്പെടുകയോ ചെയ്യുന്ന പപ്പുപവരോ, മൃഗങ്ങളുടെ അലശിഷ്ടങ്ങളോ മറ്റ് പദാർത്ഥമോ ശേഖരിച്ച്, സെക്രട്ടറിക്ക് സുപ്രീകരമായ രീതിയിൽ നീക്കം ചെയ്യിക്കേണ്ടതാണ്.
8. ലൈസൻസി ഏതൊരു കെട്ടിടത്തിന്റെയും ചുവരുകളുടെ അകവശത്തിന്റെ ഏതൊരു ഭാഗവും മേൽപറഞ്ഞ പതിസമങ്ങളിലുള്ള തറയും നടപ്പാതയും അവിടെ തെറിച്ചുവീഴാനിടയുള്ള ഏതെങ്കിലും ശ്രാവകരോ, മാലിന്യരോ, പപ്പുപവരോ, അസഹ്യവും, ഉപദ്രവകരവുമായ ഏതെങ്കിലും പദാർത്ഥമോ അവിടെ ലയിക്കുന്നത് തടയത്തക്കവിധം എപ്പോഴും നന്നായി കേടുപാട് തീർത്ത് നിലനിർത്തേണ്ടതാണ്.
9. ലൈസൻസി മേൽപറഞ്ഞ സ്ഥലത്തോ, പതിസമത്തോ അതോടു ചേർന്നോ ഉള്ള ഏതൊരു ഓവുചാലും, അഴുക്കുജലം കളയുന്നതിനുള്ള ഉപകരണവും എപ്പോഴും നന്നായി കേടുപാടുതീർത്ത് വയ്പിക്കേണ്ടതാണ്.
10. അയിത്തം ആചരിക്കുന്ന കടകളുടെ ലൈസൻസ് റദ്ദ്ചെയ്യുന്നതാണ്.
11. ഏതെങ്കിലും തരത്തിലുള്ള തപാൽ റോഡോ കൂപ്പ് റോഡോ വ്രണമോ പകർച്ച വ്യാധികളോ ഉള്ള യന്ത്രോരോളം കച്ചവടം നടത്തുന്നതിന് ഉപയോഗിക്കുന്ന സ്ഥലത്തും പതിസമത്തും പ്രവർത്തിക്കുവാൻ പാടില്ലാത്തതാകുന്നു.
12. 40 മൈട്രാക്രാനിൽ കറുവുള്ള പ്ലാസ്റ്റിക്കുകളും മറ്റ് നിരോധിത പ്ലാസ്റ്റിക് ഇനങ്ങളും ഉൽപ്പാദിപ്പിക്കുകയോ ശേഖരിക്കുകയോ വിൽക്കുകയോ കൈകാര്യം ചെയ്യുകയോ ചെയ്യാൻ പാടില്ല.
13. സ്ഥാപനത്തിന്റെ ബോർഡിൽ സ്ഥലനരം മലയാളത്തിലും ഇംഗ്ലീഷിലും രേഖപ്പെടുത്തേണ്ടതാണ്.
14. 20 സീറ്റിൽ കൂടുതലുള്ള എല്ലാ ഹോട്ടലുകൾക്കും റെസ്റ്റോറന്റുകൾക്കും ടോയ്ലെറ്റ് സൗകര്യം ഏർപ്പെടുത്തേണ്ടതാണ്.
15. നിരോധിത ഉൽപ്പന്നങ്ങളായ പാൻമസാല, ഗുഡ്ഡ തുടങ്ങിയവ സംഭരിച്ചുവയ്ക്കുവാനോ വിൽക്കുവാനോ പാടില്ല.
16. ബാലവേല അനുവദിക്കാൻ പാടില്ല.
17. മുകളിൽ കാണിച്ചിരിക്കുന്ന വ്യവസ്ഥകളുടെ ലംഘനം ഈ ലൈസൻസ് റദ്ദ് ചെയ്യപ്പെടുന്നതിന് കാരണമാകാവുന്നതാണ്.



(Signature)
സെക്രട്ടറി

BIJUKUMAR, M.
Nagaroor Grama Panchayat

ഈ ലൈസൻസ് അവസാനിക്കുന്ന തീയതിയ്ക്ക് 30 ദിവസം മുമ്പ് ലൈസൻസ് പുതുക്കുന്നതിനുള്ള അപേക്ഷ നൽകിയിരിക്കേണ്ടതാണ്.

**Annexure 9: NoC for Use of Explosives
from District Collector,
Thiruvananthapuram**



Collectorate, Civil Station,
Kudappanakunnu, Thiruvananthapuram-43,
Phone No:0471-2731210
Fax No:0471-2731166
E-mail:dctvm.ker@nic.in
Dated:09/05/2019

The District Collector,
Thiruvananthapuram.

The Deputy Chief Controller Of Explosives
Ernakulam
Sir,

Sub:- Use of Explosives in quarry situated at Re-survey No.555/2, Nagaroor
Village, Chirayinkeezhu Taluk Thiruvanthapuram an Thiruvananthapuram
District- reg

Ref:- Letter No.AVPPL/GOK/2019-19/730 dtd.29.03.2019 of Chief Executive
Officer Adani Vizhinjam Port Pvt Ltd.

The Chief Executive officer, Adani, Vizhinjam Port Pvt Ltd vide his letter cited has requested permission to purchase and transport Explosives from Mr. Binu V, Managing Partner, M/s Galaxy Rock Sand Industries, Vattakaitha House, Narickal P.O, Punalur, (license No.E/SE/KL/22/129(E95316) for blasting in quarry situated at Re-survey No.555/2 Nagaroor Village Chirayinkeezhu Taluk Thiruvananthapuram District. On going through the Explosives Rules 2008 it is revealed that there in no provision to grant permission for the said purpose as requested.

In this circumstance this is to inform that this office has no objection in granting permission to the said purpose after getting NOC if any from other Departments.

Signature valid
Digitally signed by ABRAHAM P T
Date: 2019.05.09 11:34:01 IST
Reason: Approved

Yours Faithfully,
ABRAHAM P T
DEPUTY COLLECTOR
For District Collector.

Copy to:1.The Chief Executive Officer, Adani, Vizhinjam Port Pvt Ltd.

Annexure 10: Lease Order from DMG

No. 9363/M3/2018

Directorate of Mining & Geology

Kesavadasapuram, Pattom P.O.

Thiruvananthapuram-4

Tel: 0471-2447429

Fax: 0471-2447429

E.mail: director.dir.dmg@kerala.gov.in

Web: www.dmg.kerala.gov.in

Dated: 20/05/2019

From

The Director of Mining & Geology

To

M/s. Adani Vizhinjam Port Private Limited,
2nd Floor, Vipanchika Tower,
Thycaud, Thiruvananthapuram District – 695 014
(Registered Office at: Adani House, Near Mithakhali Six Road,
Navrangpura, Ahmedabad, Gujrat State – 380 009)
(Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Sir,

Sub: Mining & Geology - Mines and Minerals - Minor Minerals- Granite Building Stone -
Preparation and execution of quarrying lease deed – reg.

Ref: 1. Pro. Order No. 79/2019-20/9363/M3/2018/DMG Dated: 20/05/2019
2. Kerala Minor Mineral Concession Rules, 2015
3. Kerala Minerals (Prevention of Illegal Mining, Storage & Transportation)
Rules, 2015.
4. Mines & Minerals (Development & Regulation) Act, 1957.

Please refer to the Proceedings Order cited above wherein a quarrying lease for Granite (Building Stone) is granted to M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha). A draft copy of quarrying lease deed in Form H is enclosed. I request you to prepare three copies of the quarrying lease deed, original on plain paper and two copies of the same in stamped paper worth Rs. 500/- and produce the same before the Geologist, District Office, Thiruvananthapuram for scrutiny and execution. The date of execution will be filled by the Geologist at the time of execution or you fill in the date after getting confirmation from the District Geologist. After scrutiny of the quarrying lease deed, the Geologist will inform you the date of execution convenient to him. You have to be present in person at the District Office on such date with two witnesses for execution of deed. It may be noted that the survey map based on which lease is granted to you forms a part of the deed and same has to be included in the lease deed. The signature of the lessee and lessor has to be affixed in the survey map also. After execution of deed, as per the request of the District Geologist stamp duty shall be fixed by District Registrar. On remittance of stamp duty, a certificate of remittance of stamp duty will be entered in the lease deed by the Registrar. The lease deed has to be registered by the office of the Registration Department concerned. After registration, the documents have to be produced before the District Geologist.

A chalan for Rs. 36,630/- (Rupees thirty six thousand six hundred and thirty only) being the security deposit is enclosed herewith duly countersigned. Please affix your signature at the appropriate places before remittance of money in the treasury. The original treasury receipted chalan may also be produced along with the typed copies of the lease deed before the Geologist, District Office, Thiruvananthapuram at the time of execution.

Please note that the quarrying lease deed has to be executed within a period of six months from the date on which quarrying lease has been granted and got registered in accordance with the Registration Act, 1908 vide Rules 44 of the Kerala Minor Mineral Concession Rules, 2015.

Before starting quarrying operations you have to send 2 copies of notice in attached Form D to the Director (Mining), Directorate General of Mines Safety, No. 5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bangaluru – 560 034 and one copy to District Magistrate concerned.

Yours faithfully,

Handwritten signature
20/05/2019

DIRECTOR OF MINING & GEOLOGY

Encl (applicant):

1. Proceedings order
2. Draft Form H
3. Form D
4. Countersigned Chalan

Copy to:

The Geologist, District Office, Thiruvananthapuram for further necessary action.
(Ref your letters No. 1716/DOT/ML/2018 dated. 18/08/2018, 16/03/2019)

You are instructed to execute the lease deed as and when it is received. The Proceedings Order cited as reference I, original survey map and draft Form H are enclosed herewith. The survey map forms a part of lease deed and the signatures of both lessor and lessee. A copy of the lease deed may be forwarded to this office soon after registration. Please ensure that the area under this grant is demarcated and boundary stones maintained properly before execution of the lease deed.

You may ensure remittance of security deposit, surface rent etc. for the amount specified in the lease order. You may also obtain financial guarantee from the lessee for the amount specified in the lease order.

You are also instructed to obtain and forward the Form D to this office. Since Form D is a statutory document, no movement permits shall be issued to lessee if lessee fails to prove that he had sent notice in Form D to the Director of Mines Safety, Office of the DDGMS, (Bangalore Region) Southern Zonal Office, No. 5, 100ft Road, 17th Main, Koramangala, Bangalore – 560 034 and District Magistrate.

You are further instructed to forward photocopies of the registered lease deed to the Director of Mines Safety, Bangaluru & District Collector. Please ensure that the lessee is observing the requirements as per mining plan, lease grant order, form H and KMMC Rules, 2015.

Encl: (District Geologist)

1. Original Survey Map
2. Draft Form H
3. Proceedings order



Kerala Minor Mineral Concession Rules 2015
FORM D

[See clause (a) of rule 10 and clause (m) of sub-rule (1) of rule 40]

NOTICE

1. (a) Name of mine :
(b) Name of minerals :
(c) Situation of mine (Survey Number, Village, Taluk, District, State) :
(d) Date when work was first started :
2. (a) Name and postal address of present owner (s) :
(b) Name and postal address of agent, if any :
3. (a) Name and postal address of manager, if any :
(b) His age :
(c) His qualification :
(d) His experience in mining :
4. Whether workings are likely to be extended below Ground :
5. (a) Maximum depth of open cast excavation measured From its highest to its lowest point :
(b) Date when depth first exceeded 6 metres :
6. (a) Nature, amount and kind of explosives used, if any :
(b) Date when explosives were first used :

Signature of Owner/Agent/Manager.

Date:

To be sent to:

1. The Director (Mining), Directorate General of Mines Safety, No. 5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bangaluru – 560 034 (two copies)
2. The District Magistrate of the District.

**PROCEEDINGS OF THE ADDITIONAL DIRECTOR OF MINING & GEOLOGY,
THIRUVANANTHAPURAM, KERALA**
(Present Shri. T K Ramakrishnan)

- Sub:** Department of Mining & Geology, Government of Kerala - Mines & Minerals - Minor Minerals – Granite (Building Stone) – Quarrying Lease to M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha) – sanctioned-orders-issued.
- Ref:**
- 1 Application dated. 13/06/2018 from M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)
 - 2 Letter No. 1716/DOT/ML/2018 dated. 18/08/2018, 16/03/2019 from the Geologist, District Office, Thiruvananthapuram.
 - 3 Letter of Intent No. 9363/M3/2018 dtd. 04/09/2018 issued by Director of Mining and Geology
 - 4 Environmental clearance No. 02/2019 issued vide Pro. order No. 1200/EC2/2018/SEIAA dtd. 01/03/2019 by the State Environment Impact Assessment Authority, Kerala (valid till 28/02/2024)
 - 5 Integrated consent to operate No. PCB/TVM-DO/ICO/QRY/103/2019 dt. 05/03/2019 issued by Kerala State Pollution Control Board, Thiruvananthapuram (valid till 27/02/2021)
 - 6 Explosive License No. E/SE/KL/22/129(E95316) dated. 16/05/2019 issued by Petroleum and Explosive Safety Organization, Ernakulam (valid till 31.03.2022)
 - 7 Dangerous and Offensive Trade Licence No. A2 – 1836/2019 dated. 01/04/2019 issued by Nagaroor Grama Panchayat (valid till 31.03.2020)
 - 8 Mines and Minerals (Development & Regulation) Act, 1957.
 - 9 Kerala Minor Mineral Concession Rules, 2015
 - 10 Kerala Minerals (Prevention of Illegal Mining, Storage & Transportation) Rules 2015

No. 79/2019-20/9363/M3/2018/DMG

Dated, Thiruvananthapuram 20/05/2019

ORDER

M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha (Aadhaar No. 2712 6816 7724) submitted an application vide reference first cited to obtain quarrying lease to quarry Granite (Building Stone) over an area of 3.6630 Hectares of land (as per the survey map No. B9/9590/18 issued by Tahsildar, Chirayinkeezhu) comprised in Re - Survey Block No. 37, Re – Survey No. 555/2 of Nagaroor



Village, Chirayinkeezhu Taluk. The District Geologist, Thiruvananthapuram has intimated that the applied area was previously quarried with the strength of quarrying permits issued by the Revenue Department.

Based on the merit of the application and the enclosed mandatory documents including survey map, possessions certificates, demarcation certificate and land assignment certificate issued by Revenue Authorities and based on the recommendation of the District Geologist, a letter of intent was issued to the applicant vide reference cited 3 intimating the intention of the department to grant quarrying lease subject to production of approved mining plan and other statutory licenses. The District Geologist forwarded the mining plan (prepared by Shri. Kantharaj. K, Recognized Qualified Person – Reg. No. RQP/GOA/130/2000/A) approved by him and other statutory licenses submitted by the applicant to this office. In the approved mining plan it is mentioned that mineable mineral reserve of granite (building stone) in the applied area is **17,78,750 tonnes** and that it is proposed to mine **17,78,750 tonnes** of granite (building stone) within a period of **5 (Five) years**. It is also proposed to mine 3,99,375 MT in the first year, 3,00,625 MT in the 2nd year and 10,78,750 MT in the 3rd, 4th and 5th year. In the approved mining plan it is also mentioned that a total quantity of 9,06,500 MT of building stones has already been excavated from the area. Since the applicant has produced all statutory documents as per the Letter of Intent, it is decided to grant a quarrying lease in the said land and hence the following orders are issued:

A quarrying lease is hereby granted to **M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha (Aadhaar No. 2712 6816 7724) to quarry Granite (Building Stone) over an area of 3.6630 Hectares of land (as per the survey map No. B9/9590/18 issued by the Tahsildar, Chirayinkeezhu) comprised in Re - Survey Block No. 37, Re – Survey No. 555/2 of Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District for 5 (Five) years as per the Kerala Minor Mineral Concession Rules, 2015, subject to the conditions mentioned below.**

1. The lessee shall execute a quarrying lease deed within a period of six months from the date of this order in form 'H' as per Rule 43 of the Kerala Minor Mineral Concession Rules, 2015 and the quarrying leases deed shall be registered in accordance with the provisions of the Indian Registration Act, 1908.
2. The lessee shall commence quarrying operation only after the deed is executed and registered.
3. The lessee shall not assign, sublet or transfer his lease or any right or interest therein to any person without previous written permission of the Director of Mining & Geology.
4. Royalty is payable to Government as per Rule 32 of the Kerala Minor Mineral Concession Rules, 2015 in respect of minor mineral quarried and moved out of the quarry subject to revision from time to time on the basis of amendments to the schedule I of the said Rules. In case the lessee opts for consolidated royalty payment system by registering attached metal



crusher units as per Rule 89, then consolidated royalty at the rate specified in Schedule III said Rules shall be paid instead of royalty specified in Schedule I.

5. Dead rent is realizable under 40(1)(d) of the said rules subject to revision from time to time on the basis of amendments to the schedule II of the said rules.
6. Surface rent realizable under 40(1)(e) of the said rules will be equal to the land revenue assessed by the Revenue Department subject to revision from time to time on the basis of the land revenue.
7. The lessee shall also deposit an amount of **Rs. 36,630/- (Rupees thirty six thousand six hundred and thirty only)** being the security deposit at the rate of Rs 10,000/- per hectare as security deposit for the observance of the terms and conditions of the lease before the deed is executed as per rule 42 of the said rules.
8. The lessee shall produce financial guarantee for **Rs. 1,00,000/- (Rupees one lakh only)** as stipulated in rule 62 of KMMC Rules 2015, before execution of lease deed.
9. The lessee shall pay tax related to Revenue Department, if any, as directed by them and the details should be furnished to the District Geologist periodically.
10. The lessee shall pay 10% of the amount of royalty/consolidated royalty as the case may be paid by them, being the quarry safety fund in addition to the royalty/consolidated royalty, as per rule 63 of KMMC rules, 2015.
11. In addition to the royalty, rents, funds, fees etc. that are required to be remitted by the lessee as per the Mines and Minerals (Development and Regulation) Act, 1957 and Rules made thereunder, the lessee shall pay all other fees, rents, taxes etc. as required by other agencies including Goods and Service Tax (GST) for royalty.
12. The quarrying shall be carried out as per the conditions stipulated in Kerala Minor Mineral Concession Rules 2015 and storage and transportation of mineral shall be carried out as per Kerala Minerals (Prevention of Illegal Mining, Storage and Transportation) Rules 2015.
13. The lessee shall renew Environmental Clearance on or before **28/02/2024** for the operation of the quarry for the remaining period.
14. The quarrying operations shall be strictly as per the approved mining plan and schemes of mining.
15. The lessee shall review the progressive quarry closure plan every five years from the date of opening of the quarry and shall submit to the competent authority for its approval. The lessee shall submit to the competent authority in this behalf any early report before 1st July of every year describing protective works including reclamation and rehabilitation work

dy



carried out as envisaged in the approved quarry closure plan and if there is any deviation, reasons thereof.

16. The lessee shall submit a scheme of mining for the next five years or remaining period of the lease to the competent authority for approval at least one hundred and twenty days before the expiry of the first five year period for which it was approved on the last occasion.
17. The lessee shall submit final quarry closure plan one year prior to the proposed closure of the quarry and close the quarry as per the approved quarry closure plan.
18. The production of Granite (Building Stone) from the area covered under this grant shall be subject to the year-wise quantity specified in the approved Mining Plan and scheme of mining.
19. The lessee shall not win and dispose of any type of dimension and decorative stones from the area over which the quarrying lease has been sanctioned on the strength of this order.
20. The Lessee shall comply with any and all laws, ordinances, rules and orders related to quarrying operations of any and all governmental or quasi-governmental authorities.
21. The lessee shall obtain all other statutory licences required from the authorities concerned during the period of operation of the quarry and comply with all the conditions mentioned in other statutory license required for carrying out quarrying operations.
22. The lessee shall stop all quarrying activities in the event of expiry of any other statutory licenses which is required for carrying out quarrying activities in the State as per the prevailing Acts and Rules. Any quarrying activity undertaken violating the above condition will be treated as illegal and lessee will be solely responsible for such act and lessee will be liable to pay the penalty imposed by any officer competent to enforce such Acts and Rules.
23. In case the lessee makes any breaches in the conditions of the lease deed or violates the conditions stipulated in relevant Act and Rules based on which all Statutory Licenses are issued for quarrying, then the lessee will be solely responsible for any such breaches and violation and in such cases, the lessee will be solely liable to pay such sum of money as fixed by competent authorities as due and penalty.
24. The Lessee shall indemnify and keep indemnified the State Government against all actions, proceedings, suits, claims, demands, losses, damages, costs, charges, and expenses incurred or suffered by them as a reason of any non-observance or non-performance of rules and regulations

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25. This lease is granted in good faith based on the documents/licenses submitted by the lessee. The lessee is solely responsible for the authenticity of the documents/licenses submitted. At any stage, if it is observed that the documents submitted are incorrect or fake or forged or if it is found that some information was omitted or suppressed, then this lease is liable to be cancelled. In such an event the quarrying carried out with the strength of this lease will be treated as quarrying conducted without any lawful authority.
26. The lessee shall properly maintain the boundary pillars erected as per the demarcation certificate issued by the Village Officer till the expiry of lease.
27. The lessee shall erect a notice board in Malayalam at a prominent place with a minimum size of 1 metre X 1.5 metres in a metallic board near to the entrance of the quarry to the effect that it shall contain the name and address of the lessee, mineral concession number and date, validity of concession, the name of the mineral quarried, proposed annual production etc. In addition, details of other statutory licenses shall also be displayed.
28. The lessee shall erect by the side of the road leading to quarry (preferably 100 m away from quarry), a warning board with danger sign regarding operation of the quarry and use of explosives.
29. The lessee should take effective preventive measures for the safety of labourers as well as the general public. In due course of quarrying, if any part of the quarry becomes unsafe, then the lessee shall properly fence that area for preventing accidents by falling of human beings, animals, vehicles or any objects into the pit formed by quarrying.
30. The lessee shall not carry out any quarrying operations within 7.5 meters from the boundary of the lease area and quarrying operations shall be carried out in benches.
31. The lessee shall send a notice in form D appended to KMMC Rules 2015 to the Director (Mining), Directorate General of Mines Safety, No.5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bengaluru - 560034 and to the District Magistrate concerned before commencing the quarrying operation and shall intimate the same to the District office of the Department of Mining and Geology concerned.
32. The lessee shall keep book of accounts of production and dispatch of granite (building stone) and shall file monthly and annual returns in Form F and Form G appended to KMMC Rules 2015.
33. The quarrying permit granted from the district office, if any, in the area of this quarrying lease is hereby stands cancelled from the date of this order.
34. In this case, the anticipated royalty to be remitted for the mineral extracted per year at the present rate of royalty of **Rs. 24/-** per tonne with average annual production of **3,55,750** tonne is **Rs. 85,38,000/- (Rupees eighty five lakhs thirty eight thousand only)**. In this case, the surface rent to be remitted per year at the present rate of Rs. 5 per Are per year is **Rs. 1,832/- (Rupees one thousand eight hundred and thirty two only)** and in the event

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of non – functioning of quarry the Dead Rent to be realized for the 1st year – NIL IInd year – Rs. 300/- (Rupees three hundred only) and IIIrd year onwards – Rs. 1,200/- (Rupees one thousand and two hundred only) per hectare subject to revision from time to time.

The terms and conditions stated in this order will be subject to such further modifications as may be made by the State Government from time to time.

Sd/-

T. K. RAMAKRISHNAN
ADDITIONAL DIRECTOR OF MINING & GEOLOGY

To

M/s. Adani Vizhinjam Port Private Limited,
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram District – 695 014
(Registered Office at: Adani House,
Near Mithakhali Six Roads, Navrangpura,
Ahmedabad, Gujrat State – 380 009)
(Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Copy to:

- 1 The Director (Mining), Directorate General of Mines Safety, No.5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bengaluru – 560034
- 2 Member Secretary, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram
- 3 The Chairman, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.
- 4 The Deputy Chief Controller of Explosives, PESO, C2-III Floor, CGO Complex, Kakkanad, Ernakulam
- 5 The Environmental Engineer, Kerala State Pollution Control Board, District Office, Thiruvananthapuram.
- 6 The Secretary, Nagaroor Grama Panchayath, Thiruvananthapuram District.
- 7 The Tahsildar, Chirayinkeezhu Taluk Office, Thiruvananthapuram District.
- 8 The Village officer, Nagaroor Village, Thiruvananthapuram District.
- 9 Shri. Kantharaj. K, #200, 2nd Floor, 40th Main, 1st Cross, Behind Silk Board, BTM Layout, 2nd Stage, Kuvempu Nagar, Bangalore – 560 068
- 10 The Geologist, District Office of the Dept. of Mining and Geology, Thiruvananthapuram.
- 11 Stock File
- 12 File Copy

(By Order)

Handwritten signature
20/05/2019

Senior Superintendent



No. 9363/M3/2018

Directorate of Mining & Geology

Kesavadasapuram, Pattom P.O.

Thiruvananthapuram-4

Tel: 0471-2447429

Fax: 0471-2447429

E.mail: director.dir.dmg@kerala.gov.in

Web: www.dmg.kerala.gov.in

Dated: 20/05/2019

From

The Director of Mining & Geology

To

✓ M/s. Adani Vizhinjam Port Private Limited,
2nd Floor, Vipanchika Tower,
Thycaud, Thiruvananthapuram District – 695 014
(Registered Office at: Adani House, Near Mithakhali Six Road,
Navrangpura, Ahmedabad, Gujrat State – 380 009)
(Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Sir,

Sub: Mining & Geology - Mines and Minerals - Minor Minerals- Granite Building Stone -
Preparation and execution of quarrying lease deed – reg.

Ref: 1. Pro. Order No. 79/2019-20/9363/M3/2018/DMG Dated: 20/05/2019
2. Kerala Minor Mineral Concession Rules, 2015
3. Kerala Minerals (Prevention of illegal Mining, Storage & Transportation)
Rules, 2015.
4. Mines & Minerals (Development & Regulation) Act, 1957.

Please refer to the Proceedings Order cited above wherein a quarrying lease for Granite (Building Stone) is granted to M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha). A draft copy of quarrying lease deed in Form H is enclosed. I request you to prepare three copies of the quarrying lease deed, original on plain paper and two copies of the same in stamped paper worth Rs. 500/- and produce the same before the Geologist, District Office, Thiruvananthapuram for scrutiny and execution. The date of execution will be filled by the Geologist at the time of execution or you fill in the date after getting confirmation from the District Geologist. After scrutiny of the quarrying lease deed, the Geologist will inform you the date of execution convenient to him. You have to be present in person at the District Office on such date with two witnesses for execution of deed. It may be noted that the survey map based on which lease is granted to you forms a part of the deed and same has to be included in the lease deed. The signature of the lessee and lessor has to be affixed in the survey map also. After execution of deed, as per the request of the District Geologist stamp duty shall be fixed by District Registrar. On remittance of stamp duty, a certificate of remittance of stamp duty will be entered in the lease deed by the Registrar. The lease deed has to be registered by the office of the Registration Department concerned. After registration, the documents have to be produced before the District Geologist.

A chalan for Rs. 36,630/- (Rupees thirty six thousand six hundred and thirty only) being the security deposit is enclosed herewith duly countersigned. Please affix your signature at the appropriate places before remittance of money in the treasury. The original treasury receipted chalan may also be produced along with the typed copies of the lease deed before the Geologist, District Office, Thiruvananthapuram at the time of execution.

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Please note that the quarrying lease deed has to be executed within a period of six months from the date on which quarrying lease has been granted and got registered in accordance with the Registration Act, 1908 vide Rules 44 of the Kerala Minor Mineral Concession Rules, 2015.

Before starting quarrying operations you have to send 2 copies of notice in attached Form D to the Director (Mining), Directorate General of Mines Safety, No. 5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bangaluru – 560 034 and one copy to District Magistrate concerned.

Yours faithfully,

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26/05/2019

for
DIRECTOR OF MINING & GEOLOGY

Encl (applicant):

1. Proceedings order
2. Draft Form H
3. Form D
4. Countersigned Chalan

Copy to:

The Geologist, District Office, Thiruvananthapuram for further necessary action.
(Ref your letters No. 1716/DOT/ML/2018 dated. 18/08/2018, 16/03/2019)

You are instructed to execute the lease deed as and when it is received. The Proceedings Order cited as reference I, original survey map and draft Form H are enclosed herewith. The survey map forms a part of lease deed and the signatures of both lessor and lessee. A copy of the lease deed may be forwarded to this office soon after registration. Please ensure that the area under this grant is demarcated and boundary stones maintained properly before execution of the lease deed.

You may ensure remittance of security deposit, surface rent etc. for the amount specified in the lease order. You may also obtain financial guarantee from the lessee for the amount specified in the lease order.

You are also instructed to obtain and forward the Form D to this office. Since Form D is a statutory document, no movement permits shall be issued to lessee if lessee fails to prove that he had sent notice in Form D to the Director of Mines Safety, Office of the DDGMS, (Bangalore Region) Southern Zonal Office, No. 5, 100ft Road, 17th Main, Koramangala, Bangalore – 560 034 and District Magistrate.

You are further instructed to forward photocopies of the registered lease deed to the Director of Mines Safety, Bangaluru & District Collector. Please ensure that the lessee is observing the requirements as per mining plan, lease grant order, form H and KMMC Rules, 2015.

Encl: (District Geologist)

1. Original Survey Map
2. Draft Form H
3. Proceedings order



Kerala Minor Mineral Concession Rules 2015
FORM D

[See clause (a) of rule 10 and clause (m) of sub-rule (1) of rule 40]

NOTICE

- | | |
|---|---|
| 1. (a) Name of mine | : |
| (b) Name of minerals | : |
| (c) Situation of mine (Survey Number, Village,
Taluk, District, State) | : |
| (d) Date when work was first started | : |
| 2. (a) Name and postal address of present owner (s) | : |
| (b) Name and postal address of agent, if any | : |
| 3. (a) Name and postal address of manager, if any | : |
| (b) His age | : |
| (c) His qualification | : |
| (d) His experience in mining | : |
| 4. Whether workings are likely to be extended below
Ground | : |
| 5. (a) Maximum depth of open cast excavation measured
From its highest to its lowest point | : |
| (b) Date when depth first exceeded 6 metres | : |
| 6. (a) Nature, amount and kind of explosives used, if any | : |
| (b) Date when explosives were first used | : |

Signature of Owner/Agent/Manager.

Date:

To be sent to:

1. The Director (Mining), Directorate General of Mines Safety, No. 5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bangaluru – 560 034 (two copies)
2. The District Magistrate of the District.

**PROCEEDINGS OF THE ADDITIONAL DIRECTOR OF MINING & GEOLOGY,
THIRUVANANTHAPURAM, KERALA**

(Present Shri. T K Ramakrishnan)

- Sub:** Department of Mining & Geology, Government of Kerala - Mines & Minerals - Minor Minerals – Granite (Building Stone) – Quarrying Lease to M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha) – sanctioned-orders–issued.
- Ref:**
- 1 Application dated. 13/06/2018 from M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)
 - 2 Letter No. 1716/DOT/ML/2018 dated. 18/08/2018, 16/03/2019 from the Geologist, District Office, Thiruvananthapuram.
 - 3 Letter of Intent No. 9363/M3/2018 dtd. 04/09/2018 issued by Director of Mining and Geology
 - 4 Environmental clearance No. 02/2019 issued vide Pro. order No. 1200/EC2/2018/ SEIAA dtd. 01/03/2019 by the State Environment Impact Assessment Authority, Kerala (valid till 28/02/2024)
 - 5 Integrated consent to operate No. PCB/TVM-DO/ICO/QRY/103/2019 dt. 05/03/2019 issued by Kerala State Pollution Control Board, Thiruvananthapuram (valid till 27/02/2021)
 - 6 Explosive License No. E/SE/KL/22/129(E95316) dated. 16/05/2019 issued by Petroleum and Explosive Safety Organization, Emakulam (valid till 31.03.2022)
 - 7 Dangerous and Offensive Trade Licence No. A2 – 1836/2019 dated. 01/04/2019 issued by Nagaroor Grama Panchayat (valid till 31.03.2020)
 - 8 Mines and Minerals (Development & Regulation) Act, 1957.
 - 9 Kerala Minor Mineral Concession Rules, 2015
 - 10 Kerala Minerals (Prevention of Illegal Mining, Storage & Transportation) Rules 2015

No. 79/2019-20/9363/M3/2018/DMG

Dated, Thiruvananthapuram 20/05/2019

ORDER

M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha (Aadhaar No. 2712 6816 7724) submitted an application vide reference first cited to obtain quarrying lease to quarry Granite (Building Stone) over an area of 3.6630 Hectares of land (as per the survey map No. B9/9590/18 issued by Tahsildar, Chirayinkeezhu) comprised in Re - Survey Block No. 37, Re – Survey No. 555/2 of Nagaroor



Village, Chirayinkeezhu Taluk. The District Geologist, Thiruvananthapuram has intimated that the applied area was previously quarried with the strength of quarrying permits issued by the Revenue Department.

Based on the merit of the application and the enclosed mandatory documents including survey map, possessions certificates, demarcation certificate and land assignment certificate issued by Revenue Authorities and based on the recommendation of the District Geologist, a letter of intent was issued to the applicant vide reference cited 3 intimating the intention of the department to grant quarrying lease subject to production of approved mining plan and other statutory licenses. The District Geologist forwarded the mining plan (prepared by Shri. Kantharaj. K, Recognized Qualified Person – Reg. No. RQP/GOA/130/2000/A) approved by him and other statutory licenses submitted by the applicant to this office. In the approved mining plan it is mentioned that mineable mineral reserve of granite (building stone) in the applied area is **17,78,750 tonnes** and that it is proposed to mine **17,78,750 tonnes** of granite (building stone) within a period of **5 (Five) years**. It is also proposed to mine 3,99,375 MT in the first year, 3,00,625 MT in the 2nd year and 10,78,750 MT in the 3rd, 4th and 5th year. In the approved mining plan it is also mentioned that a total quantity of 9,06,500 MT of building stones has already been excavated from the area. Since the applicant has produced all statutory documents as per the Letter of Intent, it is decided to grant a quarrying lease in the said land and hence the following orders are issued:

A quarrying lease is hereby granted to **M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha (Aadhaar No. 2712 6816 7724) to quarry Granite (Building Stone) over an area of 3.6630 Hectares of land (as per the survey map No. B9/9590/18 issued by the Tahsildar, Chirayinkeezhu) comprised in Re - Survey Block No. 37, Re – Survey No. 555/2 of Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District for 5 (Five) years as per the Kerala Minor Mineral Concession Rules, 2015, subject to the conditions mentioned below.**

1. The lessee shall execute a quarrying lease deed within a period of six months from the date of this order in form 'H' as per Rule 43 of the Kerala Minor Mineral Concession Rules, 2015 and the quarrying leases deed shall be registered in accordance with the provisions of the Indian Registration Act, 1908.
2. The lessee shall commence quarrying operation only after the deed is executed and registered.
3. The lessee shall not assign, sublet or transfer his lease or any right or interest therein to any person without previous written permission of the Director of Mining & Geology.
4. Royalty is payable to Government as per Rule 32 of the Kerala Minor Mineral Concession Rules, 2015 in respect of minor mineral quarried and moved out of the quarry subject to revision from time to time on the basis of amendments to the schedule I of the said Rules. In case the lessee opts for consolidated royalty payment system by registering attached metal



- crusher units as per Rule 89, then consolidated royalty at the rate specified in Schedule III said Rules shall be paid instead of royalty specified in Schedule I.
5. Dead rent is realizable under 40(1)(d) of the said rules subject to revision from time to time on the basis of amendments to the schedule II of the said rules.
 6. Surface rent realizable under 40(1)(e) of the said rules will be equal to the land revenue assessed by the Revenue Department subject to revision from time to time on the basis of the land revenue.
 7. The lessee shall also deposit an amount of **Rs. 36,630/- (Rupees thirty six thousand six hundred and thirty only)** being the security deposit at the rate of Rs 10,000/- per hectare as security deposit for the observance of the terms and conditions of the lease before the deed is executed as per rule 42 of the said rules.
 8. The lessee shall produce financial guarantee for **Rs. 1,00,000/- (Rupees one lakh only)** as stipulated in rule 62 of KMMC Rules 2015, before execution of lease deed.
 9. The lessee shall pay tax related to Revenue Department, if any, as directed by them and the details should be furnished to the District Geologist periodically.
 10. The lessee shall pay 10% of the amount of royalty/consolidated royalty as the case may be paid by them, being the quarry safety fund in addition to the royalty/consolidated royalty, as per rule 63 of KMMC rules, 2015.
 11. In addition to the royalty, rents, funds, fees etc. that are required to be remitted by the lessee as per the Mines and Minerals (Development and Regulation) Act, 1957 and Rules made thereunder, the lessee shall pay all other fees, rents, taxes etc. as required by other agencies including Goods and Service Tax (GST) for royalty.
 12. The quarrying shall be carried out as per the conditions stipulated in Kerala Minor Mineral Concession Rules 2015 and storage and transportation of mineral shall be carried out as per Kerala Minerals (Prevention of Illegal Mining, Storage and Transportation) Rules 2015.
 13. The lessee shall renew Environmental Clearance on or before **28/02/2024** for the operation of the quarry for the remaining period.
 14. The quarrying operations shall be strictly as per the approved mining plan and schemes of mining.
 15. The lessee shall review the progressive quarry closure plan every five years from the date of opening of the quarry and shall submit to the competent authority for its approval. The lessee shall submit to the competent authority in this behalf any early report before 1st July of every year describing protective works including reclamation and rehabilitation work



carried out as envisaged in the approved quarry closure plan and if there is any deviation, reasons thereof.

16. The lessee shall submit a scheme of mining for the next five years or remaining period of the lease to the competent authority for approval at least one hundred and twenty days before the expiry of the first five year period for which it was approved on the last occasion.
17. The lessee shall submit final quarry closure plan one year prior to the proposed closure of the quarry and close the quarry as per the approved quarry closure plan.
18. The production of Granite (Building Stone) from the area covered under this grant shall be subject to the year-wise quantity specified in the approved Mining Plan and scheme of mining.
19. The lessee shall not win and dispose of any type of dimension and decorative stones from the area over which the quarrying lease has been sanctioned on the strength of this order.
20. The Lessee shall comply with any and all laws, ordinances, rules and orders related to quarrying operations of any and all governmental or quasi-governmental authorities.
21. The lessee shall obtain all other statutory licences required from the authorities concerned during the period of operation of the quarry and comply with all the conditions mentioned in other statutory license required for carrying out quarrying operations.
22. The lessee shall stop all quarrying activities in the event of expiry of any other statutory licenses which is required for carrying out quarrying activities in the State as per the prevailing Acts and Rules. Any quarrying activity undertaken violating the above condition will be treated as illegal and lessee will be solely responsible for such act and lessee will be liable to pay the penalty imposed by any officer competent to enforce such Acts and Rules.
23. In case the lessee makes any breaches in the conditions of the lease deed or violates the conditions stipulated in relevant Act and Rules based on which all Statutory Licenses are issued for quarrying, then the lessee will be solely responsible for any such breaches and violation and in such cases, the lessee will be solely liable to pay such sum of money as fixed by competent authorities as due and penalty.
24. The Lessee shall indemnify and keep indemnified the State Government against all actions, proceedings, suits, claims, demands, losses, damages, costs, charges, and expenses incurred or suffered by them as a reason of any non-observance or non-performance of rules and regulations

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25. This lease is granted in good faith based on the documents/licenses submitted by the lessee. The lessee is solely responsible for the authenticity of the documents/licenses submitted. At any stage, if it is observed that the documents submitted are incorrect or fake or forged or if it is found that some information was omitted or suppressed, then this lease is liable to be cancelled. In such an event the quarrying carried out with the strength of this lease will be treated as quarrying conducted without any lawful authority.
26. The lessee shall properly maintain the boundary pillars erected as per the demarcation certificate issued by the Village Officer till the expiry of lease.
27. The lessee shall erect a notice board in Malayalam at a prominent place with a minimum size of 1 metre X 1.5 metres in a metallic board near to the entrance of the quarry to the effect that it shall contain the name and address of the lessee, mineral concession number and date, validity of concession, the name of the mineral quarried, proposed annual production etc. In addition, details of other statutory licenses shall also be displayed.
28. The lessee shall erect by the side of the road leading to quarry (preferably 100 m away from quarry), a warning board with danger sign regarding operation of the quarry and use of explosives.
29. The lessee should take effective preventive measures for the safety of labourers as well as the general public. In due course of quarrying, if any part of the quarry becomes unsafe, then the lessee shall properly fence that area for preventing accidents by falling of human beings, animals, vehicles or any objects into the pit formed by quarrying.
30. The lessee shall not carry out any quarrying operations within 7.5 meters from the boundary of the lease area and quarrying operations shall be carried out in benches.
31. The lessee shall send a notice in form D appended to KMMC Rules 2015 to the Director (Mining), Directorate General of Mines Safety, No.5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bengaluru – 560034 and to the District Magistrate concerned before commencing the quarrying operation and shall intimate the same to the District office of the Department of Mining and Geology concerned.
32. The lessee shall keep book of accounts of production and dispatch of granite (building stone) and shall file monthly and annual returns in Form F and Form G appended to KMMC Rules 2015.
33. The quarrying permit granted from the district office, if any, in the area of this quarrying lease is hereby stands cancelled from the date of this order.
34. In this case, the anticipated royalty to be remitted for the mineral extracted per year at the present rate of royalty of **Rs. 24/-** per tonne with average annual production of **3,55,750** tonne is **Rs. 85,38,000/- (Rupees eighty five lakhs thirty eight thousand only)**. In this case, the surface rent to be remitted per year at the present rate of Rs. 5 per Are per year is **Rs. 1,832/- (Rupees one thousand eight hundred and thirty two only)** and in the event



of non – functioning of quarry the Dead Rent to be realized for the 1st year – NIL IInd year – Rs. 300/- (Rupees three hundred only) and IIIrd year onwards – Rs. 1,200/- (Rupees one thousand and two hundred only) per hectare subject to revision from time to time.

The terms and conditions stated in this order will be subject to such further modifications as may be made by the State Government from time to time.

Sd/-

T. K. RAMAKRISHNAN
ADDITIONAL DIRECTOR OF MINING & GEOLOGY

To

M/s. Adani Vizhinjam Port Private Limited,
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram District – 695 014
(Registered Office at: Adani House,
Near Mithakhali Six Roads, Navrangpura,
Ahmedabad, Gujrat State – 380 009)
(Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Copy to:

- 1 The Director (Mining), Directorate General of Mines Safety, No.5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bengaluru – 560034
- 2 Member Secretary, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram
- 3 The Chairman, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.
- 4 The Deputy Chief Controller of Explosives, PESO, C2-III Floor, CGO Complex, Kakkanad, Ernakulam
- 5 The Environmental Engineer, Kerala State Pollution Control Board, District Office, Thiruvananthapuram.
- 6 The Secretary, Nagaroor Grama Panchayath, Thiruvananthapuram District.
- 7 The Tahsildar, Chirayinkeezhu Taluk Office, Thiruvananthapuram District.
- 8 The Village officer, Nagaroor Village, Thiruvananthapuram District.
- 9 Shri. Kantharaj. K, #200, 2nd Floor, 40th Main, 1st Cross, Behind Silk Board, BTM Layout, 2nd Stage, Kuvempu Nagar, Bangalore – 560 068
- 10 The Geologist, District Office of the Dept. of Mining and Geology, Thiruvananthapuram.
- 11 Stock File
- 12 File Copy

(By Order)

Y. K. K.
20/05/2019

Senior Superintendent



CHALAN
FORM T. R.

[See Rules 102 (c) and 124 of Kerala Treasury Code]

Chalan for Payment of Money into the
District Treasury/Sub Treasury
State Bank of India/State Bank of TravancoreAt _____
Computer Seq. No. _____ Date _____Head of Account 8443 - 103
May Sng Mth Sub Dec Qtr S Qtr*DDO Code: (Dept) 4581 (DDO) _____

*SDO Code: _____

By whom paid and name and address of the person on whose behalf money is paid	Purpose of remittance and authority, if any	Amount in ₹	Order to the Bank
M/s. Adam Vazhinger Post P.O. Ltd 2nd Floor, Vipinulaya Tower Chengal Changanassery - 695016 Chap. by its branch 9/10- 4th Dept. known the	8443 CIVIL DEPOSIT 103 SECURITY DEPOSIT	R. 36,630/-	Correct Receive and grant receipt Treasury Officer
Signature & Designation of the Departmental Officer countersigning the remittance	Total		

Total in words Payee thing is stated for
Signature of Remitter ended and thing of

Received ₹ _____ (Rupees _____ only)

Date _____ Seal _____

Signature of Treasurer/Cashier Treasury Officer/Bank Manager

Note: 1. The seal/stamp of the Treasury/Bank of collection shall be affixed.

- If remittance is in official capacity (*SDO/DDO), write corresponding code in the column provided.
- If loan repayment of SDO, write instrument number in purpose column.

CHALAN
FORM T. R.

[See Rules 102 (c) and 124 of Kerala Treasury Code]

Chalan for Payment of Money into the
District Treasury/Sub Treasury
State Bank of India/State Bank of TravancoreAt _____
Computer Seq. No. _____ Date _____Head of Account 8443 - 103
May Sng Mth Sub Dec Qtr S Qtr*DDO Code: (Dept) 4581 (DDO) _____

*SDO Code: _____

By whom paid and name and address of the person on whose behalf money is paid	Purpose of remittance and authority, if any	Amount in ₹	Order to the Bank
M/s. Adam Vazhinger Post P.O. Ltd 2nd Floor, Vipinulaya Tower Chengal Changanassery - 695016 Chap. by its branch 9/10- 4th Dept. known the	8443 CIVIL DEPOSIT 103 SECURITY DEPOSIT	R. 36,630/-	Correct Receive and grant receipt Treasury Officer
Signature & Designation of the Departmental Officer countersigning the remittance	Total		

Total in words Payee thing is stated for
Signature of Remitter ended and thing of

Received ₹ _____ (Rupees _____ only)

Date _____ Seal _____

Signature of Treasurer/Cashier Treasury Officer/Bank Manager

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CHALAN
FORM T. R.

[See Rules 102 (c) and 124 of Kerala Treasury Code]

Chalan for Payment of Money into the
District Treasury/Sub Treasury
State Bank of India/State Bank of TravancoreAt _____
Computer Seq. No. _____ Date _____Head of Account 8443 - 103
May Sng Mth Sub Dec Qtr S Qtr*DDO Code: (Dept) 4581 (DDO) _____

*SDO Code: _____

By whom paid and name and address of the person on whose behalf money is paid	Purpose of remittance and authority, if any	Amount in ₹	Order to the Bank
M/s. Adam Vazhinger Post P.O. Ltd 2nd Floor, Vipinulaya Tower Chengal Changanassery - 695016 Chap. by its branch 9/10- 4th Dept. known the	8443 CIVIL DEPOSIT 103 SECURITY DEPOSIT	R. 36,630/-	Correct Receive and grant receipt Treasury Officer
Signature & Designation of the Departmental Officer countersigning the remittance	Total		

Total in words Payee thing is stated for
Signature of Remitter ended and thing of

Received ₹ _____ (Rupees _____ only)

Date _____ Seal _____

Signature of Treasurer/Cashier Treasury Officer/Bank Manager

Note: 1. The seal/stamp of the Treasury/Bank of collection shall be affixed.

- If remittance is in official capacity (*SDO/DDO), write corresponding code in the column provided.
- If loan repayment of SDO, write instrument number in purpose column.

REVERSE OF FORM T. R. 12

PARTICULARS OF MONEY PAID

Currency Notes	No.	Amount in ₹	Ps.
₹ 1000			
₹ 500			
₹ 100			
₹ 50			
₹ 20			
₹ 10			
₹ 5			
₹ 2			
₹ 1			
Total Notes			
Coins			
₹ 10			
₹ 5			
₹ 2			
₹ 1			
Ps. 50			
Total Coins			
Grand Total			

REVERSE OF FORM T. R. 12

PARTICULARS OF MONEY PAID

Currency Notes	No.	Amount in ₹	Ps.
₹ 1000			
₹ 500			
₹ 100			
₹ 50			
₹ 20			
₹ 10			
₹ 5			
₹ 2			
₹ 1			
Total Notes			
Coins			
₹ 10			
₹ 5			
₹ 2			
₹ 1			
Ps. 50			
Total Coins			
Grand Total			

REVERSE OF FORM T. R. 12

PARTICULARS OF MONEY PAID

Currency Notes	No.	Amount in ₹	Ps.
₹ 1000			
₹ 500			
₹ 100			
₹ 50			
₹ 20			
₹ 10			
₹ 5			
₹ 2			
₹ 1			
Total Notes			
Coins			
₹ 10			
₹ 5			
₹ 2			
₹ 1			
Ps. 50			
Total Coins			
Grand Total			

FORM H
(See Rule 43)
QUARRYING LEASE

This deed of lease made on this the..... day of2019 between the Governor of Kerala (hereinafter referred to as the "State Government" which expression shall, where the context so admits be deemed to include his successors and assigns) of the one part and M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha, aged 53 years, S/o. Krishna Chandra Jha, residing at House No. – H7 – H8, Nishant Vihar, Near Aashiana Trade Centre, Jamshedpur, Adityapur, Seraikela – Kharsawan, Jharkhand – 831 013 (Aadhaar No. 2712 6816 7724) (hereinafter called the "lessee/lessees" which expression shall where the context so admits, include his/their heirs, executors, administrators, representatives and permitted assigns) of the other part.

Witnesseth that in consideration of the rents and royalties and lessee's/Lessees' covenants, hereinafter reserved and contained the State Government hereby give on lease to the lessee/lessees the land measuring **3.6630 hectares** described in the schedule hereunder and delineated on the plan hereto annexed and therein coloured red (hereinafter called the "said lands") to hold the same for a period of **5 (Five) years** commencing from theand ending on the for the purposes of extracting minor mineral/minerals and subject to the terms and conditions contained in the Kerala Minor Mineral Concession Rules, 2015 (hereinafter referred to as "the Rules") and to the terms and conditions hereinafter appearing

Lessor

Lessee

1. The lessee/lessees shall have the right in and upon the said lands to extract Granite Building Stone (here in after called the said mineral/minerals) and to do all acts necessary for the extraction of the said mineral/minerals including the erection on the said lands, buildings and plant required for the purposes and also to take lead and carry away over the said lands and to dispose of the said minerals extracted as aforesaid.
2. The lessee/lessees shall during the subsistence of this lease have the liberty to work the said mineral/minerals and remove the same from the leasehold on permits issued by the State Government/competent authority or any other officer authorized by him in this regard. The permits shall be issued only on the basis of pre-paid royalty at the rates specified in Schedule I to these Rules. The royalty rates shall be subject to revision from time to time as the State Government may order.
3. The lessee/lessees shall pay to the State Government a yearly surface rent equal to the land revenue if any, assessable under the rules for the time being in force, or if the land be the property of Government or in reserve forest then equal to the land revenue plus cess, if any, per hectare of the land the surface whereof shall be occupied or used by the lessee/lessees for any of the purposes of this deed and so in proportion for any area less than one hectare. The said surface rent shall be paid by yearly payments; the first of such payments to be made on or before the last day of the first year of occupation provided always that no such rent shall be paid or demanded in respect of any roads or ways now in existence.
4. The lessee/lessees shall at all times during the currency of this lease keep correct and intelligible books of account showing accurately the quantity of the said minerals extracted and the weight and value of the said mineral sold or exported together with the names of the purchasers or consignees. The lessee shall also maintain a register of employees showing therein separately men, women employed daily and shall at reasonable times allow the competent authority appointed under the rules (hereinafter referred to as "competent authority") or the officer authorised by him to examine the said books of account and the register of employees and to take copies and extracts there from. The lessee/lessees shall submit reports in Forms F and G on the specified dates.

Lessor

Lessee

5. All sums found due under or by virtue of this deed from the lessee/lessees may be recovered from him jointly and severally from them and his/their properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue or in any other manner as the State Government may deem fit.
6. The lessee/lessees shall at the lessee's/lessees' own expense erect and at all times maintain and keep in repair boundary marks and pillars along the boundaries of the said lands according to the demarcation shown in the plan here to annexed.
7. The lessee shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 metres from any railway line except with the previous written permission of the railway administration concerned and any bridge on National Highway or 50 metres from any reservoir, tanks, canals, rivers, bridges, public roads, other public works, residential buildings, the boundary walls of places of worship, burial grounds, burning ghats or one kilometer from the boundaries of National Park or Wildlife Sanctuaries except with the previous permission of the authorities concerned or the Government or competent authority.
8. The sides of open workings shall be sloped, stepped or secured by the lessee in such a manner as to prevent slope failure, when an open working is worked in steps, steps shall be of sufficient breadth in relation to their height to secure safety. In open workings trees liable to fall and all loose ground and material shall be removed by the lessee sufficiently far from the edge or otherwise made source in order to prevent danger to persons employed in the quarry.
9. If a working place is found to be unsafe all persons shall be withdrawn by the lessee/lessees immediately from the dangerous area and all access to such working place except for the purpose of removing the danger of saving life shall be prevented by securely fencing the full width of all entrances to the place.
10. The lessee/lessees shall at all reasonable times allow any officer authorised by the Central Government or by the State Government in that behalf to inspect the said lands and the buildings and plants erected thereon and the lessee/lessees shall assist such persons in conducting the inspection and afford them all information they may reasonably require, and shall conform

Lessor

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to and observe all orders which the Central and State Governments as the result of such inspection or otherwise, may from time to time pass.

11. The lessee shall be responsible for implementing the provisions of the Various labour laws applicable, from time to time, to the quarry.
12. The lessee/lessees shall not assign or underlet the said lands or any part thereof or the rights or privileges, therein hereby granted or any of them without the previous permission in writing of the State Government / competent authority.
13. Where the lease or any right, title or interest therein has been assigned, sublet or transferred as provided in rule 45 read with condition 12, then the person in whose favour such assignment, sublease or transfer has been made shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.
14. The lease may be surrendered by the lessee/lessees at any time after 3 months notice in writing to the State Government/competent authority provided the lessee/lessees has/have paid all sums due on account of the lease: Provided that if the lessee/lessees elects/elect to determine this lease before the expiry of the term of the lease, shall pay in addition to other dues a sum equal to the dead rent payable for the remaining part of the term of the lease deed.
15. If the lessee/lessees shall be desirous of taking a further lease of the said lands he/they shall give three months' previous notice in writing of such desire to the State Government/competent authority and if the lessee/lessees has/have duly observed all the conditions of this lease, the State Government/competent authority may agree to renew the lease for such further term and on such terms and conditions as the State Government/competent authority may determine which shall be in accordance with the provisions of these rules.
16. If the lessee/lessees shall at any time during the said term use the said lands or any part thereof in any manner other than as authorised by this lease or fail to carry on quarrying operations continuously without sufficient cause of which the State Government/competent authority shall be the judge or shall commit a breach of any of the conditions of this lease it shall be lawful for the State Government/competent authority to cancel this lease and take possession of the said lands or the alternative to receive from the

Lessor

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lessee/lessees such penalty not exceeding Rs. 25,000/- (Rupees twenty five thousand only) for the breach as the State Government/competent authority may fix.

17. If at the expiration of three calendar months after the expiry of the lease or its sooner determination, there shall remain in or the said lands, any engines, machinery, plant buildings, structures and other works, erections and conveniences, the said minerals or other property which the lessee is/lessees are entitled to remove from the said lands, the same shall, if not removed by the lessee/lessees within one calendar month after notice in writing requiring their removal be given to the lessee/lessees by the State Government/competent authority be deemed to become the property of the State Government in such manner as they may deem fit without liability to pay any compensation or to account to the lessee/lessees in respect thereof.
18. This lease subject to all rules and regulations which may from time to time be issued by the State Government regulating the working of the quarries and other matters affecting safety, health and convenience of the lessee's/lessees' employees or of the public, whether under the Indian Mines Act or otherwise.
19. The lessee/lessees shall without delay send to the District Collector and the competent authority or the officer authorised by him in this regard report of any accident causing loss of life or serious bodily injuries or seriously affecting or endangering life or property which may at any time occur at or in the said lands in the course of operations under this lease.
20. The lessee/lessees shall furnish such reports and returns relating to output, labourers employed and other matters as the State Government may prescribe.
21. The lessee/lessees shall make and pay such reasonable compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him/them in exercise of the powers granted by this lease and shall indemnify and shall keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage, injury or disturbance and all costs and expenses in connection therewith.

Lessor

Lessee

22. Any condition prescribed in the Kerala Minor Mineral Concession Rules, 2015 but left out in this lease which may be found applicable to the lessee / lessees shall be treated as binding on the lessee/lessees.
23. In this case, the anticipated royalty to be remitted for the mineral extracted per year at the present rate of royalty of **Rs. 24/-** per tonne with proposed average annual production of **3,55,750 tonne** is **Rs. 85,38,000/- (Rupees eighty five lakhs and thirty eight thousand only)** and may enhance the quantity of production and period of lease with the prior permission of the lessor and registration of the lease deed accordingly.
24. In this case, the surface rent to be remitted per year at the present rate of **Rs. 5/-** per Are per year is **Rs. 1,832/- (Rupees one thousand eight hundred and thirty two only)** and the refundable Security Deposit is **Rs. 36,630/- (Rupees thirty six thousand six hundred and thirty only)**.

SCHEDULE OF DESCRIPTION OF LAND

District : Thiruvananthapuram
Taluk : Chirayinkeezhu

Village	Re – Survey Block No.	Re - Survey No.	Lease Area in Hectares
Nagaroor	37	555/2	3.6630
Total Area in Hectares			3.6630

Bounded by Survey No:

On the North by : Re - Survey No. 555/2
On the East by : Re - Survey No. 554/1
On the South by : Re - Survey No. 555/8
On the West by : Re - Survey No. 555/2

[Signature]
20/05/2019
Director of Mining & Geology
Thiruvananthapuram

Lessor

Lessee



In witness whereof the parties hereto have set their hands here unto on the day and year first above written.

Signed by.....
for and on behalf of the Governor of Kerala.

In the presence of

(1)

(2)

Signed by.....
for and on behalf of the lessee/lessees
In the presence of

Adell

Director of Mining & Geology
Thiruvananthapuram

20/5/2019

(1)

20/05/2019
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(2)



Lessor

Lessee

**Annexure 11: Lease Execution from
Additional Director of Mining and
Geology**

PROCEEDINGS OF THE ADDITIONAL DIRECTOR OF MINING & GEOLOGY,
THIRUVANANTHAPURAM, KERALA
(Present Shri. T K Ramakrishnan)

- Sub:* Department of Mining & Geology, Government of Kerala - Mines & Minerals - Minor Minerals - Granite (Building Stone) - Quarrying Lease to M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State - 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha) - sanctioned-orders-issued.
- Ref:*
- 1 Application dated. 13/06/2018 from M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State - 380 009) (Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)
 - 2 Letter No. 1716/DOT/ML/2018 dated. 18/08/2018, 16/03/2019 from the Geologist, District Office, Thiruvananthapuram.
 - 3 Letter of Intent No. 9363/M3/2018 dtd. 04/09/2018 issued by Director of Mining and Geology
 - 4 Environmental clearance No. 02/2019 issued vide Pro. order No. 1200/EC2/2018/ SEIAA dtd. 01/03/2019 by the State Environment Impact Assessment Authority, Kerala (valid till 28/02/2024)
 - 5 Integrated consent to operate No. PCB/TVM-DO/CO/CRY/103/2019 dt. 05/03/2019 issued by Kerala State Pollution Control Board, Thiruvananthapuram (valid till 27/02/2021)
 - 6 Explosive License No. E/SE/KL/22/129(E95316) dated. 16/05/2019 issued by Petroleum and Explosive Safety Organization, Emakulam (valid till 31.03.2022)
 - 7 Dangerous and Offensive Trade Licence No. A2 - 1836/2019 dated. 01/04/2019 issued by Nagaroor Grama Panchayat (valid till 31.03.2020)
 - 8 Mines and Minerals (Development & Regulation) Act, 1957.
 - 9 Kerala Minor Mineral Concession Rules, 2015
 - 10 Kerala Minerals (Prevention of Illegal Mining, Storage & Transportation) Rules 2015

No. 79/2019-20/9363/M3/2018/DMG

Dated, Thiruvananthapuram 20/05/2019

ORDER

M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State - 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha (Aadhaar No. 2712 6816 7724) submitted an application vide reference first cited to obtain quarrying lease to quarry Granite (Building Stone) over an area of 3.6630 Hectares of land (as per the survey map No. B9/9590/18 issued by Tahsildar, Chirayinkeezhu) comprised in Re - Survey Block No. 37, Re - Survey No. 555/2 of Nagaroor



Village, Chirayinkeezhu Taluk. The District Geologist, Thiruvananthapuram has intimated that the applied area was previously quarried with the strength of quarrying permits issued by the Revenue Department.

Based on the merit of the application and the enclosed mandatory documents including survey map, possessions certificates, demarcation certificate and land assignment certificate issued by Revenue Authorities and based on the recommendation of the District Geologist, a letter of intent was issued to the applicant vide reference cited 3 intimating the intention of the department to grant quarrying lease subject to production of approved mining plan and other statutory licenses. The District Geologist forwarded the mining plan (prepared by Shri. Kantharaj. K, Recognized Qualified Person – Reg. No. RQP/GOA/130/2000/A) approved by him and other statutory licenses submitted by the applicant to this office. In the approved mining plan it is mentioned that mineable mineral reserve of granite (building stone) in the applied area is 17,78,750 tonnes and that it is proposed to mine 17,78,750 tonnes of granite (building stone) within a period of 5 (Five) years. It is also proposed to mine 3,99,375 MT in the first year, 3,00,625 MT in the 2nd year and 10,78,750 MT in the 3rd, 4th and 5th year. In the approved mining plan it is also mentioned that a total quantity of 9,06,500 MT of building stones has already been excavated from the area. Since the applicant has produced all statutory documents as per the Letter of Intent, it is decided to grant a quarrying lease in the said land and hence the following orders are issued:

A quarrying lease is hereby granted to M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District – 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat State – 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha (Aadhaar No. 2712 6816 7724) to quarry Granite (Building Stone) over an area of 3.6630 Hectares of land (as per the survey map No. B9/9590/18 issued by the Tahsildar, Chirayinkeezhu) comprised in Re - Survey Block No. 37, Re – Survey No. 555/2 of Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District for 5 (Five) years as per the Kerala Minor Mineral Concession Rules, 2015, subject to the conditions mentioned below.

1. The lessee shall execute a quarrying lease deed within a period of six months from the date of this order in form 'H' as per Rule 43 of the Kerala Minor Mineral Concession Rules, 2015 and the quarrying leases deed shall be registered in accordance with the provisions of the Indian Registration Act, 1908.
2. The lessee shall commence quarrying operation only after the deed is executed and registered.
3. The lessee shall not assign, sublet or transfer his lease or any right or interest therein to any person without previous written permission of the Director of Mining & Geology.
4. Royalty is payable to Government as per Rule 32 of the Kerala Minor Mineral Concession Rules, 2015 in respect of minor mineral quarried and moved out of the quarry subject to revision from time to time on the basis of amendments to the schedule I of the said Rules. In case the lessee opts for consolidated royalty payment system by registering attached metal

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crusher units as per Rule 89, then consolidated royalty at the rate specified in Schedule III said Rules shall be paid instead of royalty specified in Schedule I.

5. Dead rent is realizable under 40(1)(d) of the said rules subject to revision from time to time on the basis of amendments to the schedule II of the said rules.
6. Surface rent realizable under 40(1)(e) of the said rules will be equal to the land revenue assessed by the Revenue Department subject to revision from time to time on the basis of the land revenue.
7. The lessee shall also deposit an amount of Rs. 36,630/- (**Rupees thirty six thousand six hundred and thirty only**) being the security deposit at the rate of Rs 10,000/- per hectare as security deposit for the observance of the terms and conditions of the lease before the deed is executed as per rule 42 of the said rules.
8. The lessee shall produce financial guarantee for Rs. 1,00,000/- (**Rupees one lakh only**) as stipulated in rule 62 of KMMC Rules 2015, before execution of lease deed.
9. The lessee shall pay tax related to Revenue Department, if any, as directed by them and the details should be furnished to the District Geologist periodically.
10. The lessee shall pay 10% of the amount of royalty/consolidated royalty as the case may be paid by them, being the quarry safety fund in addition to the royalty/consolidated royalty, as per rule 63 of KMMC rules, 2015.
11. In addition to the royalty, rents, funds, fees etc. that are required to be remitted by the lessee as per the Mines and Minerals (Development and Regulation) Act, 1957 and Rules made thereunder, the lessee shall pay all other fees, rents, taxes etc. as required by other agencies including Goods and Service Tax (GST) for royalty.
12. The quarrying shall be carried out as per the conditions stipulated in Kerala Minor Mineral Concession Rules 2015 and storage and transportation of mineral shall be carried out as per Kerala Minerals (Prevention of Illegal Mining, Storage and Transportation) Rules 2015.
13. The lessee shall renew Environmental Clearance on or before 28/02/2024 for the operation of the quarry for the remaining period.
14. The quarrying operations shall be strictly as per the approved mining plan and schemes of mining.
15. The lessee shall review the progressive quarry closure plan every five years from the date of opening of the quarry and shall submit to the competent authority for its approval. The lessee shall submit to the competent authority in this behalf any early report before 1st July of every year describing protective works including reclamation and rehabilitation work

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carried out as envisaged in the approved quarry closure plan and if there is any deviation, reasons thereof.

16. The lessee shall submit a scheme of mining for the next five years or remaining period of the lease to the competent authority for approval at least one hundred and twenty days before the expiry of the first five year period for which it was approved on the last occasion.
17. The lessee shall submit final quarry closure plan one year prior to the proposed closure of the quarry and close the quarry as per the approved quarry closure plan.
18. The production of Granite (Building Stone) from the area covered under this grant shall be subject to the year-wise quantity specified in the approved Mining Plan and scheme of mining.
19. The lessee shall not win and dispose of any type of dimension and decorative stones from the area over which the quarrying lease has been sanctioned on the strength of this order.
20. The Lessee shall comply with any and all laws, ordinances, rules and orders related to quarrying operations of any and all governmental or quasi-governmental authorities.
21. The lessee shall obtain all other statutory licences required from the authorities concerned during the period of operation of the quarry and comply with all the conditions mentioned in other statutory license required for carrying out quarrying operations.
22. The lessee shall stop all quarrying activities in the event of expiry of any other statutory licenses which is required for carrying out quarrying activities in the State as per the prevailing Acts and Rules. Any quarrying activity undertaken violating the above condition will be treated as illegal and lessee will be solely responsible for such act and lessee will be liable to pay the penalty imposed by any officer competent to enforce such Acts and Rules.
23. In case the lessee makes any breaches in the conditions of the lease deed or violates the conditions stipulated in relevant Act and Rules based on which all Statutory Licenses are issued for quarrying, then the lessee will be solely responsible for any such breaches and violation and in such cases, the lessee will be solely liable to pay such sum of money as fixed by competent authorities as due and penalty.
24. The Lessee shall indemnify and keep indemnified the State Government against all actions, proceedings, suits, claims, demands, losses, damages, costs, charges, and expenses incurred or suffered by them as a reason of any non-observance or non-performance of rules and regulations

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25. This lease is granted in good faith based on the documents/licenses submitted by the lessee. The lessee is solely responsible for the authenticity of the documents/licenses submitted. At any stage, if it is observed that the documents submitted are incorrect or fake or forged or if it is found that some information was omitted or suppressed, then this lease is liable to be cancelled. In such an event the quarrying carried out with the strength of this lease will be treated as quarrying conducted without any lawful authority.
26. The lessee shall properly maintain the boundary pillars erected as per the demarcation certificate issued by the Village Officer till the expiry of lease.
27. The lessee shall erect a notice board in Malayalam at a prominent place with a minimum size of 1 metre X 1.5 metres in a metallic board near to the entrance of the quarry to the effect that it shall contain the name and address of the lessee, mineral concession number and date, validity of concession, the name of the mineral quarried, proposed annual production etc. In addition, details of other statutory licenses shall also be displayed.
28. The lessee shall erect by the side of the road leading to quarry (preferably 100 m away from quarry), a warning board with danger sign regarding operation of the quarry and use of explosives.
29. The lessee should take effective preventive measures for the safety of labourers as well as the general public. In due course of quarrying, if any part of the quarry becomes unsafe, then the lessee shall properly fence that area for preventing accidents by falling of human beings, animals, vehicles or any objects into the pit formed by quarrying.
30. The lessee shall not carry out any quarrying operations within 7.5 meters from the boundary of the lease area and quarrying operations shall be carried out in benches.
31. The lessee shall send a notice in form D appended to KMMC Rules 2015 to the Director (Mining), Directorate General of Mines Safety, No.5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bengaluru - 560034 and to the District Magistrate concerned before commencing the quarrying operation and shall intimate the same to the District office of the Department of Mining and Geology concerned.
32. The lessee shall keep book of accounts of production and dispatch of granite (building stone) and shall file monthly and annual returns in Form F and Form G appended to KMMC Rules 2015.
33. The quarrying permit granted from the district office, if any, in the area of this quarrying lease is hereby stands cancelled from the date of this order.
34. In this case, the anticipated royalty to be remitted for the mineral extracted per year at the present rate of royalty of Rs. 24/- per tonne with average annual production of 3,55,750 tonne is Rs. 85,38,000/- (Rupees eighty five lakhs thirty eight thousand only). In this case, the surface rent to be remitted per year at the present rate of Rs. 5 per Are per year is Rs. 1,832/- (Rupees one thousand eight hundred and thirty two only) and in the event

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of non - functioning of quarry the Dead Rent to be realized for the 1st year - NIL 2nd year - Rs. 300/- (Rupees three hundred only) and 3rd year onwards - Rs. 1,200/- (Rupees one thousand and two hundred only) per hectare subject to revision from time to time.

The terms and conditions stated in this order will be subject to such further modifications as may be made by the State Government from time to time.

Sd/-

T. K. RAMAKRISHNAN
ADDITIONAL DIRECTOR OF MINING & GEOLOGY

To

M/s. Adani Vizhinjam Port Private Limited,
2nd Floor, Vipanchika Tower, Thycaud,
Thiruvananthapuram District - 695 014
(Registered Office at: Adani House,
Near Mithakhali Six Roads, Navrangpura,
Ahmedabad, Gujrat State - 380 009)
(Represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha)

Copy to:

- 1 The Director (Mining), Directorate General of Mines Safety, No.5, 14th Main (100ft) Road, 4th B Block, Koremangla, Bengaluru - 560034
- 2 Member Secretary, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram
- 3 The Chairman, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.
- 4 The Deputy Chief Controller of Explosives, PESO, C2-III Floor, CGO Complex, Kakkanad, Ernakulam
- 5 The Environmental Engineer, Kerala State Pollution Control Board, District Office, Thiruvananthapuram.
- 6 The Secretary, Nagaroor Grama Panchayath, Thiruvananthapuram District.
- 7 The Tahsildar, Chirayinkeezhu Taluk Office, Thiruvananthapuram District.
- 8 The Village officer, Nagaroor Village, Thiruvananthapuram District.
- 9 Shri. Kantharaj. K, #200, 2nd Floor, 40th Main, 1st Cross, Behind Silk Board, BTM Layout, 2nd Stage, Kuvempu Nagar, Bangalore - 560 068
- 10 The Geologist, District Office of the Dept. of Mining and Geology, Thiruvananthapuram.
- 11 Stock File
- 12 File Copy

(By Order)

Paul
20/05/2019

Senior Superintendent



**Annexure 12: Quarrying Lease
Registration Agreement in Form H**



കേരളം KERALA

F 041258

FORM H
(See Rule 43)
QUARRYING LEASE



This deed of lease made on this the 22nd day of MAY 2019 between the Governor of Kerala (hereinafter referred to as the "State Government" which expression shall, where the context so admits be deemed to include his successors and assigns) of the one part and M/s. Adani Vizhinjam Port Private Limited, 2nd Floor, Vipanchika Tower, Thycaud, Thiruvananthapuram District - 695 014 (Registered Office at: Adani House, Near Mithakhali Six Road, Navrangpura, Ahmedabad, Gujrat


Lessor **GEOLOGIST DISTRICT OFFICE**
DEPT. OF MINING & GEOL.
THIRUVANANTHAPURAM

Value Rupees 500/- only
Issued to

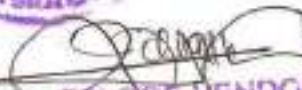
Rajesh Kumar Jha
MD & CEO

Adani Vizhinjam Port Private Ltd




Lessee




PALOGE VENDOR
N. JAYAKUMAR

No: 3171

20.5.2019

State - 380 009) a Private Limited Company having Corporate Identity No. U61200GJ2015PTC083954, represented by its Chief Executive Officer, Shri. Rajesh Kumar Jha, aged 53 years, S/o. Krishna Chandra Jha, residing at House No. - H7 - H8, Nishant Vihar, Near Aashiana Trade Centre, Jamsheedpur, Adityapur, Seraikela - Kharsawan, Jharkhand - 831 013 (Aadhaar No. 2712 6816 7724) (hereinafter called the "lessee/lessees" which expression shall where the context so admits, include his/their heirs, executors, administrators, representatives and permitted assigns) of the other part.

Witnesseth that in consideration of the rents and royalties and lessee's/Lessees' covenants, hereinafter reserved and contained the State Government hereby give on lease to the lessee/lessees the land measuring **3.6630 hectares** described in the schedule hereunder and delineated on the plan hereto annexed and therein coloured red (hereinafter called the "said lands") to hold the same for a period of **5 (Five) years** commencing from the **22.05.2019** and ending on the **21.05.2024** for the purposes of extracting minor mineral/minerals and subject to the terms and conditions contained in the Kerala Minor Mineral Concession Rules, 2015 (hereinafter referred to as "the Rules") and to the terms and conditions hereinafter appearing

1. The lessee/lessees shall have the right in and upon the said lands to extract Granite Building Stone (here in after called the said mineral/minerals) and to do all acts necessary for the extraction of the said mineral/minerals including the erection on the said lands, buildings and plant required for the purposes and also to take lead and carry away over the said lands and to dispose of the said minerals extracted as aforesaid.
2. The lessee/lessees shall during the subsistence of this lease have the liberty to work the said mineral/minerals and remove the same from the leasehold on permits issued by the State Government/competent authority or any other officer authorized by him in this regard. The permits shall be issued only on the basis of pre-paid royalty at the rates specified in Schedule I to these Rules. The royalty rates shall be subject to revision from time to time as the State Government may order.
3. The lessee/lessees shall pay to the State Government a yearly surface rent equal to the land revenue if any, assessable under the rules for the time being in force, or if the land be the property of Government or in reserve forest then equal to the land revenue plus cess, if any, per hectare of the land the surface whereof shall be occupied or used by the lessee/lessees for any of the purposes of this deed and so in proportion for any area less than one hectare. The said surface rent shall be paid by yearly payments; the first of such payments to be made on or before the last day of the first year of occupation provided always that no such rent shall be paid or demanded in respect of any roads or ways now in existence.


Lessor




Lessee

4. The lessee/lessees shall at all times during the currency of this lease keep correct and intelligible books of account showing accurately the quantity of the said minerals extracted and the weight and value of the said mineral sold or exported together with the names of the purchasers or consignees. The lessee shall also maintain a register of employees showing therein separately men, women employed daily and shall at reasonable times allow the competent authority appointed under the rules (hereinafter referred to as "competent authority") or the officer authorised by him to examine the said books of account and the register of employees and to take copies and extracts there from. The lessee/lessees shall submit reports in Forms F and G on the specified dates.

5. All sums found due under or by virtue of this deed from the lessee/lessees may be recovered from him jointly and severally from them and his/their properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue or in any other manner as the State Government may deem fit.

6. The lessee/lessees shall at the lessee's/lessees' own expense erect and at all times maintain and keep in repair boundary marks and pillars along the boundaries of the said lands according to the demarcation shown in the plan here to annexed.

7. The lessee shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 metres from any railway line except with the previous written permission of the railway administration concerned and any bridge on National Highway or 50 metres from any reservoir, tanks, canals, rivers, bridges, public roads, other public works, residential buildings, the boundary walls of places of worship, burial grounds, burning ghats or one kilometer from the boundaries of National Park or Wildlife Sanctuaries except with the previous permission of the authorities concerned or the Government or competent authority.

8. The sides of open workings shall be sloped, stepped or secured by the lessee in such a manner as to prevent slope failure, when an open working is worked in steps, steps shall be of sufficient breadth in relation to their height to secure safety. In open workings trees liable to fall and all loose ground and material shall be removed by the lessee sufficiently far from the edge or otherwise made source in order to prevent danger to persons employed in the quarry.

9. If a working place is found to be unsafe all persons shall be withdrawn by the lessee/lessees immediately from the dangerous area and all access to such working place except for the purpose of removing the danger of saving life shall be prevented by securely fencing the full width of all entrances to the place.

10. The lessee/lessees shall at all reasonable times allow any officer authorised by the Central Government or by the State Government in that


Lessor




Lessee

behalf to inspect the said lands and the buildings and plants erected thereon and the lessee/lessees shall assist such persons in conducting the inspection and afford them all information they may reasonably require, and shall conform to and observe all orders which the Central and State Governments as the result of such inspection or otherwise, may from time to time pass.

11. The lessee shall be responsible for implementing the provisions of the Various labour laws applicable, from time to time, to the quarry.

12. The lessee/lessees shall not assign or underlet the said lands or any part thereof or the rights or privileges, therein hereby granted or any of them without the previous permission in writing of the State Government / competent authority.

13. Where the lease or any right, title or interest therein has been assigned, sublet or transferred as provided in rule 45 read with condition 12, then the person in whose favour such assignment, sublease or transfer has been made shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.

14. The lease may be surrendered by the lessee/lessees at any time after 3 months notice in writing to the State Government/competent authority provided the lessee/lessees has/have paid all sums due on account of the lease: Provided that if the lessee/lessees elects/elect to determine this lease before the expiry of the term of the lease, shall pay in addition to other dues a sum equal to the dead rent payable for the remaining part of the term of the lease deed.

15. If the lessee/lessees shall be desirous of taking a further lease of the said lands he/they shall give three months' previous notice in writing of such desire to the State Government/competent authority and if the lessee/lessees has/have duly observed all the conditions of this lease, the State Government/competent authority may agree to renew the lease for such further term and on such terms and conditions as the State Government/competent authority may determine which shall be in accordance with the provisions of these rules.

16. If the lessee/lessees shall at any time during the said term use the said lands or any part thereof in any manner other than as authorised by this lease or fail to carry on quarrying operations continuously without sufficient cause of which the State Government/competent authority shall be the judge or shall commit a breach of any of the conditions of this lease it shall be lawful for the State Government/competent authority to cancel this lease and take possession of the said lands or the alternative to receive from the lessee/lessees such penalty not exceeding Rs. 25,000/- (Rupees twenty five thousand only) for the breach as the State Government/competent authority may fix.

17. If at the expiration of three calendar months after the expiry of the lease or its sooner determination, there shall remain in or the said lands, any engines, machinery, plant buildings, structures and other works,


Lessor




Lessee

erections and conveniences, the said minerals or other property which the lessee is/lessees are entitled to remove from the said lands, the same shall, if not removed by the lessee/lessees within one calendar month after notice in writing requiring their removal be given to the lessee/lessees by the State Government/competent authority be deemed to become the property of the State Government in such manner as they may deem fit without liability to pay any compensation or to account to the lessee/lessees in respect thereof.

18. This lease subject to all rules and regulations which may from time to time be issued by the State Government regulating the working of the quarries and other matters affecting safety, health and convenience of the lessee's/lessees' employees or of the public, whether under the Indian Mines Act or otherwise.

19. The lessee/lessees shall without delay send to the District Collector and the competent authority or the officer authorised by him in this regard report of any accident causing loss of life or serious bodily injuries or seriously affecting or endangering life or property which may at any time occur at or in the said lands in the course of operations under this lease.

20. The lessee/lessees shall furnish such reports and returns relating to output, labourers employed and other matters as the State Government may prescribe.

21. The lessee/lessees shall make and pay such reasonable compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him/them in exercise of the powers granted by this lease and shall indemnify and shall keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage, injury or disturbance and all costs and expenses in connection therewith.

22. Any condition prescribed in the Kerala Minor Mineral Concession Rules, 2015 but left out in this lease which may be found applicable to the lessee / lessees shall be treated as binding on the lessee/lessees.

23. In this case, the anticipated royalty to be remitted for the mineral extracted per year at the present rate of royalty of Rs. 24/- per tonne with proposed average annual production of 3,55,750 tonne is **Rs. 85,38,000/- (Rupees eighty five lakhs and thirty eight thousand only)** and may enhance the quantity of production and period of lease with the prior permission of the lessor and registration of the lease deed accordingly.

24. In this case, the surface rent to be remitted per year at the present rate of Rs. 5/- per Are per year is Rs. 1,832/- (Rupees one thousand eight hundred and thirty two only) and the refundable Security Deposit is Rs. 36,630/- (Rupees thirty six thousand six hundred and thirty only).


Lessor


Lessee



SCHEDULE OF DESCRIPTION OF LAND

District : Thiruvananthapuram
Taluk : Chirayinkeezhu

Village	Re - Survey Block No.	Re - Survey No.	Lease Area in Hectares
Nagaroor	37	555/2	3.6630
Total Area in Hectares			3.6630

Bounded by Survey No:

On the North by : Re - Survey No. 555/2
On the East by : Re - Survey No. 554/1
On the South by : Re - Survey No. 555/8
On the West by : Re - Survey No. 555/2

In witness whereof the parties hereto have set their hands here unto on the day and year first above written. GITA S.R.

Signed by
District Office
Department of Mining & Geology
Thiruvananthapuram-695004

for and on behalf of the Governor of Kerala.

In the presence of
(1) SHYJU.P
Assistant Geologist
Department of Mining and Geology
District Office
Thiruvananthapuram

(2) J.V. Jaising - mineral Revenue Inspector,
For ADANI VIZHINJAM PORT PRIVATE LTD
Thiruvananthapuram.

Signed by
MD & CEO

for and on behalf of the lessee/lessors

In the presence of

(1) K. J. Jaising NARE

(2) MUNEEZ T

ADANAR 9273 6759 4800
SHE-T MOHAMMED GAWKER
SOUMYAN, MARRON, VIZHINKAD
MULAPPURAM, KERALA 673645

Lessor

Lessee



**Annexure 13: Extracts of Newspaper
Clippings with EC advertisements**



SP releases first list
Malayum to contest
from Malapur!



Mr. D. B. Fitts

... militant groups will
be allowed to operate
from Pakistan. Iranian



For more Trump aide Paul Manafort gets 47 months in jail for fraud

Kharwaja, Rohit hits
at Australia wins
third one-day
page 19



20

SC appoints 3-member panel to mediate in Ayodhya dispute

Committee will start work in Fairbairn in a week, and file status report in 4 weeks.

[illegible][illegible]

MATTHEW LUNA Associate	After a postcard legal battle, the National Company Law Tribunal (NCLT), New Delhi, on Friday approved a ₹400 crore acquisition of global stock exchange Ascendex Ltd to take over the debt-fuelled share price in offshore. The approval is	After a postcard legal battle, the National Company Law Tribunal (NCLT), New Delhi, on Friday approved a ₹400 crore acquisition of global stock exchange Ascendex Ltd to take over the debt-fuelled share price in offshore. The approval is
SHYAM SINGH Director	After a postcard legal battle, the National Company Law Tribunal (NCLT), New Delhi, on Friday approved a ₹400 crore acquisition of global stock exchange Ascendex Ltd to take over the debt-fuelled share price in offshore. The approval is	After a postcard legal battle, the National Company Law Tribunal (NCLT), New Delhi, on Friday approved a ₹400 crore acquisition of global stock exchange Ascendex Ltd to take over the debt-fuelled share price in offshore. The approval is
SHYAM SINGH Director	After a postcard legal battle, the National Company Law Tribunal (NCLT), New Delhi, on Friday approved a ₹400 crore acquisition of global stock exchange Ascendex Ltd to take over the debt-fuelled share price in offshore. The approval is	After a postcard legal battle, the National Company Law Tribunal (NCLT), New Delhi, on Friday approved a ₹400 crore acquisition of global stock exchange Ascendex Ltd to take over the debt-fuelled share price in offshore. The approval is

1. **STEP 1**
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 99. **STEP 99**
 100. **STEP 100**

[illegible]

Bankruptcy proceedings: Polar Ski made a 10-asset-bankruptcy filing in Illinois in August and soon over 160,000 credit to over 100 stores was shut, but by the end of the year, the company was back, but by the end of the year, the company was back, but by the end of the year, the company was back.

Case no.	Age (yr)	Sex	Site	Time (yr)	Pathologic findings	Survival (yr)
1	62	M	Stomach	10	Adenocarcinoma	10
2	65	M	Stomach	10	Adenocarcinoma	10
3	68	M	Stomach	10	Adenocarcinoma	10
4	70	M	Stomach	10	Adenocarcinoma	10
5	72	M	Stomach	10	Adenocarcinoma	10
6	75	M	Stomach	10	Adenocarcinoma	10
7	78	M	Stomach	10	Adenocarcinoma	10
8	80	M	Stomach	10	Adenocarcinoma	10
9	82	M	Stomach	10	Adenocarcinoma	10
10	85	M	Stomach	10	Adenocarcinoma	10

Rafale documents not stolen: AG does U-turn

With the MSME sector, the original proponents of the MSME Act, State and Central Banks, have been critical of

100

Mr. Meek accused the

Govt data for 2012-2015 recorded 11,54 lakh new jobs

The number of net jobs created in the services, small and medium enterprises and organised sector in the last four years was 11,54 lakh.

The FreshStart for the five-year period – beginning 2011-12 – puts in category A as well as that from the government's Ministry of Micro, Small & Medium Enterprises, and Industries, and has counted its own jobs created in 2012-13, 2013-14 and 2014-15.

It also shows the jobs were cre-

ages - 20%
% of the
period
73% of
all by age-

മാതൃഭൂമി



2019
നാളിതദിനം

മാതൃഭൂമി ദേശീയതയുടെയും ഐക്യത്തിന്റെയും പ്രതീകമാണ്. നാളിതദിനം ഏപ്രിൽ 15-ാം തീയതിയാണ്. ഈ ദിനം നമ്മുടെ നാടിന്റെയും ജനതയുടെയും ഐക്യം ഉറപ്പുവരുത്തുന്നതിനായി ആചരിക്കേണ്ടതാണ്. മാതൃഭൂമി ഈ ദിനം ഏകദേശം 1948-ൽ ആരംഭിച്ചു. അന്ന് നമ്മുടെ നാടിന്റെ ഐക്യം ഉറപ്പുവരുത്തുന്നതിനായി ആചരിക്കേണ്ടതാണ്.

കുളിമൊരുങ്ങി

ഇനിയെല്ലാം
ഐക്യമാകാൻ

നാധ്യന്താ പട്ടിക തയ്യാർ

നഗ്നനീൽ ഓപ്പറേഷൻ
കുടുംബം നാലാംതരം വേർതിരിച്ചു

നഗ്നനീൽ ഓപ്പറേഷൻ
കുടുംബം നാലാംതരം വേർതിരിച്ചു

നാലാംതരം	നാലാംതരം
നാലാംതരം	നാലാംതരം
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നാലാംതരം	നാലാംതരം
നാലാംതരം	നാലാംതരം



നീരവ് മോദിക്ക് ബ്രിട്ടനിൽ സുഖജീവിതം; വജ്രവ്യാപാരവും



നീരവ് മോദിക്ക് ബ്രിട്ടനിൽ സുഖജീവിതം; വജ്രവ്യാപാരവും

നീരവ് മോദിക്ക് ബ്രിട്ടനിൽ സുഖജീവിതം; വജ്രവ്യാപാരവും



എം.പി.മാർ എം.എൽ.എ.മാർ

പോലീസറുങ്ങി ഇടതുമുന്നണി

നാലാംതരം	നാലാംതരം
നാലാംതരം	നാലാംതരം
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ENGG./MED. ENTRANCE

**Annexure 14: Submission Letter of
Newspaper Advertisements and
Affidavit to SEIAA**

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

Subject: Submission of Signed Environment Clearance (EC), Newspapers advertisements and Notarized Affidavit - Reg.

Reference: SEIAA-Environmental Clearance 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,


As per the Environment Clearance (referenced above), wherein general condition 25 and 29 state that:

- "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 and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation."*
- "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."*

In this regard, we are herewith enclosing the advertisements published in local newspapers on 9th & 10th March 2019 as **Annexure 1**, Environmental Clearance letter signed on all pages as **Annexure 2**, and the notarized affidavit as **Annexure 3**.

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

Yours Sincerely


Rajesh Jha
Chief Executive Officer



Encl: As Stated Above

Adani Vizhinjam Port Private Limited
2nd Floor, Vipanchika Tower, Thycaud
Thiruvananthapuram
Kerala-695014

www.adani.com

CIN -U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India



**Annexure 15: Screenshot of the APSEZ
website with EC uploaded**

Vizhinjam Port

| Environment and CRZ Clearances

2014EC CRZ ClearanceVISL

Mar2019ECBuilding Stone Quarry
ML36630 HaAVPPL

| Current Environment Compliance Report

Compliance ReportVISL Oct18Mar19

| Previous Environment Compliance Report

**Annexure 16: Letter to MoEF&CC for
Submission for First Half Yearly
Compliance Report to be submitted for
the period ending March 2019**

Ref: AVPPL/MOEF/2019-20/752

Date: 25th April 2019

To,
Ministry of Environment and Forests & Climate Change (MoEF&CC),
Regional Office, Southern Zone,
Kendriya Sadan, 4th Floor, E&F Wing, II Block,
Koramangla, Bangalore 560034

Sub: Compliances of the Environmental Clearance Issued for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala – Reg.

Ref: 1. Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019
2. FILE NO: PCB/TVM-DO/ICE/10171298/2019 dated 05.03.2019
3. Our Letter Number AVPPL/SEIAA/2019-20/731 dated 01.04.2019

Dear Sir/Madam,

This is with reference to the Environmental Clearance issued for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala.

The general conditions of the Environmental Clearance, point no. 27 states that "The Proponent shall submit half yearly reports in soft copy and SEIAA will upload it on to the website". Since the orders for Environmental Clearance was granted on 01.03.2019 and Adani Vizhinjam Port Private Limited (AVPPL) as on date have not initiated any work at the site and therefore the compliance for the half yearly period ending 31.03.2019 is not substantial.

It is requested that the first half yearly Compliance Report will be submitted for the Period April 2019 to September 2019. In the meantime AVPPL have complied with all the conditions that are applicable prior to commencement of operations as detailed below:

- **Point No. 20:** *Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before mining activity* – AVPPL have already obtained CTO from Kerala State Pollution Control Board and was awarded the same on 05.03.2019 (Annexure 1).
- **Point No. 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*

1

Adani Vizhinjam Port Private Limited
2nd Floor, Vipanchika Tower, Thycaud
Thiruvananthapuram
Kerala-695014

www.adani.com
CIN -U61200GJ2015PTC083954

Registered Office: Adani House, Nr Mithakhali Circle, Navrangpura, Ahmedabad 380 009, Gujarat, India



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 – Details of the advertisements that were published in local newspapers on 9th & 10th March 2019 and the signed Environmental Clearance were intimated and submitted vide Our Letter Number AVPPL/SEIAA/2019-20/731 dated 01.04.2019 (Annexure 2).

- **Point No. 26:** The Environmental Clearance shall be put on the website of the company by the proponent – The Environmental Clearance has been uploaded to the Adani Ports website: <https://www.adaniports.com/ports-downloads?port=Vizhinjam-Port> (Annexure 3).
- **Point No. 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 - The notarized affidavit was also submitted vide Our Letter Number AVPPL/SEIAA/2019-20/731 dated 01.04.2019 (Annexure 4).

This is for your kind information and records.

Thanking you, yours sincerely



Rajesh Jha
MD & CEO
Adani Vizhinjam Port Pvt. Ltd. (AVPPL)

Enclosed: As Stated Above

- Copy to:
- (1) The Director (Monitoring-IA II Division), Ministry of Environment and Forests & Climate Change, Indra Paryavaran Bhavan, Jor Bagh, New Delhi – 110003
 - (2) The Zonal Officer, Central Pollution Control Board (CPCB), Zonal Office, 1st & 2nd Floors, Nisarga Bhavan, A Block, Thimmiah Main Road, 7th D Cross Shivanagar, Opp. Pushpanjalai Theatre, Bengaluru – 560 010.
 - (3) Member Secretary, State Environment Impact Assessment Authority (SEIAA), K.S.R.T.C Bus Terminal Complex, 4th Floor, Thampanoor, Trivandrum – 695014
 - (4) The Member Secretary, Kerala State Pollution Control Board (KSPCB), Thiruvananthapuram Regional Office, Plamoodu, Pattom P.O., Thiruvananthapuram – 695 004

Jesse Benjamin Fullonton

From: Hebin Chenthamarakshan
Sent: Wednesday, 8 May, 2019 07:13 PM
To: MOEF Bangalore
Cc: seacseiaakerala@gmail.com; CPCB; MOEF Delhi; Zonal office bangalore; 2. Member Secretary- KSPCB
Subject: Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019
Attachments: 1. 08.05.2019 EC Compliance for the period October 2018 to March 2019.pdf

Dear Sir,

This is with reference to the **Environmental Clearance Order No. 1200/EC2/2018/SEIAA dated 01.03.2019** issued to Adani Vizhinjam Port Private Limited (AVPPL) for the proposed building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala.

Project Proponent - Mr Rajesh Jha, Chief Executive officer, Adani Vizhinjam Port Pvt Ltd
EC granted for - Building stone quarry project in Survey No. 555/2 at Nagaroor Village, Chirayinkeezhu Taluk, Thiruvananthapuram District, Kerala.
Dates 01.03.2019
EC Issued by - **State Environment Impact Authority (SEIAA), Kerala**

Since the Environmental Clearance was granted on 01.03.2019 and AVPPL as on date have not initiated any work at the site and therefore the compliance for the half yearly period ending 31.03.2019 is not substantial. Hence, in the meantime AVPPL have complied with all the conditions that are applicable prior to commencement of operations as detailed in the attached letter (Ref: AVPPL/MOEF/2019-20/752 dated 25.04.2019).

Regards

Hebin C
Manager-Environment
Adani Vizhinjam Port Pvt Limited | Second Floor, Vipanchika Tower, Thycaud, Trivandrum, Kerala-695 014.
EXT. No : 91-47122-**68823**
Mob +91 9099056757/9048404798 | Hebin.C@adani.com | www.adani.com



**Annexure 17: Notarized Affidavit that
all the Conditions stipulated in the EC
shall be scrupulously followed**



കേരളം KERALA

CE 767184

TO WHOMSOEVER IT MAY CONCERN

Declaration for scrupulously following Environmental Clearance conditions for Building Stone Quarry Situated in Block No-37, Re-Survey No.555/2 of Nagaroor Village.

I **Rajesh Kumar Jha**, aged 54 years. S/o Late Krishna Chandra Jha, Chief Executive Officer of Adani Vizhinjam Port Private Limited having office at 2nd Floor, Vipanchika Towers, Thycaud, Thiruvananthapuram do hereby solemnly affirm and state as follows:-



Jahangeer A.
JAHANGEER. A.
ADVOCATE & DISTRICT NOTARY
TARGET LEGAL CONSULTANTS (Cont. 2)
VANCHIYOOR, TRIVANDRUM DIST.
KERALA STATE, INDIA - 695 035

H. Lakshminan Nair
H. LAKSHMINAN NAIR
Vendor, Vanchiyoor
Thiruvananthapuram

03/14/2019
m/o CEO Adani Vizhinjam Port
Thm wj

27 MAR 2019



കേരളം KERALA

-2-

CE 767185

The company, Adani Vizhinjam Port Pvt. Ltd., was accorded Environmental Clearance with letter No. 1200/EC2/2018/SEIAA dated 01.03.2019 valid till 28.02.2024 for the mine situated in survey No. 555/2 of Nagaroor Village in Chirayinkeezhu taluk of Thiruvananthapuram District. I solemnly affirm that Adani Vizhinjam Port Private Limited will scrupulously follow all the conditions stipulated in the Environmental Clearance accorded by State Environment Impact Assessment Authority.

All the facts stated above are true and correct to the best of our knowledge information and belief.

For ADANI VIZHINJAM PORT PRIVATE LTD



Deponent Kumar Jha
MD & CEO

Solemnly affirmed and signed by the deponent in my presence who is personally known to me, at my office at Vanchiyoor, Thiruvananthapuram, on this the 3rd day of April, 2019.



N. BALAKRISHNAN NAIR
Vendor, Vanchiyoor
Thiruvananthapuram



JAHANGEER A.
ADVOCATE & DISTRICT NOTARY
* TARGET LEGAL CONSULTING *
VANCHIYOOR, TRIVANDRUM DIST
KERALA STATE, INDIA - 695 035

27 MAR 2019

Annexure 18: AAQM Report

TEST REPORT

AMBIENT AIR QUALITY DATA

- Name of the Project** : M/s. Adani Vizhinjam Port Pvt. Ltd.,
- Location Name** : Quarry Area
- Name of the project Proponent** : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,
Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.
- Month of sampling** : September 2019
- Duration of sampling** : 8 - Hours
- Date of reporting** : 05.10.2019

Parameter	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	NO ₂ µg /m ³	SO ₂ µg /m ³	Ammonia µg /m ³
Sample no.	MGF648853	PT0718729	04191146	04191147	--
Date of Sampling					
19.09.2019	60.2	32.5	20.0	12.4	--
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	60	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



Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

“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.



An ISO 9001:2015
OHSAS 18001:2007

METAMORPHOSISSM

LABORATORY PRIVATE LIMITED

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

Recognized by MoEF & CC and Accredited by NABL

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** : September 2019
5. **Duration of sampling** : 8 - Hours
6. **Date of reporting** : 05.10.2019

Parameter	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	NO ₂ µg /m ³	SO ₂ µg /m ³	Ammonia µg /m ³
Sample no.	0419276B	0419277B	0419278B	0419279B	--
Date of Sampling					
19.09.2019	52.1	30.4	25.2	12.9	--
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	60	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

Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

“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.

TEST REPORT

AMBIENT AIR QUALITY DATA

1. **Name of the Project** : M/s. Adani Vizhinjam Port Pvt. Ltd.,
2. **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** : September 2019
5. **Duration of sampling** : 8 - Hours
6. **Date of reporting** : 05.10.2019

Parameter	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	NO ₂ µg /m ³	SO ₂ µg /m ³	Ammonia µg /m ³
Sample no.	0419280B	0419281B	0419282B	0419283B	--
Date of Sampling					
19.09.2019	53.1	29.1	16.4	12.4	--
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	60	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



Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

“PRAKRUTI BHAVAN”, #200, 1st & 2nd Floor, 40th Main, 1st Cross,
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Email: mail@metamorphosis-india.com.



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OHSAS 18001:2007

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

Recognized by MoEF & CC and Accredited by NABL

TEST REPORT

AMBIENT AIR QUALITY DATA

1. **Name of the Project** : M/s. Adani Vizhinjam Port Pvt. Ltd.,
2. **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** : September 2019
5. **Duration of sampling** : 8 - Hours
6. **Date of reporting** : 05.10.2019

Parameter	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	NO ₂ µg /m ³	SO ₂ µg /m ³	Ammonia µg /m ³
Sample no.	0419284B	0419285B	0419286B	0419287B	--
Date of Sampling					
19.09.2019	43.6	22.8	18.2	13.1	--
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	60	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

Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

“PRAKRUTI BHAVAN”, #200, 1st & 2nd Floor, 40th Main, 1st Cross,
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Bengaluru – 560068, Karnataka, India, Telefax: +91.80.26783006
Email: mail@metamorphosis-india.com.

TEST REPORT

AMBIENT AIR QUALITY DATA

- Name of the Project** : M/s. Adani Vizhinjam Port Pvt. Ltd.,
- Location Name** : Nearest settlement towards (near Altharamudu bus stop) @ 825 mts >> NNE
- Name of the project Proponent** : Building Stone Quarry of M/s. Adani Vizhinjam Port Pvt. Ltd.,
Nagaroor village (Kadavila), Chirayinkeez Taluk, Thiruvananthapuram District, Kerala.
- Month of sampling** : September 2019
- Duration of sampling** : 8 hours
- Date of reporting** : 05.10.2019

Parameter	PM ₁₀ µg /m ³	PM _{2.5} µg /m ³	NO ₂ µg /m ³	SO ₂ µg /m ³	Ammonia µg /m ³
Sample no.	0419360B	0419361B	0419362B	0419363B	--
Date of Sampling	19.09.2019	50.9	27.6	20.0	14.6
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	60	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



Laboratory Head
Dr. Shanth A. Thimmaiah

Annexure 19: Noise Monitoring Report

TEST REPORT

AMBIENT NOISE MEASUREMENT

- | | |
|----------------------------------|---|
| 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. Date of Measurement | : 19.09.2019 |
| 5. Name of instrument | : Digital sound level meter Equinox & EQ-107 |
| 6. Date of reporting | : 05.10.2019 |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Quarry Area	04191095	IS:9989 -1981	69.9	76.8	72.6	53.4	59.9	55.7

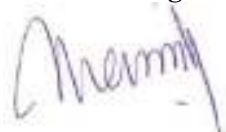
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

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 SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory



Laboratory Head
Dr. Shanth A. Thimmaiah

TEST REPORT

AMBIENT NOISE MEASUREMENT

- | | |
|----------------------------------|--|
| 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. Date of Measurement | : 19.09.2019 |
| 5. Name of instrument | : Digital sound level meter Equinox & EQ-107 |
| 6. Date of reporting | : 05.10.2019 |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Nearest settlement towards Near (Kadavila bus stop) @ 450 mts >> SE	04191096	IS:9989-1981	60.0	70.0	69.9	45.9	52.1	48.5

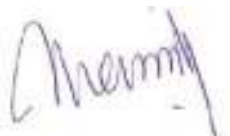
Limits in dB (A) Leq			
Area Code	Category of Area/ Zone	Day (6 a.m. to 10 p.m.)	Night (10 p.m. to 6 a. m.)
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Sensitive Zone	50	40

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 found to be higher than the permissible limits applicable to residential area due to the day activities.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory



Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

“PRAKRUTI BHAVAN”, #200, 1st & 2nd Floor, 40th Main, 1st Cross,
BTM Layout II Stage, Behind Central Silk Board,
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Email: mail@metamorphosis-india.com.

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 | : 19.09.2019 |
| 5. Name of instrument | : Digital sound level meter Equinox & EQ-107 |
| 6. Date of reporting | : 05.10.2019 |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Nearest settlement towards @ 900 mts >> W	04191097	IS:9989-1981	59.9	68.4	62.8	45.9	50.8	52.4

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
(D)	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 higher than the permissible limits applicable to residential area.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory



Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

“PRAKRUTI BHAVAN”, #200, 1st & 2nd Floor, 40th Main, 1st Cross,
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Email: mail@metamorphosis-india.com.

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 | : 19.09.2019 |
| 5. Name of instrument | : Digital sound level meter Equinox & EQ-107 |
| 6. Date of reporting | : 05.10.2019 |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Nearest settlement towards @ 330 mts >> NNW	04191098	IS:9989-1981	61.6	70.8	62.3	48.6	54.4	53.5

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
(D)	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 found to be higher than the permissible limits applicable to residential area due to the day activities.
Sample Collected By	M/s. METAMORPHOSIS SM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory



Laboratory Head
Dr. Shanth A. Thimmaiah

TEST REPORT

AMBIENT NOISE MEASUREMENT

- | | |
|----------------------------------|---|
| 1. Name of the project | : M/s. Adani Vizhinjam Port Pvt. Ltd., |
| 2. 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. Date of Measurement | : 19.09.2019 |
| 5. Name of instrument | : Digital sound level meter Equinox & EQ-107 |
| 6. Date of reporting | : 05.10.2019 |

Sampling point	Sample no.	Protocol	Result (dB (A))					
			Day			Night		
			LMin	LMax	Leq	LMin	LMax	Leq
Nearest settlement towards (near Altharamudu bus stop) @ 825 mts >> NNE	04191164	IS:9989-1981	59.9	70.0	64.6	49.9	56.1	54.1

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
(D)	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 found to be higher than the permissible limits applicable to residential area due to the day activities.
Sample Collected By	M/s. METAMORPHOSISSM Laboratory Private Limited, Bengaluru.

End of Report

Authorized Signatory



Laboratory Head
Dr. Shanth A. Thimmaiah



TC-5841

“PRAKRUTI BHAVAN”, #200, 1st & 2nd Floor, 40th Main, 1st Cross,
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Bengaluru – 560068, Karnataka, India, Telefax: +91.80.26783006
Email: mail@metamorphosis-india.com.

**Annexure 20: Article 32 of Concession
Agreement with GoK**

ARTICLE 32

ESCROW ACCOUNT

32.1 Escrow Account

32.1.1 The Concessionaire shall, prior to the Appointed Date, open and establish an Escrow Account with a Bank (the "Escrow Bank") in accordance with this Agreement read with the Escrow Agreement.

32.1.2 The nature and scope of the Escrow Account are fully described in the agreement (the "Escrow Agreement") to be entered into amongst the Concessionaire, the Authority, the Escrow Bank and the Senior Lenders through the Lenders' Representative, which shall be substantially in the form set forth in Schedule-S.

32.2 Deposits into Escrow Account

The Concessionaire shall deposit or cause to be deposited the following inflows and receipts into the Escrow Account:

- (a) all funds constituting the Financial Package;
- (b) all Fee and any other revenues from or in respect of the Port, including the proceeds of any rentals, deposits, capital receipts or insurance claims; and
- (c) all payments by the Authority, after deduction of any outstanding Concession Fee:

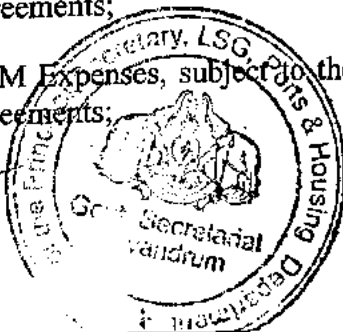
Provided that the Senior Lenders may make direct disbursements to the EPC Contractor in accordance with the express provisions contained in this behalf in the Financing Agreements.

32.3 Withdrawals during Concession Period

32.3.1 The Concessionaire shall, at the time of opening the Escrow Account, give irrevocable instructions, by way of an Escrow Agreement, to the Escrow Bank instructing, inter alia, that deposits in the Escrow Account shall be appropriated in the following order every month, or at shorter intervals as necessary, and if not due in a month then appropriated proportionately in such month and retained in the Escrow Account and paid out therefrom in the month when due:

- (a) all taxes due and payable by the Concessionaire for and in respect of the Port, excluding Port Estate Development;
- (b) all payments relating to construction of the Port, subject to and in accordance with the conditions, if any, set forth in the Financing Agreements;

- (c) O&M Expenses, subject to the ceiling, if any, set forth in the Financing Agreements;



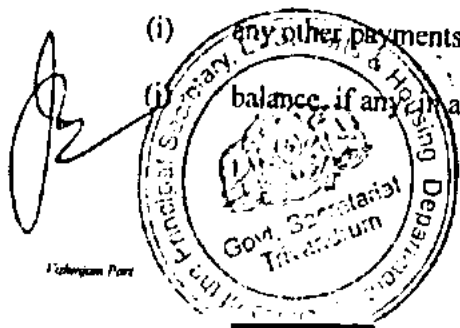
- (d) O&M Expenses and other costs and expenses incurred by the Authority in accordance with the provisions of this Agreement, and certified by the Authority as due and payable to it;
- (e) Concession Fee due and payable to the Authority;
- (f) monthly proportionate provision of Debt Service due in an Accounting Year;
- (g) all payments and Damages certified by the Authority as due and payable to it by the Concessionaire, including repayment of Revenue Shortfall Loan;
- (h) monthly proportionate provision of debt service payments due in an Accounting Year in respect of Subordinated Debt;
- (i) any reserve requirements set forth in the Financing Agreements; and
- (j) balance, if any, in accordance with the instructions of the Concessionaire.

32.3.2 The Concessionaire shall not in any manner modify the order of payment specified in Clause 32.3.1, except with the prior written approval of the Authority.

32.4 Withdrawals upon Termination

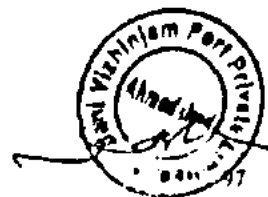
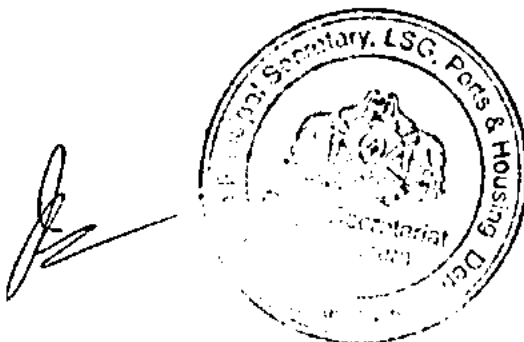
32.4.1 Notwithstanding anything to the contrary contained in this Agreement, all amounts standing to the credit of the Escrow Account shall, upon Termination, be appropriated in the following order:

- (a) all taxes due and payable by the Concessionaire for and in respect of the Port, excluding Port Estate Development;
- (b) 90% (ninety per cent) of Debt Due excluding Subordinated Debt;
- (c) outstanding Concession Fee;
- (d) all payments and Damages certified by the Authority as due and payable to it by the Concessionaire, including Premium and repayment of Revenue Shortfall Loan;
- (e) retention and payments relating to the liability for defects and deficiencies set forth in Article 40;
- (f) outstanding Debt Service including the balance of Debt Due;
- (g) outstanding Subordinated Debt;
- (h) incurred or accrued O&M Expenses;
- (i) any other payments required to be made under this Agreement; and
- (j) balance, if any, in accordance with the instructions of the Concessionaire;



Provided that no appropriations shall be made under Sub-clause (j) of this Clause 32.4.1 until a Vesting Certificate has been issued by the Authority under the provisions of Article 39.

32.4.2 The provisions of this Article 32 and the instructions contained in the Escrow Agreement shall remain in full force and effect until the obligations set forth in Clause 32.4.1 have been discharged.



**EC Compliance Report
April 2019 to September 2019**

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



Adani Vizhinjam Port Private Ltd. (AVPPL)