DRAFT EIA / EMP FOR
PROPOSED ROUGH STONE AND GRAVEL QUARRY
CATEGORY B1 (Cluster)

(Submitted for Public Hearing as per the provisions of EIA Notification 2006 & its amendments thereof)

ToR Identification No.TO26B0108TN5346922N (F.No.13627), dated.15.06.2026)

PROPOSED QUARRY LEASE DETAILS	
SURVEY NOS	14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6
VILLAGE	SEENIYAPURAM
TALUK	VIRUDHUNAGAR
DISTRICT	VIRUDHUNAGAR
EXTENT	7.37.80 Ha
PROPOSED PRODUCTION FOR 10 YEARS	10 Years – 20,34,000 m^3 OF ROUGH STONE & 3,06,850 m^3 OF GRAVEL First Five years – 8,19,750 m^3 OF ROUGH STONE & 3,06,850 m^3 OF GRAVEL Second Five years – 12,14,250 m^3 OF ROUGH STONE
LAND	PATTA LAND

(Sector No. 1(a) (Sector no.1 as per NABET)
Category of the Project: B1 Cluster Mining, Total Cluster Area – 15.01.80 Ha
Baseline Monitoring Period – March 2026 to May 2026

APPLICANT

THIRU. G.PANDURANGAN,
S/O. GOVINDARAJ,
DOOR NO; 13/3, 7/25 ELAGIPATTI
PAVALI PANCHAYAT, SEENIYAPURAM VILLAGE,
VIRUDHUNAGAR DISTRICT.

ENVIRONMENTAL CONSULTANT	LABORATORY
M/s. GLOBAL MINING SOLUTIONS ***(NABET Accredited & ISO 9001 Certified Consultant)*** **Plot No. 6, S.F.No. 13/2, A2, VS City,** **RC Chettypatty, Kottamettupatty, Omalur,** **Salem, Tamil Nadu – 636 455.** **NABET Accreditation No: NABET/EIA/26-29/RA 0478, Valid Until – 03.01.2029** **Contact: 97502 23535 & 94446 54520** **Email: infoglobalmining@gmail.com, globalminingsolutionssalem@gmail.com**	**M/s. SHRIENT ANALYTICAL & RESEARCH LABS PRIVATE LIMITED** ***(NABL Accredited Testing Laboratory)*** ***Valid Until -29.09.2029*** ***#416/15, Dhargas Road, Perungalathur, West Tambaram, Chennai,*** ***Tamil Nadu, India.***

August - 2026

AMENDMENT PAGE

SL	Page No.	Section / Clause / Para / Line (as Applicable)	Date of Amendment	Amendment Made	Reasons of amendment	Signature of Person Authorizing Amendment
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

ACKNOWLEDGEMENT

M/s. Global Mining Solutions, Salem is very much thankful to Thiru.G.Pandurangan, (Lessee) for the confidence and trust placed on our organization for carrying out Environmental Impact Assessment (EIA) study for the proposed Rough Stone and Gravel Quarry over a lease extent of 7.37.80 Ha & a cluster extent of 15.01.80 Ha at Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu and formulating the Environmental Management Plan (EMP). We also gratefully acknowledge the cooperation and assistance provided by concerned government authorities for collection of secondary information for the preparation of EIA/EMP report. Our sincere thanks to the local people of Seeniyapuram Village and the nearby villages for their whole hearted cooperation and constant involvement during the entire field study without which the study would not have been possible.

For: M/s. Global Mining Solutions



(M.Prabhu)

Managing Director

UNDERTAKING

In Line with MoEF OM no. J – 11013/41/2006-IA. II (I) dated 5th October 2011, we hereby give our undertaking for owning the content and information in the EIA/EMP report submitted for EC of the proposed Rough Stone and Gravel Quarry over a lease extent of 7.37.80 Ha & a cluster extent of 15.01.80 Ha at Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.

For M/s. Global Mining Solutions

M. MANIKANDAN
EIA CO-ORDINATOR
GLOBAL MINING SOLUTIONS
SALEM

UNDERTAKING

In Line with MOEF OM no. J-11013/41/2006-IA.II (1) dated 4th Aug 2009 and its Amendments, we hereby confirm that all Terms of Reference issued by Ministry of Environment, Forest and Climate Change vide Letter No: TO26B0108TN5346922N, dated:15.06.2026 for preparation of EIA/EMP report for the proposed Rough Stone and Gravel Quarry over a lease extent of 7.37.80 Ha & a cluster extent of 15.01.80 Ha at Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu, for the production of 20,34,000 m^3 of Rough Stone and 3,06,850 m^3 of gravel from the proposed lease area and the details has been complied in the EIA/EMP report is factually correct.

The EIA/EMP report has been prepared by M/s. Global Mining Solutions (GMS), Salem. GMS is a NABET accredited consultant for preparation of EIA/EMP report of Mining of Minerals (Opencast only) vide certificate No. NABET/EIA/26-29/RA 0478 valid till 03.01.2029.

For M/s. Global Mining Solutions

M. MANIKANDAN
EIA CO-ORDINATOR
GLOBAL MINING SOLUTIONS
SALEM

भारतीय गुणवत्ता परिषद
QUALITY COUNCIL OF INDIA
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NABET

National Accreditation Board for Education and Training

Certificate of Accreditation

Global Mining Solutions, Salem

Plot No. 6, S.F.No. 13/2, A2, VS City, RC Chettypatty, Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455

*Global Mining Solutions, Salem is Re-Accredited (RA1) **as Category-A organization** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organizations (Version 3), for the preparation of EIA/EMP reports in the sectors listed below, as per the specified categories*

S.No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1.	Mining of minerals including opencast / underground mining	1	1 (a) (i)	A
2.	Thermal power plants	4	1 (d)	B
3.	Metallurgical industries (ferrous only)	8	3 (a)	A
4.	Metallurgical industries (non-ferrous only)	8		B
5.	Cement plants	9	3 (b)	A
6.	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	21	5 (f)	A
7.	Distilleries	22	5 (g)	A
8.	Industrial estates/ parks/ complexes/areas, export processing Zones(EPZs), Special Economic Zones(SEZs), Biotech Parks, Leather Complexes	31	7 (c)	B
9.	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	32	7 (d)	B
10.	Common Effluent Treatment Plants (CETPs)	36	7 (h)	B
11.	Common Municipal Solid Waste Management Facility (CMSWMF)	37	7 (i)	B
12.	Building and construction projects	38	8 (a)	B
13.	Townships and Area development projects	39	8 (b)	B

Note: Names of approved experts and sectors are mentioned in RAAC minutes dated February 05, 2026, posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no QCI/NABET/ENV/ACO/26/4024 dated February 16, 2026. The accreditation needs to be renewed before the expiry date by Global Mining Solutions, Salem following due process of assessment.

Valid up to
January 03, 2029

Issue Date
February 16, 2026

Certificate No.
NABET/EIA/26-29/RA 0478

Prof (Dr) Varinder S Kanwar
(CEO – NABET)

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website.

Declaration by Experts

Declaration by Experts contributing to the proposed Rough Stone and Gravel Quarry over a lease extent of 7.37.80 Ha & a cluster extent of 15.01.80 Ha at Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.

I, hereby, certify that I was a part of the EIA team that developed the above EIA.

EIA Coordinator Name: M. Manikandan Manickam



Period of involvement: March to May 2026.

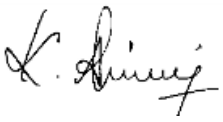
Contact information:

M/s Global Mining Solutions

Plot No.6, SF No. 13/2, A2, VS City, RC Chettypatty,

Kottamettupatty, Omalur,

Salem, Tamil Nadu – 636 455

S. No.	Functional areas	Name of the expert/s	Involvement (period and task**)	Signature and Date
1	*AP*	*Dhanalakshmi Ramanathan*	*Assessment of existing air quality, Impact of the project on ambient air and suggested mitigation measures for air pollution.* *Period: March to May 2026.*	
2	*WP*	*Abirami Kaliaperumal*	*Assessment of existing water quality, impact of the project on surface and ground water quality, suggested mitigation measures for minimizing the impact.* *Period: March to May 2026.*	
3	*SHW*	*Ramadoss N*	*Assessment of waste generated from the project, suggested waste management practices.* *Period: March to May 2026.*	
4	*SE*	*Sarasvathy K*	*Baseline SE study. Data compilation and assessment. Impact of the project on SE status of the area. Formulation of CER plan.* *Period: March to May 2026.*	
5	*EB*	*Saravanan S*	*Baseline data collection of related to ecology of the area.* *Period: March to May 2026.*	

6	*HG*	*Ravinthiran N*	*Hydrogeological feature of the area. Ground water depth and impact of project on ground water of the area.* *Period: March to May 2026.*	
7	*AQ*	*Srilatha Thiruveedhula*	*Air quality modeling utilizing the area source model. Predication of the ground level concentration of the dust. Suggesting suitable mitigation measures.* *Period: March to May 2026.*	
8	*NV*	*Dhanalakshmi Ramanathan*	*Ambient noise study of the area. Incremental noise generation due to quarry operation and impact of the noise due to the project.* *Period: March to May 2026.*	
9	*LU*	*Srilatha Thiruveedhula*	*Preparation of land use map based on satellite imagery. Land use classification and analysis. Impact prediction of the project on the surrounding land environment.* *Period: March to May 2026.*	

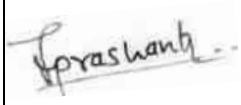
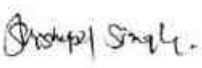
10	*RH*	*S.V. Prashant*	*Identification of the Risk related to the mining activities. Preparation of emergency disaster management plan. Plan for supply of safety equipment for the worker.* *Period: March to May 2026.*	
11	*SC*	*Shisupal Sing*	*Soil monitoring, secondary data collection on soil type, soil management practices, utilization of Gravel.* *Period: March to May 2026.*	
12	*GEO*	*Valliappan Meyyappan*	*Geological map, stability of quarry and dump, management plan for mine stability, after use of mining quarry and geological feature of the area.* *Period: March to May 2026.*	

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Annexure No –9	The Copy of CER Letter

COMPLIANCE TO TERMS OF REFERENCE

POINT WISE COMPLIANCE OF TOR CONDITIONS

1. SEAC CONDITIONS – site specific:

S.No	ToR Points	Reply	Pg. No
1.1	**<u>Major Conditions;</u>** 1. The Project Proponent must furnish drone video/photograph of the quarries belonging to the PP, which are in operation, in the same village, as mentioned in the 500m cluster certificate dated: 03.03.2026, along with EIA report. Further, the PP shall submit the details of HYCR submitted in parivesh portal for the quarries operating in the name of the PP as stated above. 2. The PP shall submit a detailed hydrology report from reputed institution. 3. The name of the Proponent is mentioned as Thiru.K. Bharathiraja S/o of Krishnan in Mining plan approval letter & 500M Cluster Letter Dated:03.03.2026, hence the PP shall correct the lessee's name and submit the revised mining plan approval letter & 500M Cluster Letter. 4. The Survey Nos. 19/1B & 14/4B are Mistakenly mentioned as 19/18 & 14/18 in precious area communication letter. Hence the correction shall be carried out in survey Nos. and the PP shall submit revised precious area communication letter. 5. During the meeting, the Committee observed a scratched portion within the proposed project area from the KML furnished by the PP. Hence, the PP shall obtain clarification from the Assistant Director (AD), Department of Mines regarding the nature, extent, and cause of the said scratched portion and	Drone video/photographs and HYCR details of the operating quarries will be incorporated in the Final EIA Report. A detailed hydrology report from a reputed institution will be incorporated in the Final EIA Report. Correction of the lessee's name in the revised Mining Plan Approval Letter and 500 m Cluster Certificate is under process and the revised documents will be submitted along with the Final EIA Report. Correction of the survey numbers in the Precious Area Communication Letter is under process, and the revised letter will be submitted along with the Final EIA Report. Clarification from the Assistant Director, Department of Mines, regarding the nature, extent, and cause of the scratched portion observed in the KML will be obtained and submitted along with the Final EIA Report.	-

	furnish at the time of submission of the EIA report. **<u>Site-specific conditions:</u>** 1. A Cluster Management Committee (CMC) shall be constituted including all the mines in the cluster as Committee Members for the effective management of the mining operation in the cluster through systematic & scientific approach with appointment of required statutory personnel, appropriate environmental management, system of maintaining the haul roads and village/panchayat roads, authorized blasting operation, Monitoring system of the environmental & other statutory Compliances & its reporting status, etc. The PP shall submit the following details in the form of an Affidavit during the EIA appraisal: (i) Copy of the agreement forming CMC. (ii) The Organisation chart of the Committee with defining the role of the members (iii) The 'Standard Operating Procedures' (SoP) executing the planned activities. 2. The details of enumeration of structures including schools, colleges, primary health centres should be submitted along with the EIA report. 3. The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300m & upto 1km shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc. and spell out the mitigation measures to be proposed for the protection of the above structures, if any during the quarrying operations. 4. The PP shall ensure the installation of CCTV at the proposed quarry site and ensure	A cluster management committee including all the proponents of the rough stone quarrying projects within the cluster of 500 m radius will be constituted for the effective implementation of appropriate environmental management plan. Affidavit in this regard will be submitted during final EIA/EMP Report. Details of the enumeration of structures will be incorporated in the Final EIA Report. There are no schools, colleges, or primary health centres within a 300 m radius of the project site.	

	its inclusion during the EIA presentation.		

2. SEIAA Specific Conditions

S.No	ToR Points	Reply	Pg. No
1. SEAC Conditions - Site Specific			
2.1	After detailed discussions, the Authority accepts the recommendation of SEAC-II and decided to grant Terms of Reference (ToR) along with Public Hearing for the quantity of 20,34,000m^3 of rough stone & 3,06,850m^3 of Gravel up to the depth of 85m BGL and the annual peak production shall not exceed 2,43,750m^3 of rough stone & 85,500m^3 of Gravel as per the approved mining plan, under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions & the SEIAA Standard conditions.	Agreed	-
3	**SEIAA Standard Conditions**		
Cluster Management Committee			
1	Cluster management committee shall be framed which must include all the proponents in the cluster as members including the existing as well as proposed quarry	There are 4 existing and 1 proposed and 2 Abandoned quarry located within 500-metre radius. The proponent will take the initiative to form a cluster management committee once environmental clearance is obtained for this quarry.	**-**
2	The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc.,	Agreed. Will be complied.	**-**

3	The List of members of the committee formed shall be submitted to AD/Mines before the execution of mining lease and the same shall be updated every year to the AD/Mines.	Agreed. The list of members of the committee formed will be submitted to AD/mines after obtaining Environmental Clearance.	-
4	Detailed Operational Plan must be submitted which must include the blasting frequency with respect to the nearby quarry situated in the cluster, the usage of haul roads by the individual quarry in the form of route map and network.	Agreed. Details of the Operation plan for cluster mining operations will be submitted once we get environmental clearance for all quarries proposed in the cluster area.	-
5	The committee shall deliberate on risk & emergency management plan, fire safety & evacuation plan and sustainable development goals pertaining to the cluster in a holistic manner especially during natural calamities like intense rain and the mitigation measures considering the inundation of the cluster and evacuation plan.	Risk management plan for the individual quarry is given in this report. As far as cluster working condition is concerned, once the committee is formed, risk management as a cluster including inundation of clusters and the evacuation plan will be elaborated and the same will be submitted to the EIA.	-
6	The Cluster Management Committee shall form Environmental Policy to practice sustainable mining in a scientific and systematic manner in accordance with the law. The role played by the committee in implementing the environmental policy devised shall be given in detail.	Environmental policy for the cluster will be framed by the cluster management committee and the policy will be in accordance with EPA Act, 1986 and its amendments, guidelines by MoEF&CC/SEIAA and other regulatory bodies. This policy will be displayed in the quarry.	-
7	The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner.	Agreed. It will be complied as mentioned in the Point No.4	-
8	The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public in the vicinity.		
Agriculture & Agro-Biodiversity			
9	Impact on surrounding agricultural fields around the proposed mining Area.	There are no forest area and traditional practices within the project area. However, there are some agricultural lands around the project site. It may be affected due to the quarry operation as such dust particles sedimentation in the agricultural land. It will be controlled at the	-
10	Impact on soil flora & vegetation around the project site.		

		source level by proper dust separation as such wet drilling, controlled blasting and water sprinkling on the project roads and project surrounding roads. As per Air Quality Modelling the impact of the air quality limited to 0.5km radius. So, there is no impact for the Agriculture, Forestry, soil located within 10km radius.	
11	Details of type of vegetations including no. of trees & shrubs within the proposed mining area and. If so, transplantation of such vegetations all along the boundary of the proposed mining area shall committed mentioned in EMP.	There is no standing trees in proposed mine lease area.	-
12	The Environmental Impact Assessment should study the biodiversity, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem.	Complied. The details are given in section 3.3.6, Chapter- 3 and section 4.2, Chapter 4.	113, 139
13	Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.	The detailed action plan has been described in the EMP (Chapter- 10) for the sustainable management for the project area and its surroundings.	191
14	The project proponent shall study and furnish the impact of project on plantations in adjoining Government poramboke lands, Horticulture, Agriculture and livestock.	Complied. The details are given in, Chapter- 4.	-
Forests			
15	The project proponent shall detailed study on impact of mining on Reserve forests free ranging wildlife.	Nil within a 10 km radius. The anticipated impact on ecological environment is given in section 4.2.4 of Chapter 4.	-
16	The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.	The anticipated impact on ecological environment is given in section 4.2.4 of Chapter 4.	147
17	The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection.	Not Applicable.	**-**

18	The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site.	There are no protected areas, National Parks, environmentally sensitive areas Corridors and Wildlife pathways within 10 km radius of the project site. The nearest Sanctuary is Srivilliputhur Squirrel Grizzled Squirrel wildlife- 20.14km (NW).	-
Water Environment			
19	Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period.	The hydrogeological study from a reputed institute is in progress and it will incorporated in the Final EIA report.	-
20	Erosion Control measures.	There is no waste generation (OB) has been envisaged in this quarry. However, there may be erosion due to rainy season and that is limited within quarry area. The control measures are explained in section 4.2 to 4.5 of Chapter- 4.	139 - 165
21	Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas.	Complied. The baseline study details are incorporated in section 3.3, Chapter- 3. Anticipated impacts and its mitigation measures are detailed in section 4.5, Chapter- 4.	91 161
22	The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir.	There is no wastewater generation from this Quarry, so this is not applicable.	-
23	The project proponent shall study and furnish the details on potential fragmentation impact on natural environment, by the activities.	Fragmentation impact on environment may be due to drilling and blasting. The anticipated impacts and mitigation measures are discussed in Chapter- 4.	137 – 165
24	The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby	• The Flora and Fauna study covering 10 km radius are detailed in section 3.3.6 of chapter- 3.	113

	caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts.	• The impacts anticipated with respect to the environment of the project area is very negligible and it will be minimized within the project area. • Greenbelt / Plantation will be carried out to enhance the vegetative growth and aesthetic in the safety zone area (refer Section 4.2, Chapter- 4).	139
25	The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components.	The impact of mining on soil environment has been discussed in section 4.2.2 under Chapter-4.	143
26	The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.	The anticipated impact and its mitigation measures for Water Environment are detailed in section 4.5 of Chapter- 4.	161
27	The EIA shall include the impact of mining activity on the following: a) Hydrothermal/Geothermal effect due to destruction in the Environment. b) Bio-geochemical processes and its foot prints including environmental stress. c) Sediment geochemistry in the surface streams.	The proposed quarry operation is Opencast Mechanized operation with drilling, blasting, excavation, loading and transportation. So, the effect of Hydrothermal/Geothermal is not envisaged. This is a simple mining operation, so bio-geochemical processes are not envisaged. Due to mining operation, there may be minimum impact to the nearby water bodies due to dust sedimentation. It will be controlled by wet drilling, water sprinkling and plantation. There are no water bodies within 500 m radius of the project site.	-
Energy			
28	The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilize the Energy shall be furnished.	The measures taken to control noise, air, water, and dust have been given under Chapter 4.	159
Climate Change			
29	The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities.	• Only the best equipment will be used, and it will be properly and regularly maintained. Regular vehicular emission tests will be conducted on the transport vehicles to ensure minimal carbon emissions. • To further reduce carbon emissions, a good greenbelt	147

30	The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock, soil health and physical, chemical & biological soil features.	has been planned. Refer Section 4.2.4, Chapter- 4.	
31	Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood.		
Mine Closure Plan			
32	Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.	Complied. Mine Closure Plan has been prepared incorporated in the approved Mining Plan/precise area communication order and the same is incorporated in the Chapter-2	80
EMP			
33	Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued and the scope for achieving SDGs.	Complied. The details are described in Chapter- 10.	190
34	The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan.	• Green belt development plan is being planned to develop inside the safety zone area of 1.17.80 Ha with 1178 Nos of saplings. • For this capital cost of INR 1.18 Lakhs and recurring cost of INR 0.24 Lakhs for 5 years has been earmarked. • The breakup of the total EMP cost is detailed in Table 10.2 of Chapter 10.	- 190-192
Risk Assessment			
35	To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.	Complied. The details are described in Chapter- 7.	173
Disaster Management Plan			
36	To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in &	Complied. The details are described in Chapter- 7.	180

	around the proposed mine lease area due to the proposed method of mining activity & its related activities covering the entire mine lease period as per precise area communication order issued.		
Others			
37	The project proponent shall furnish VAO certificate with reference to 300m radius regard to approved habitations, schools, Archaeological sites, Structures, railway lines, roads, water bodies such as streams, odai, vaari, canal, channel, river, lake pond, tank etc.	There are no historical places, schools, cemeteries, HT and LT lines, bird sanctuaries, and wildlife sanctuaries within 300 meters of the proposed project area. In this regard, the project proponent has received an official letter from the Village Administrative Officer, Seeniyapuram village, The letter copy enclosed as Annexure – 5.	Annexure No-5
38	As per the MoEF& CC office memorandum F.N0.22-65/2017-1A.III dated: 30.09.2020 and20.10.2020 the proponent shall address the concerns raised during the public consultation and all the activities proposed shall be part of the Environment Management Plan.	Noted. It will be complied in the Final EIA/EMP report.	-
39	The project proponent shall study and furnish the possible pollution due to plastic and microplastic on the environment. The ecological risks and impacts of plastic & microplastics on aquatic environment and fresh water systems due to activities, contemplated during mining may be investigated and reported.	Complied. The PP has framed detail solid waste management system for the project area and the same will be executed by proper awareness and sign boards. The sign boards will be in two language i.e., Vernacular language (Tamil) and common language (English). The plastic waste generation is very negligible and it will be collected from the source level in specific dustbin and disposed through the municipal bins.	-

Standard Terms of Reference for (Mining of minerals)

1.1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.	Not applicable	

1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.	The proposed land is a patta land registered in the name of Applicant, Thiru G.Pandurangan vide Patta Nos.528, 554, 455, 319, 574, 597, 507, 601 and 606	
1.3	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.	Noted & agreed. All documents including approved mine plan, EIA and Public Hearing are compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and is in the name of the lessee.	
1.4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	Complied. • Project coordinates superimposed in satellite imagery are given as Figure - 2.2, Chapter - 2. • The 10km Radius Index plan showing buffer zone is given as Figure - 3.1, Chapter - 3. • The geology and geomorphology map are provided in Figure - 3.26 & 3.27, Chapter - 3. The Soil map is provided as Figure - 3.28, Chapter - 3.	59, 89 133,134 135
1.5	Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.	The following map in 1:50,000 Scale: Geology map of the project area covering 10km radius – Figure No. 3.26. Geomorphology Map of the Study Area covering 10 km radius – Figure No. 3.27. Drainage map – 3.25	134
1.6	Details about the land proposed for mining activities should be givenwith information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority	The applied area is inspected by the VAO, Revenue Inspector of Mines, Assistant Director and confirmed the land is suitable for Rough stone quarrying operation with the land use policy of the state. Precise area communication letter and Mine plan approval letter is enclosed in Annexure 2 & 3.	

1.7	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.	Environmental policy for the cluster will be framed by the cluster management committee and the policy will be in accordance with EPA Act, 1986 and its amendments, guidelines by MoEF&CC/SEIAA and other regulatory bodies. This policy will be displayed in the quarry.	
1.8	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.	Risks are identified and the management plan is given in Chapter 7.	173
1.9	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.	Noted & Agreed The study area considered for this study is 10 km radius and all data contained in the EIA report such as waste generation etc., is for the Life of the Mine / lease period.	
1.10	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.	The land use of the study area was studied to demarcate various LULC categories and its details are provided under section 3.3.7 of Chapter-3. The land use pattern at present and at the end of the quarrying period has been provided in Table 2.14, Chapter-2. The Conceptual plan of mine lease area is shown in Figure No-2.13.	120 79
1.11	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land	There is no proposal for use of land outside the mine lease area for OB dumps, etc. There	

	use, R&R issues, if any, should be given	are no R&R issues involved in the project.	
1.12	Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.	There is no Forest Land involved in the proposed project area. The proposed project area is a Patta land registered in the name of applicant. Approved Mining Plan is enclosed in Annexure – 2.	
1.13	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.	Not applicable since no forest land involved within mine lease area.	
1.14	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated	Not applicable since no forest land involved in mine lease area.	
1.15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.	• There is no reserve Forest area within 1 km radius.	88
1.16	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.	The mining lease area and the 10 km buffer zone from the periphery of the core zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc.	89
1.17	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location	Not Applicable. There are No National Parks, Biosphere Reserves, Wildlife Corridors, and Tiger/Elephant Reserves within 10 km Radius from the periphery of the project area.	89

	map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.		
1.18	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.	Flora and fauna composition in the core and buffer zone of the project has been studied through primary field surveys. The details are furnished in Chapter 3.	113
1.19	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.	Not Applicable	
1.20	Similarly, for Coastal Projects, a CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease with respect to CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).	Not Applicable	

1.21	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.	Not applicable. No habitation within 300 meter of the radius.	
1.22	One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given	Baseline environmental monitoring was conducted in the core zone and buffer zone during Winter **March to May 2026.** Site specific meteorological data was also collected during the study period. The monitoring location details and the monitoring results are discussed in **Chapter 3**.	87 – 136
1.23	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input	Air Quality Modelling for prediction of incremental GLC's of pollutant was carried out using AERMOD view and Detailed in Section 4.3.5	150

	parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.		
1.24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.	The total water requirement for the project is 12.2 KLD. The required water will be procured from outside agencies initially and later rainwater harvested in the mine pit shall be used other than drinking purpose. Water Balance diagram is presented in Figure No – 4.1.	145
1.25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.	Not Applicable Water for dust suppression, greenbelt development and domestic use will be sourced from accumulated rainwater/seepage water in mine pits and purchased from local water vendors through water tankers on daily requirement basis.	
1.26	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.	Rain water will be diverted into working area by constructing drains to store and use for dust suppression and greenbelt development. Details are presented in section 4.2.4 The total water requirement for the project will be 12.2 KLD comprising Drinking and domestic 1.7 KLD, Dust suppression 7.0 KLD, Greenbelt 3.5 KLD. The water will be sourced initially from outside agencies. Later the rainwater collected in the mine pit sump will be used for this purpose. The water balance diagram for the same is shown in Figure No 4.1.	145
1.27	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.	Impact of the project on the surface and ground water environment and necessary control measures are discussed in **Chapter 4**	144

<table>
<tr><td>1.28</td><td>Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.</td><td>The quarrying activity will not intersect ground water table as quarrying is proposed upto a depth of 85m (BGL) and water table is found at a depth of 98 m BGL.</td><td></td></tr>
<tr><td>1.29</td><td>Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.</td><td>There is no seasonal stream or nallah flowing through the mining area.</td><td></td></tr>
<tr><td>1.30</td><td>Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.</td><td><table><tr><td>Site Elevation above MSL</td><td>135 m from MSL</td></tr><tr><td>Ultimate Depth</td><td>85m (BGL)</td></tr><tr><td>Ground water</td><td>98 m BGL.</td></tr></table></td><td></td></tr>
<tr><td>1.31</td><td>A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.</td><td>There are no trees within ML area. Fencing and plantations are under process.
Greenbelt / Plantation will be carried out in the safety zone to enhance the vegetative growth and aesthetic in the safety zone area. In the post mining stage, an area of 1.17.80 Ha will be under greenbelt and plantation.</td><td></td></tr>
<tr><td>1.32</td><td>Impact on local transport infrastructure due to the Project should be indicated. Projected</td><td>The traffic density study was carried out and the same is</td><td>83-86</td></tr>
</table>

	increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.	given in section 2.10 of Chapter 2.	
1.33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	Temporary Infrastructure & other facilities will be provided to the Mine Workers after the grant of quarry lease and the same has been discussed in Chapter 2.	
1.34	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.	At the conceptual stage the quarried-out land will be fenced and lower benches will be allowed to collect rain water to act as a temporary reservoir and Greenbelt development will be carried out on the top bench, unutilized areas and haul roads. Mine closure plan is detailed in Section 2.7.3 of Chapter 2.	78
1.35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.	Details of anticipated occupational health impacts and proposed preventive measures are discussed in Chapter 10	185
1.36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations	No major impact on public health will be there since the villages are located more than 1km from the lease area.	
1.37	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent	Details of CER and CSR are discussed under Chapter No. 8	183

	should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.		
1.38	Detailed Environmental Management Plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.	Environmental Management Plan for the project is discussed in detail in **Chapter 10**.	185
1.39	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project	The public hearing comments will be submitted during final EIA report	
1.40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.	There is no litigation pending against the project.	
1.41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.	Project Cost is Rs. 290.57 Lakhs (including EMP & CER cost) CER Cost is Rs. 5.00 lakhs Total EMP Cost for 10 years is 134.31 lakhs i.e., Rs.46.65 Lakhs of Capital + Recurring cost Rs. 88.66 lakhs for 1 years.	
1.42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report.	Disaster Management Plan is included in **Chapter 7**	180
1.43	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.	The Project benefits are clearly spelt out in **Chapter 8**.	182
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.	Yes, Complied.	

	d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. e) Where the documents provided are in a language other than English, an English translation should be provided. f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the ToR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and		

	(iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.		

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

Environmental Impact Assessment (EIA) is the management tool to ensure the sustainable development and it is a process, used to identify the environmental, social and economic impacts of a project prior to decision making. It is a decision-making tool, which guides the decision makers in taking appropriate decisions for any project.

EIA systematically examines both beneficial and adverse consequences of the project and ensures that these impacts are taken into account during the project designing. It also reduces conflicts by promoting community participation, information, decision makers, and helps in developing the base for environmentally sound project.

Rough Stone are the major requirements for construction industry. This EIA report is prepared by considering Cumulative load of all proposed & existing quarries located within 500 m radius of the project area.

Thiru.G.Pandurangan proposes to operate Rough Stone & Gravel Quarry over an extent of 7.37.80 Ha. patta land in S.F. No. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu and ToR obtained vide TO26B0108TN5346922N (F.No.13627), dated:15.06.2026.

This proposed project is categorized under category "B1" Activity 1(a) (mining lease area in cluster situation). This cluster includes the one existing Quarry and two proposed Quarries including this proposal. The existing and proposed quarries located within 500m radius are detailed in below Table.

Table – 1.1 Cluster Mines Details

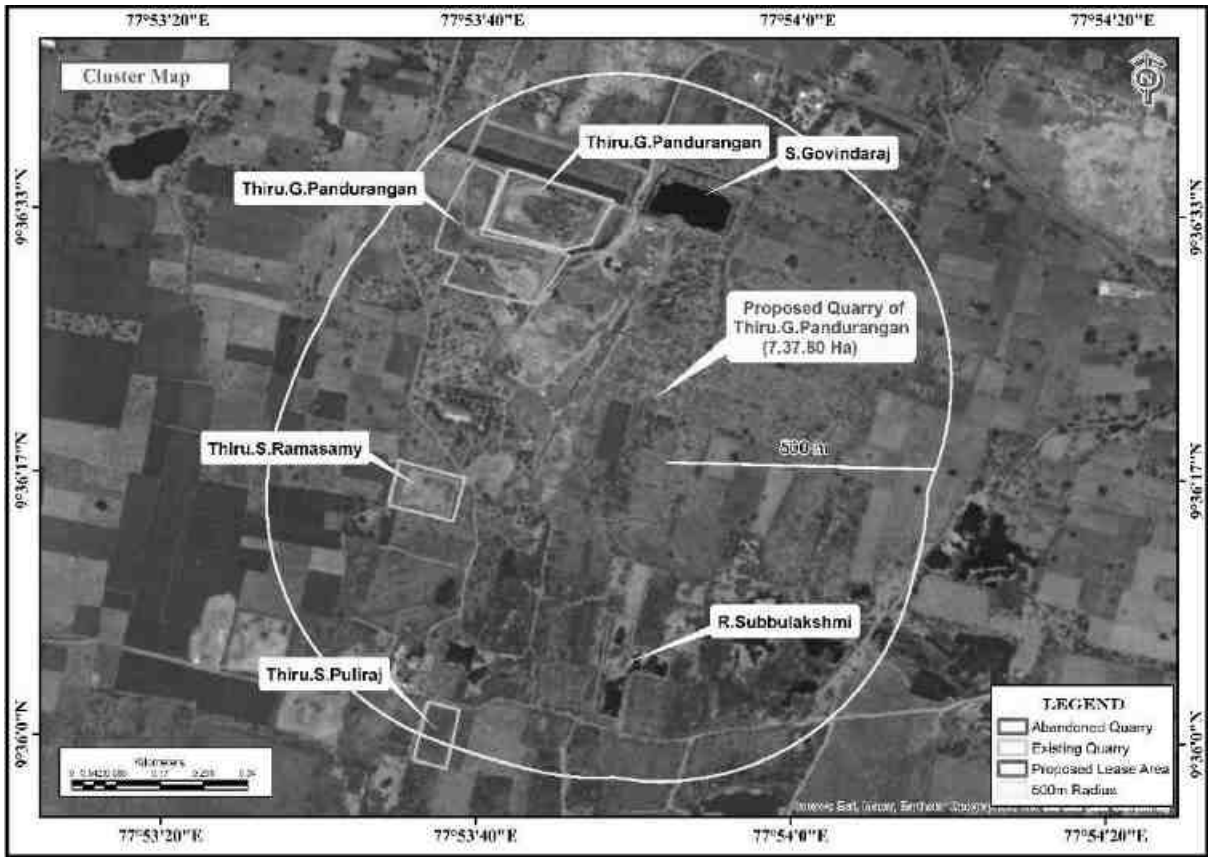
Sl. No	Extent	Proponent	Status of lease
1	0.74.00 Ha	S.Puliraj	Existing
2	2.51.00 Ha	G.Pandurangan	Existing
3	3.25.50 Ha	G.Pandurangan	Existing
4	1.13.50 Ha	Thiru.S.Ramasamy	Existing

5	7.37.80 Ha	Thiru.G.Pandurangan	Proposed
Total extent is 15.01.80 Ha including this proposed project			

As such Common EIA for the 5 projects falling in the cluster with assessment of impacts and EMP separately is carried out. Cluster area calculated as per MoEF & CC Notification S.O. 2269(E) Dated 1st July 2016. Satellite image of Quarries in Cluster is shown in Fig 1.1.

As per MoEF&CC OM: F.No.L-11011/175/2018-IA-II(M), dated 12.12.2018, the common EIA/EMP report has to be prepared for the cluster area based on ToR recommended by SEIAA. Therefore, the applicant applied for ToR through Parivesh website vide online proposal no. SIA/TN/MIN/572606/2026 Dated 17.03.2026. The ToR proposal was placed in 712th SEAC meeting, dated 08.05.2026. Then ToR has been issued by the SEIAA vide TO26B0108TN5346922N (F.No.13627), dated:15.06.2026 to prepare the draft EIA report as per the recommended ToR for conducting Public hearing and obtaining Environmental Clearance from the SEIAA.0

Figure1.1 Satellite Image showing cluster quarries



1.2 IDENTIFICATION OF PROJECT AND PROJECT PROPONENT

1.2.1 IDENTIFICATION OF PROJECT

Table -1.2 Project Identification

Name of the Project	Thiru.G.Pandurangan Rough stone & Gravel Quarry
S.F No.	14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6
Location of the Project	Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu
Extent	7.37.80 Ha.
Type of Land	Patta Land

1.2.2 IDENTIFICATION OF PROJECT PROPONENT

Table -1.3- Details of Project Proponent

Name of the Project Proponent	Thiru.G.Pandurangan
Communication address	S/o. Govindaraj, Door No; 13/3, 7/25 Elagipatti Pavali Panchayat, Seeniyapuram Village, Virudhunagar District.
	pentagonbluemetalsvnr@gmail.com
Mobile No.	9842118297

1.3 BRIEF DESCRIPTION OF THE PROJECT

1.3.1 NATURE AND SIZE OF THE PROJECT

The quarrying operation is proposed to be carried out by Opencast Mechanized Mining Method by jack hammer drilling, slurry blasting by forming 5.0 m bench height and 5.0 m bench width. Excavator and tippers are proposed for Loading and transportation.

Table – 1.4 Brief Descriptions of the Project

Name of the Quarry	Thiru.G.Pandurangan Rough Stone & Gravel Quarry
Toposheet No	58-G/ 14
Latitude between	09°36'13.53''N to 09°36'25.58''N
Longitude between	77°53'43.15''E to 77°53'53.80''E
The altitude of the area	135 m (MSL)

Proposed Depth of Mining	85 m BGL	
	Rough Stone	Gravel
Geological Resources	58,99,600m^3	3,68,725m^3
Mineable Reserves	20,34,000 m^3	3,06,850m^3
Proposed Production	20,34,000 m^3	3,06,850m^3
Ultimate pit Dimension	85m BGL	
Water Level in the area	98m BGL	
Method of Mining	Opencast method of mechanized	
Topography	The area applied for quarry lease is exhibits almost plain covered by Gravel formation. The massive Charnockite formation is noticed below 5m (Avg) Gravel formation and sloping towards southeastern side of the area, the altitude of the area is above 135m (maximum) from MSL. Water table is found at a depth of 98m. Temperature of the area is reported to be 18^0C to a maximum of 42^0C during summer. Rainfall of this area is about 800mm to 900 mm during the both NE & SW monsoons.	
Machinery Proposed	Jack Hammer	10 Nos
	Compressor	2 Nos
	Excavator with bucket and rock breaker	3Nos
	Tipper (10/20 T)	8 Nos
Proposed Manpower Development	39 Nos	
Water Requirement	12.2 KLD	
Greenbelt Development	The safety zone of 1.17.80 ha will be developed with about 1178 nos of plantation.	
Project Cost	Rs. 290.57 Lakhs	
EMP Cost	Total EMP Cost for 5 years is 134.31 lakhs i.e., Rs.46.65 Lakhs of Capital + Recurring cost Rs. 88.66 lakhs for 10years	
CER Cost	Rs.5.0 Lakhs will be spent as CER Cost.	

1.3.2 NATURE OF THE PROJECT

S. NO	DESCRIPTION	DETAILS
1.	Sector	1(a), Non-Coal Mining
2.	Type	Fresh Quarry
3.	Category	B1
4.	Mineral to be Mined	Rough Stone and Gravel
5.	Major/Minor Mineral	Minor

1.3.3 LOCATION OF PROJECT

The proposed Quarry lease area is situated at S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8,

19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 , Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu. The area lies in the north latitude of 09°36'13.53''N to 09°36'25.58''N and eastern longitude of 77°53'43.15''E to 77°53'53.80''E. Location of the proposed project is shown in Figure 2.1 and the satellite imagery of the project site is shown in Figure 2.2.

1.4 IMPORTANCE OF THE PROJECT TO THE REGION

Rough stone will continue to be a staple in construction, decoration and industry for years to come. As recycling picks up, mining and quarries may slow down, but we will always need rough stone in general construction and industry.

1.5 REGULATORY COMPLIANCES

Understanding of the applicable environmental legislative framework is crucial for understanding the scope of the EIA study. With respect to prevention and control of environmental pollution, the following Acts and Rules of MoEF&CC (Ministry of Environment Forests and Climate Change), GoI (Government of India) govern the proposed project. The applicable environmental legislation for the proposed mining project is detailed below,

- Environment protection Act, 1986
- EIA Notification, 2006 & Subsequent amendments
- Water Pollution (Prevention & Control) Act, 1974
- Air Pollution (Prevention & Control) Act, 1981
- Noise Pollution (Regulation 7 Control) Rules, 2000
- Mines Act,1952
- Tamil Nadu Minor Mineral Concession Rules, 1959
- Mines and Minerals (development and regulation) Act,1957
- Minor Minerals Conservation and Development Amendment Rules 2018
- State Minor Mineral Concession Rules (GMMCR), 2017
- Explosive Act ,1884
- Explosive Rules,2008
- Hazardous and other Wastes (management and Trans boundry Movement) Rules, 2016
- Batteries (Management and Handling) Rules 2010
- Solid Waste Management Rule 2016

1.5.1 PRESENT LEGAL STATUS

Table 1.5 – Present Legal Status

Description	Issuing Authority	Status	Letter number	Date	Reference
Precise Area Communication	Assistant Director, Department of Geology and Mining, Virudhunagar	Received	Rc.No. 25VNR0402851	04.09.2025	Annexure - 2
Mine Plan Approval Letter	Assistant Director, Department of Geology and Mining, Virudhunagar	Approved	Rc.No. 25VNR0402851	03.03.2026	Annexure-3
District Survey Report	Collector, Dept. of Geology and Mining, Virudhunagar	Authenticated	As per S.O. 3611(E) dated 25.07.2018	19.03.2019	**Link:** https://cdn.s3waas.gov.in/s3c86a7ee3d8ef0b551ed58e354a836f2b/uploads/2019/06/2019061311.pdf
500m radius Cluster Letter	Assistant Director, Department of Geology and Mining, Virudhunagar	Obtained	Rc.No. 25VNR0402851	03.03.2026	Annexure-4
VAO NOC for features within 300m radius	Village Administrative Officer, Seeniyapuram village	obtained	-	22.03.2026	Annexure-5

1.5.2 SCREENING

As per the Environmental Impact Assessment (EIA) Notification dated 14th September 2006 and its subsequent amendments the proposed quarry mining project falls under 'Category B1(Cluster Situation)', which requires Environmental Clearance from the State Environmental Impact Assessment Authority (SEIAA). The project proponent has appointed M/s. Global Mining Solutions, Salem, who are accredited by the National Accreditation Board for Education and Training (NABET), Quality Council of India (QCI), New Delhi, under the registration number NABET/EIA/26-29/RA 0478. Their role is to carry out an Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) study in compliance with the Ministry of Environment, Forest and Climate Change (MoEF & CC) requirements.

1.5.3 SCOPE OF THE STUDY

In line with the prescribed Terms of Reference (TOR), the area comprising 10 km radius around the proposed mine lease boundary is considered as the study area. The EIA/EMP report has been prepared following the generic structure specified in the EIA Notification 2006. The detailed studies have been conducted as per prescribed Standard TOR issued by SEIAA, Tamil Nadu TO26B0108TN5346922N (F.No.13627), dated: 15.06.2026. The point wise compliance for the ToR has been incorporated in this EIA/EMP report.

The main scope of the EIA study is to quantify the cumulative impact in the study area due to cluster quarries and formulate the effective mitigation measures for this applied project area. A detailed account of the emission sources, emissions control equipment, background Air quality levels, Meteorological measurements, Dispersion model and all other aspects of pollution like effluent discharge, Dust generation etc., have been discussed in this report. The baseline monitoring study has been carried out during the Period of March to May 2026 for various environmental components so as to assess the anticipated impacts due the cluster quarry projects on the environment and suggest suitable mitigation measures for likely adverse impacts due to this proposed project.

The scope of study broadly covered as below,

- Literature review and collection of secondary data relevant to the study area.
- Establish the baseline environmental aspects in and around the proposed project covering 10 km radius.
- Identify various existing pollution loads due to various mining activities.
- Predict incremental levels of pollutants in the study area due to the proposed operations.
- Establishing and analyzing demographic profile including sex ratio, literacy rate, SC/ST, workers classification, land use categorization, etc in the project influenced area
- Evaluate the predicted impacts on various environmental attributes in the study area by using scientifically developed and widely accepted environmental impact assessment methodologies.
- Prepare an Environment Management Plan (EMP) outlining the measures for improving the environmental quality and identify critical environmental attributes that are required to be monitored in the post-project scenario.
- To assess the impacts on human settlement in the project influence area Socio-Economic Assessment
- Cumulative impact assessment for the quarries in cluster.

1.6 NEED AND JUSTIFICATION OF THE PROJECT

- Proposed mining project will fulfill the local market requirement for real estate and infrastructure industry. This project will also provide employment to local people helping them earn livelihood.
- Employment generated consequent to the mining activity in the project will be benefit local and rural population and will have multiplier effects on local economy.
- The Project will give tremendous boosts to the local and regional economy benefiting the population.
- The social benefits arising out of this proposal can be expressed in terms of increase in the standards of living of local population, educational opportunities, training and development of skills etc.

1.7 STRUCTURE OF THE REPORT

As per the new guidelines of the MoEF & CC the report has been divided into the following chapters and presented as follows:

1. Introduction

This chapter describes the profile of the project proponent, name and contact address with email, project consultants, the purpose of the project, brief description of the project, applicable environmental regulations, objectives and methodology for EIA studies etc.

2. Project Description

This chapter gives a brief description of the project such as the type of project, need for the project, its location, approachability, layout, etc of the proposed project, the project implementation schedule, estimated cost of development etc

3. Description of the Environment

This chapter presents details of the baseline environmental status for microclimate, air quality, noise, water quality (surface and ground), soil quality, flora, fauna and socioeconomic status etc.

4. Anticipated Environmental Impacts & Mitigation Measures

This chapter discusses the possible sources of pollution and environmental impacts due to the project during operation phases and suggests the mitigation measures.

5. Analysis of Alternatives (Site And Technology)

This chapter discusses the analysis of the various alternatives for the technology as well as the site and gives the selection of the most feasible alternative.

6. Environmental Monitoring Program

This chapter discusses the details about the environmental monitoring program during operation phases. The technical aspects of monitoring the effectiveness of mitigation measures are covered in this chapter.

7. Additional Studies

This chapter covers information about the additional studies conducted for this project such as the Risk Analysis, Emergency Response and Disaster Management Plan.

8. Project Benefits

This chapter presents the benefits from this project

9. Environmental Cost Benefit Analysis

This chapter presents the cost-benefit analysis of the proposed project as recommended at the scope/ToR stage, highlighting its anticipated economic, social, and environmental benefits.

10. Environmental Management Plan

This chapter deals with the EM for the proposed sand mining projects and indicates the measures proposed to minimize the likely impacts on the environment during and operation phases and budgetary allocation for the same.

11. Summary and Conclusion

This chapter deals with the overall justification for implementation of the project and explanation of how, adverse effects have been mitigated.

12. Disclosure of Consultant

This chapter deals with the details of consultants engaged and the NABET accreditation details of environmental consultants.

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2.0 PROJECT DESCRIPTION

2.1 TYPE OF THE PROJECT

The proposed activity is the extraction of Rough Stone by open cast mechanized mining method.

This project proposed to produce 20,34,000 m^3 of Rough Stone and 3,06,850 m^3 of gravel and for the period of 10 years with ultimate depth up to 85 m BGL.

2.2 NEED FOR THE PROJECT

Rough stone is one of the important materials for the building construction. The rough stone is used as both as coarse aggregate and fine aggregate after the proper sizing of stone. The coarse and fine aggregate are essential for preparing concrete which is used in foundation, beam, column, roof slab work of the buildings. The infrastructure is the sign of development of nation. So it is very need to excavate the rough stone for economic and infrastructure development of our Nation.

2.3 LOCATION OF THE PROJECT

This is a Rough Stone and Gravel Quarry located in Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu State. The area lies in the north latitude of 09°36'13.53''N to 09°36'25.58''N and eastern longitude of 77°53'43.15''E to 77°53'53.80''E and Toposheet number 58-G/ 14. Location of the proposed project is shown in Figure 2.1 the satellite imagery of the project site is shown in Figure 2.2.

This proposed project area is Patta land & does not fall within 10 km radius of any Eco – sensitive zone, Wild life Sanctuary, National Park, Tiger Reserve, Elephant Corridor and Biosphere Reserves. The M.L area details are presented in below Table.

Table 2.1 Boundary Coordinates of the Project

Corners	Co- ordinates	
	Latitude	Longitude
1.	09° 36' 15.04"N	77° 53' 43.15"E
2.	09° 36' 17.44"N	77° 53' 44.02"E
3.	09° 36' 19.61"N	77° 53' 45.25"E
4.	09° 36' 20.93"N	77° 53' 43.15"E
5.	09° 36' 22.10"N	77° 53' 46.76"E
6.	09° 36' 25.58"N	77° 53' 49.07"E
7.	09° 36' 24.97"N	77° 53' 50.69"E
8.	09° 36' 23.67"N	77° 53' 52.40"E
9.	09° 36' 22.59"N	77° 53' 53.80"E
10.	09° 36' 19.97"N	77° 53' 52.90"E
11.	09° 36' 19.18"N	77° 53' 52.56"E
12.	09° 36' 15.77"N	77° 53' 52.02"E
13.	09° 36' 15.71"N	77° 53' 52.34"E
14.	09° 36' 13.53"N	77° 53' 51.81"E
15.	09° 36' 13.98"N	77° 53' 49.62"E
16.	09° 36' 13.85"N	77° 53' 48.55"E
17.	09° 36' 13.73"N	77° 53' 47.66"E
18.	09° 36' 14.29"N	77° 53' 45.45"E

Table 2.2 Mine Lease Area and its Ownership

Location	S.F. No	Area in Ha	Name of the owner	Patta land
Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District	14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6	7.37.80	The proposed land is a patta land registered in the name of Applicant, Thiru G.Pandurangan	Patta Nos.528, 554, 455, 319, 574, 597, 507, 601 and 606.
Total		**7.37.80**		

Table 2.3 Site Connectivity

Nearest Roadway	There is an existing road from the area leads to Sengunrapuram – Virudhunagar road on North side of the area. The National Highway (NH-44) Salem-Kanniyakumari is about 5.0Km on southeast side of the area. The State Highway (SH-182) Virudhunagar – Watrap is about 570m on north side of the area.
Nearest Village	• Seeniyapuram -520m - NE
Nearest Railway	Virudhunagar junction– 6.63km (E)

	The Nearest Railway line is Virudhunagar to Madurai line which is about 6.6Km on east side of the area.
Nearest Airport	Madurai Airport – 42.5Km (NW)

Figure 2.1 Location Map

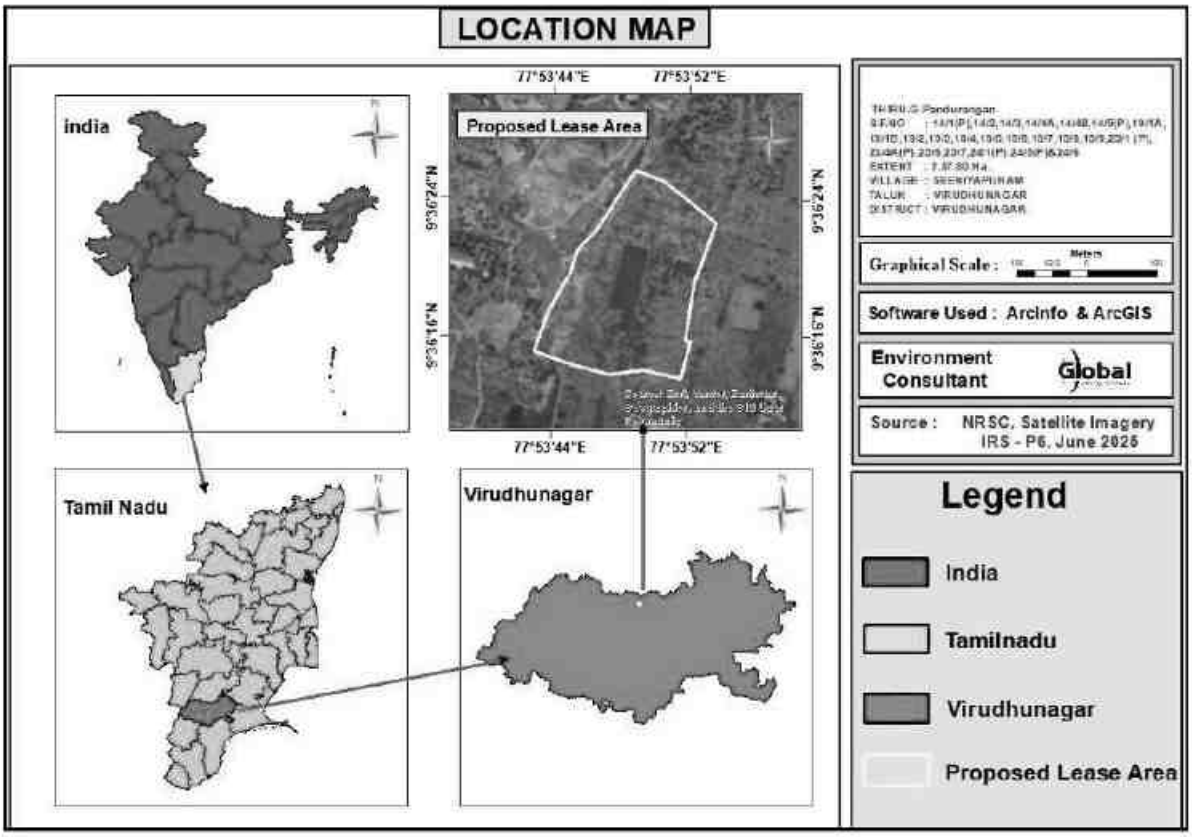


Figure 2.2 Google Image of the project site

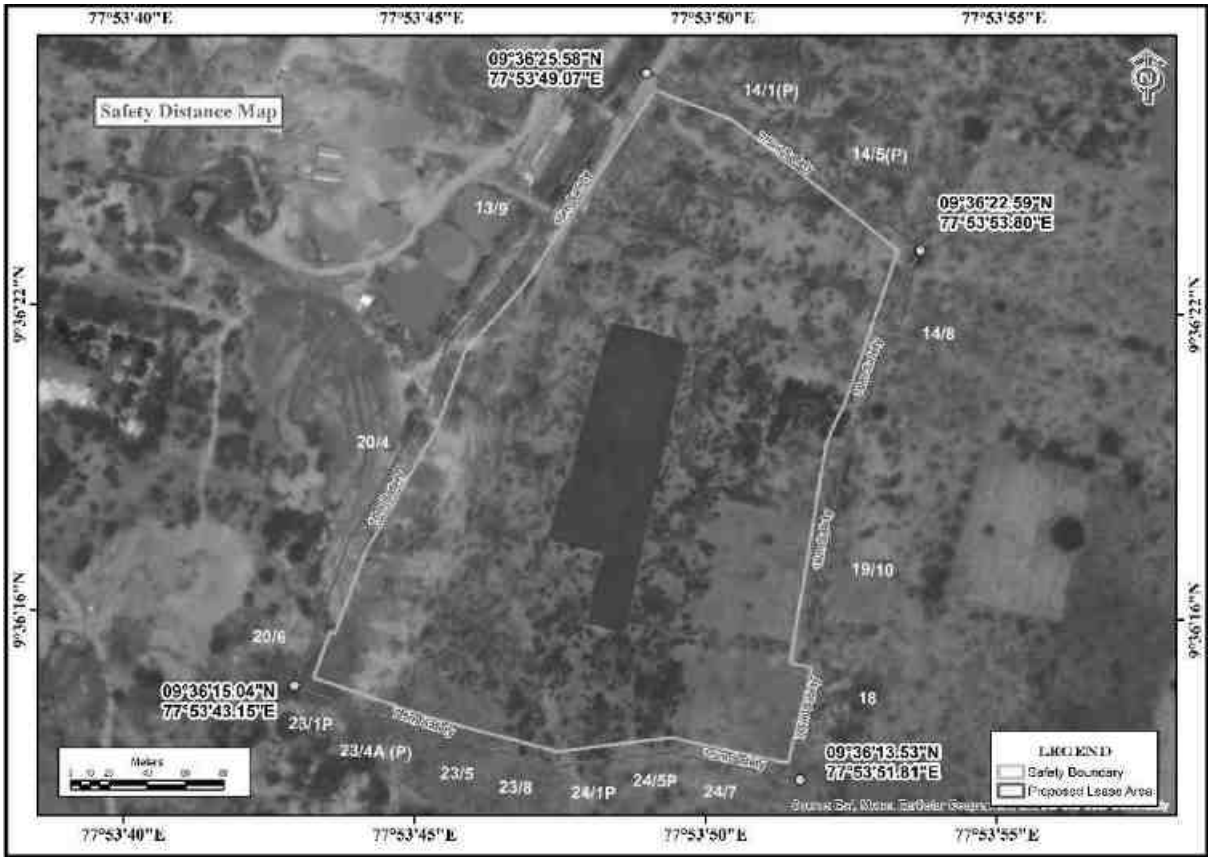


Figure 2.3 Lease Plan

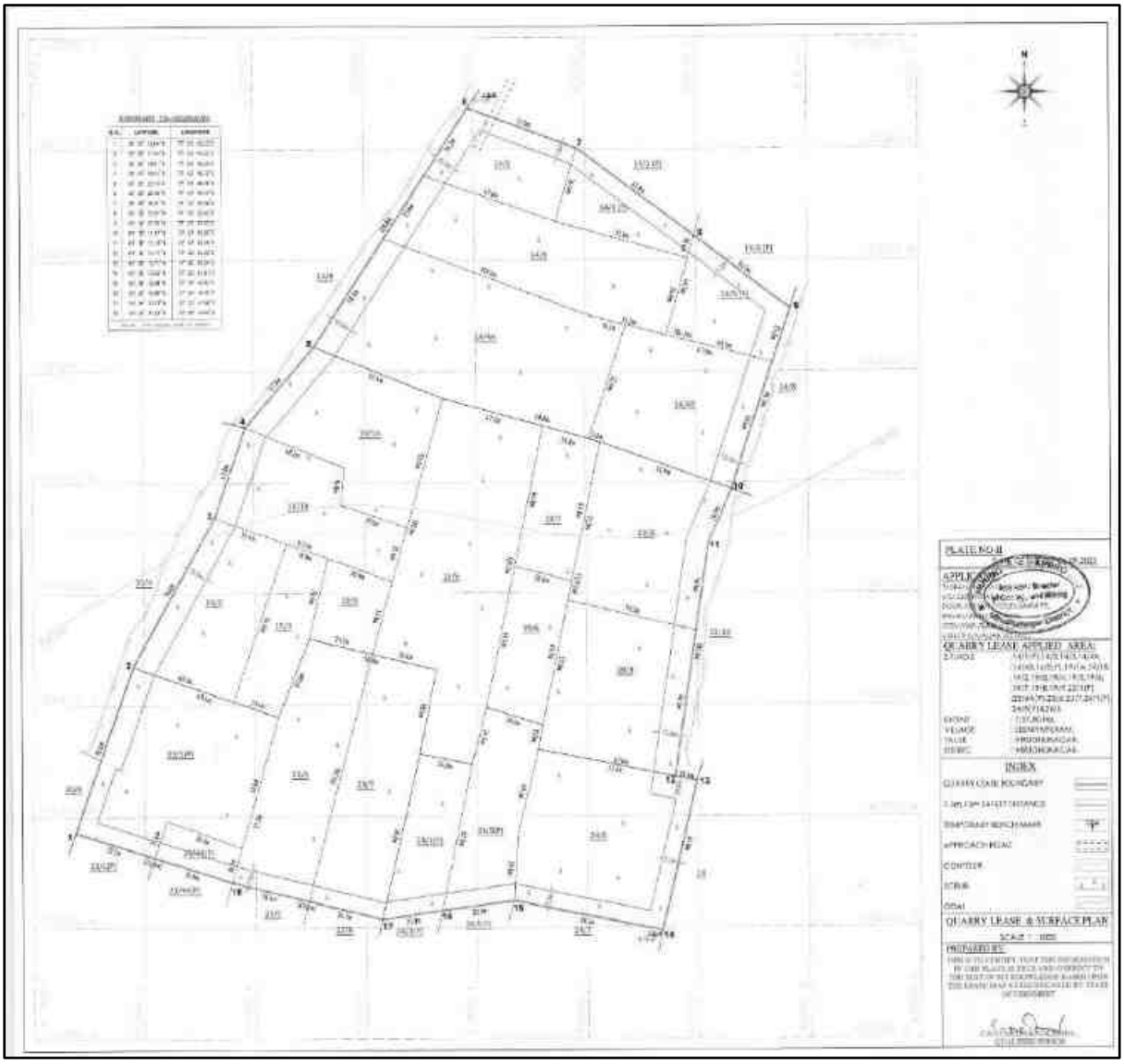


Figure 2.4 Village Map

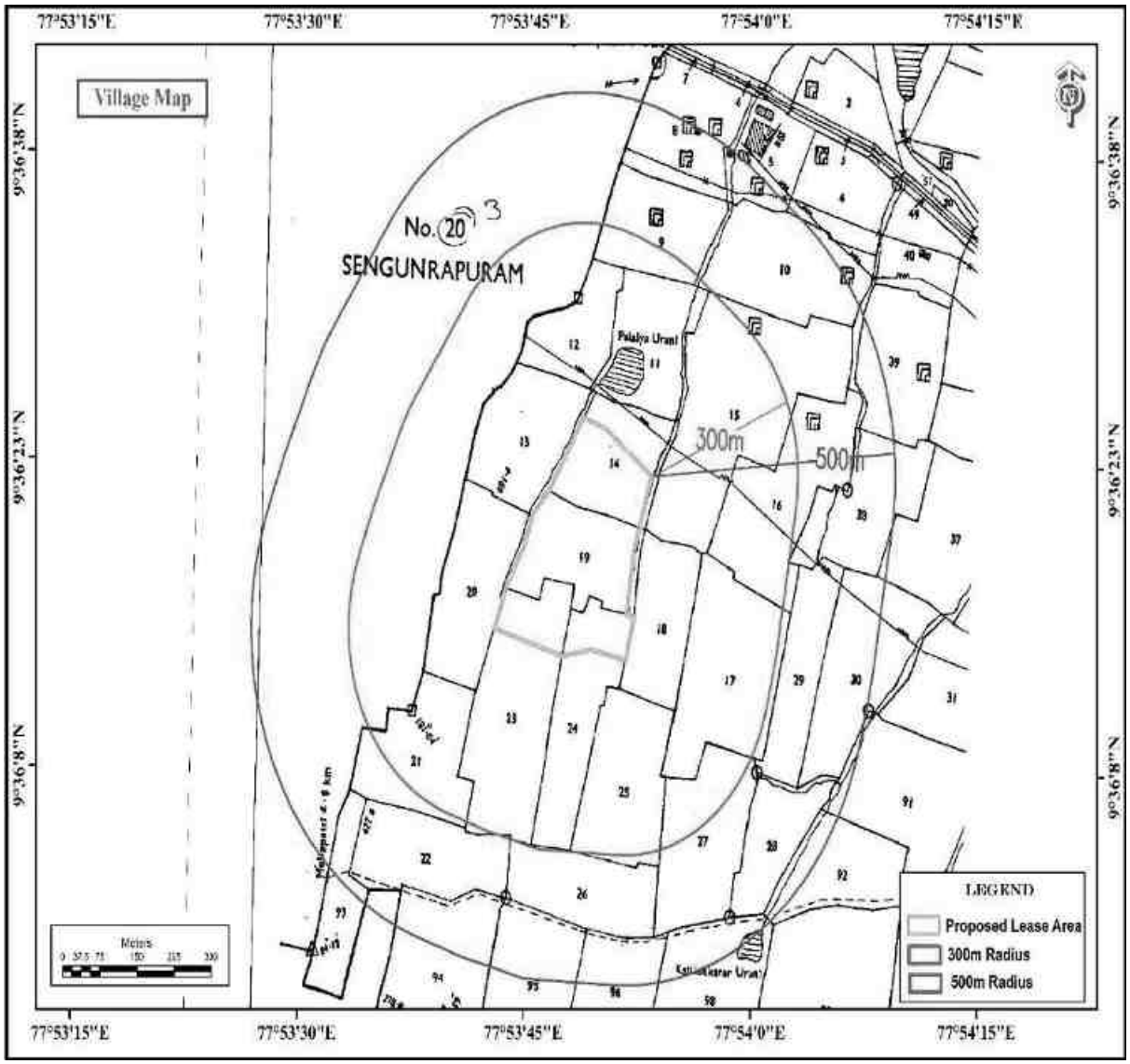


Figure 2.5 Site Photographs



2.4 LAND USE PATTERN OF THE PROJECT AREA

The entire project site is Patta land. The land use pattern of the mine lease area as of today and conceptual stage given in Table No. 2.4.

Table 2.4 Land use pattern of the Project area

Sl. No	Land Use	Present Area (Hect)	Area in use during the end of the Scheme period (Hect)
1.	Quarrying Pit	Nil	6.14.00
2.	Infrastructure	Nil	0.02.00
3.	Roads	Nil	0.04.00
4.	Green Belt	Nil	1.17.80
5.	Unutilized	7.37.80	Nil
Total		**7.37.80**	**7.37.80**

2.5 SIZE AND MAGNITUDE OF THE OPERATION

The proposed activity is the extraction of Rough Stone by open cast mechanized mining method over an extent of 7.37.80 Ha and to produce 20,34,000 m^3 of Rough Stone and 3,06,850m^3 of Gravel for the period of 10 years with ultimate

depth upto 85 m (below ground level). The details of geological and mineable reserves in the lease area have been provided below in the subsequent sub section.

2.6 TOPOGRAPHY AND DRAINAGE

The area applied for quarry lease is exhibits almost plain covered by Gravel formation. The massive Charnockite formation is noticed below 5m (Avg) Gravel formation and sloping towards southeastern side of the area, the altitude of the area is above 135m (maximum) from MSL.

2.7 GEOLOGY

2.7.1 REGIONAL GEOLOGY

The geology of the district is mainly underlain by the rocks belonging to hard crystalline rock masses of Archaean age. The Archaean rocks in this area are represented by rocks of Eastern ghat complex comprising Charnockites, Migmatite complex of composite gneiss. The entire area is covered by metamorphic crystalline rocks of Charnockite, composite gneiss of Archaean age. These rocks are highly metamorphosed and have been subjected to sever folding, crushing and faulting. Charnockites group is occupied by North and Southern part of the Tondiar River Basin. The other rock type is encountered by composite granitic gneiss of epidote hornblende biotite gneiss and hornblende biotite gneiss are occupy in the middle portion of the basin. Charnockite group occupies the high ground as well as plain and it is poorly weathered and jointed. They are generally black grey to dark grey in colour medium to coarse grained texture, and generally massive and un-foliated. A gneissic rock occurs as linear bands in the middle portion of the area and is highly migmatised. Mostly, micaceous with bands of granites, pegmatites, quartz veins and the rock are well foliated. The Hornblende biotite gneiss forms the country rock of the area and epidote hornblende gneiss (Proterozic age) occurs as small isolated outcrops. The crystalline formations are Charnockite; Granitic Gneiss of Archean ages have been intruded by dolerite dykes and pegmatite veins. These rocks are highly metamorphosed and have been subjected to very severe folding, crushing and faulting. The crystalline rocks are subjected to tectonic activities under various orogenic cycles resulting in the development of secondary structures such as joints, fissures and cleavages.

2.7.2 LOCAL GEOLOGY

The area is underlain by the wide range of metamorphic rocks of peninsular gneissic complex. These rocks are extensively weathered and overlain by the recent valley fills and alluvium at places. The geological formations found in the district are Archaean rocks like Gneisses, Granites, Charnockites basic granulites and calc-gneisses. The younger formations are Quartz veins and pegmatite. The rock type noticed in the area for lease is Charnockite which contains mostly Quartz and Feldspar with some ferromagnesian minerals. The Charnockite is part of peninsular Gneisses, a high grade metamorphic rock. The strike of the Charnockite formation is N45^{0}E –S45^{0}W with dipping towards SE60^0. The general geological succession of the area is given as under.

AGE		ROCK TYPE
Recent	-	Gravelly soil
		Unconformity
Archaean	-	Dolerite dyke, Charnockite Granitic Gneiss.
		Peninsular Gneissic complex and Calc Gneiss

2.8 RESOURCES AND RESERVES

The Geological and Recoverable reserves are estimated by Cross Sectional method.

Table 2.5 Geological Resources

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m^3	Rough stone in m^3	Bulk Density	Gravel formation in Ts	Geological Resources of Rough stone in Ts
XY-AB	I	343	215	5	368725	-	2	737450	-
	II	343	215	5	-	368725	2.75	-	1013993.75
	III	343	215	5	-	368725	2.75	-	1013993.75
	IV	343	215	5	-	368725	2.75	-	1013993.75
	V	343	215	5	-	368725	2.75	-	1013993.75
	VI	343	215	5	-	368725	2.75	-	1013993.75
	VII	343	215	5	-	368725	2.75	-	1013993.75
	VIII	343	215	5	-	368725	2.75	-	1013993.75
	IX	343	215	5	-	368725	2.75	-	1013993.75
	X	343	215	5	-	368725	2.75	-	1013993.75
	XI	343	215	5	-	368725	2.75	-	1013993.75
	XII	343	215	5	-	368725	2.75	-	1013993.75
	XIII	343	215	5	-	368725	2.75	-	1013993.75

	XIV	343	215	5	-	368725	2.75	-	1013993.75
	XV	343	215	5	-	368725	2.75	-	1013993.75
	XVI	343	215	5	-	368725	2.75	-	1013993.75
	XVII	343	215	5	-	368725	2.75	-	1013993.75
	Total				**368725**	**5899600**	-	**737450**	**16223900.00**

Gravel Formation : 3,68,725m^3

The Geological Resource of Rough Stone: 58,99,600 m^3

2.8.1 MINEABLE RESERVES

The mineable reserves are calculated by deducting 7.5 m and 50 m safety distance and bench loss.

Table 2.6 – Available Mineable Reserves

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m^3	Rough stone in m^3	Bulk Density	Gravel formation in Ts	Mineable Reserves of Rough stone in Ts
XY-AB	I	323	190	5	306850	-	2	613700	-
	II	308	175	5	-	269500	2.75	-	741125.00
	III	298	165	5	-	245850	2.75	-	676087.50
	IV	288	155	5	-	223200	2.75	-	613800.00
	V	278	145	5	-	201550	2.75	-	554262.50
	VI	268	135	5	-	180900	2.75	-	497475.00
	VII	258	125	5	-	161250	2.75	-	443437.50
	VIII	248	115	5	-	142600	2.75	-	392150.00
	IX	238	105	5	-	124950	2.75	-	343612.50
	X	228	95	5	-	108300	2.75	-	297825.00
	XI	218	85	5	-	92650	2.75	-	254787.50
	XII	208	75	5	-	78000	2.75	-	214500.00
	XIII	198	65	5	-	64350	2.75	-	176962.50
	XIV	188	55	5	-	51700	2.75	-	142175.00
	XV	178	45	5	-	40050	2.75	-	110137.50
	XVI	168	35	5	-	29400	2.75	-	80850.00
	XVII	158	25	5	-	19750	2.75	-	54312.50
	Total				**306850**	**2034000**	-	**613700**	**5593500.00**

The Total Mineable Reserves:

Gravel Formation : 3,06,850 m^3

The Mineable Resource of Rough Stone: 20,34,000 m^3

2.9 PROCESS DESCRIPTION AND TECHNOLOGY

2.9.1 PROCESS DESCRIPTON

The quarry operation involves shallow jack hammer drilling, slurry blasting, excavation, Loading and transportation of Rough stone to the needy buyers. The production of Rough stone in this quarry involves the following method which is typical for Rough Stone and Gravel Quarrying in contrast to other major mineral mining.

- Splitting of rock mass of considerable volume from the parent rock mass by jackhammer drilling and blasting, hydraulic excavators are used for loading the Rough Stone from pithead to the needy buyers.
- Occasionally hydraulic excavators are attached with rock breakers for fragmentation to avoid secondary blasting.
- The primary boulders thus splitted are removed from the pits by excavators and further made to smaller sizes by rock breakers attached in excavators.

The process flow diagram is provided in Figure 2.6. The Geological and production & Year wise Development plan and cross section for the 5 years period and conceptual plan and conceptual cross section is given in Figure No. 2.7 and Figure No. 2.8.

Figure 2.6 Process Flow Diagram

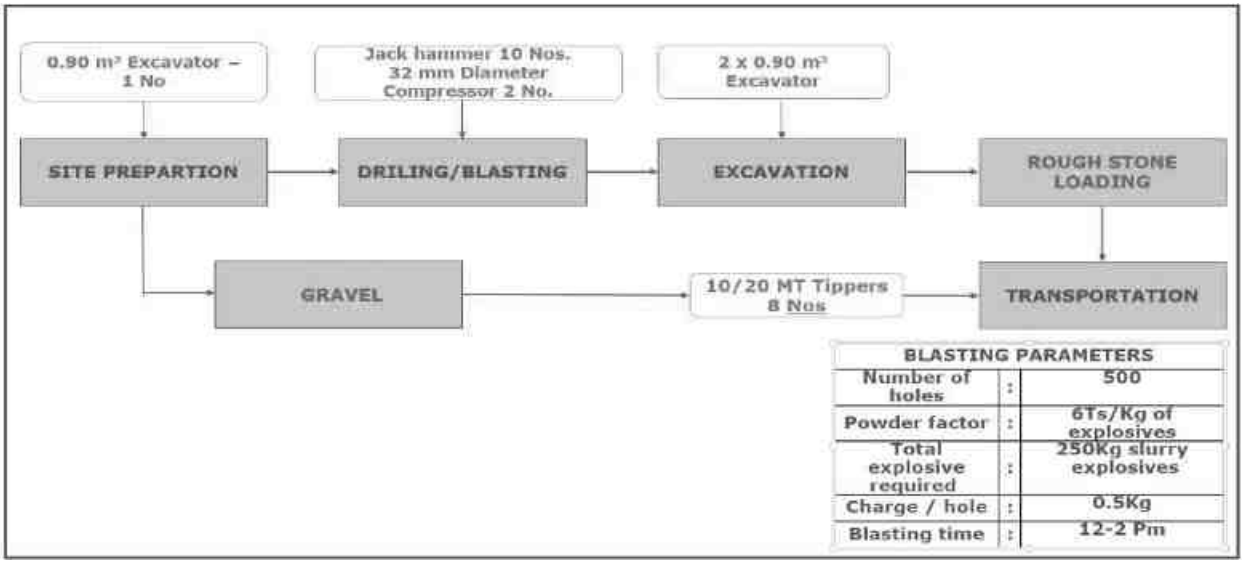


Figure 2.7 Geological Plan & Sections

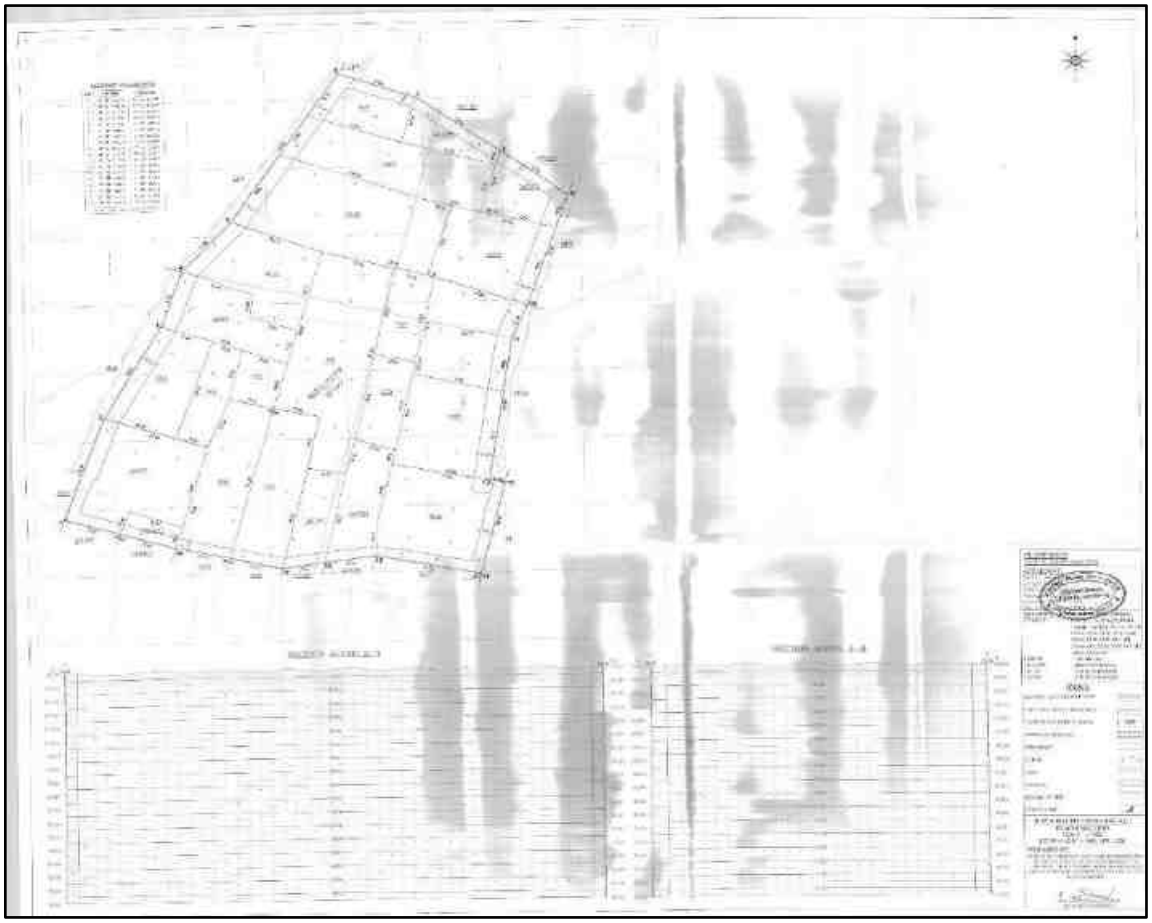


Table 2.7 – Machinery Details

S.NO	Name of the Equipment	Capacity	Requirement
1	Excavator with Rock breaker attachment	0.90 m3	3
2	Compressor	400 psi	2
3	jack hammer	32mm Dia	10
4	Tipper	10/20 T	8

2.9.2 DRILLING AND BLASTING PARAMETERS

Drilling and Blasting will be carried out as per parameters given below,

Table 2.8 – Drilling and Blasting Details

Diameter of the hole	32-36 mm
Spacing	0.6m
Depth	1 to 1.5 m
Burden of hole	0.6m
Pattern of hole	Zigzag
Inclination of hole	70^0 from horizontal
Number of holes	500
Powder factor	6Ts/Kg of Explosives
Total explosive required	250 Kg slurry Explosives
Charge / hole	0.5 kg
Blasting time	12-2 Pm

2.9.3 TYPE OF EXPLOSIVE

Slurry explosive is proposed for shattering and heaving effect for removal of rough stone. No deep hole drilling or primary blasting is proposed. The Project Proponent have agreement with Mrs. Lavanya A.R to carry out the blasting operation for the proposed quarry. The Blasting Agreement is enclosed as Annexure – 10.

2.9.4 STORAGE OF EXPLOSIVES

No proposal for storage of explosives within the project area, the applicant will engage authorized explosive agency to carry out the blasting and it will be supervised by competent and statutory foreman / mines manager as per DGMS guidelines.

2.9.5 YEARWISE PRODUCTION SCHEDULE

The year wise production schedule upto lease period of 5 years is given below, the year wise production plan is given in Figure 2.7.

Table 2.9– Yearwise production For First Five Years

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Gravel in m^3	Rough stone in m^3	Bulk Density	Gravel in Ts	Mineable Reserves of Rough stone in Ts
I	XY-AB	I	90	190	5	85500	-	2	171000	-
		II	75	175	5	-	65625	2.75	-	180468.75
		III	65	165	5	-	53625	2.75	-	147468.75
		IV	55	155	5	-	42625	2.75	-	117218.75
Total						**85500**	**161875**	-	**171000**	**445156.25**
II	XY-AB	I	87	190	5	82650	-	2	165300	-
		II	95	175	5	-	83125	2.75	-	228593.75
		III	95	165	5	-	78375	2.75	-	215531.25
		IV	10	155	5	-	7750	2.75	-	21312.50
Total						**82650**	**169250**	-	**165300**	**465437.50**
III	XY-AB	I	48	190	5	45600	-	2	91200	-
		IV	85	155	5	-	65875	2.75	-	181156.25
		V	140	145	5	-	101500	2.75	-	279125.00
Total						**45600**	**167375**	-	**91200**	**460281.25**
IV	XY-AB	I	48	190	5	45600	-	2	91200	-
		VI	130	135	5	-	87750	2.75	-	241312.50
		VII	120	125	5	-	75000	2.75	-	206250.00
Total						**45600**	**162750**	-	**91200**	**447562.50**
V	XY-AB	I	50	190	5	47500		2	95000	-
		VIII	110	115	5	-	63250	2.75	-	173937.50
		IX	100	105	5	-	52500	2.75	-	144375.00
		X	90	95	5	-	42750	2.75	-	117562.50
Total						**47500**	**158500**	-	**95000**	**435875.00**
Grand Total						**306850**	**819750**	-	**613700**	**2254312.50**

The Peak production quantity of Rough Stone – 1,69,250m^3

Total Gravel Quantity – 3,06,850m^3

Total Rough Stone Quantity (5 years) – 8,19,750 m^3

Table 2.10– Yearwise production for second five Years

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Rough stone in m^3	Bulk Density	Mineable Reserves of Rough stone in Ts
VI	XY-AB	II	138	175	5	120750	2.75	332062.50
		III	138	165	5	113850	2.75	313087.50
		IV	10	155	5	7750	2.75	21312.50
Total						**242350**		**666462.50**
VII	XY-AB	IV	128	155	5	99200	2.75	272800.00
		V	138	145	5	100050	2.75	275137.50
		VI	65	135	5	43875	2.75	120656.25
Total						**243125**		**668593.75**
VIII	XY-AB	VI	73	135	5	49275	2.75	135506.25
		VII	138	125	5	86250	2.75	237187.50
		VIII	138	115	5	79350	2.75	218212.50
		IX	55	105	5	28875	2.75	79406.25
Total						**243750**		**670312.50**
IX	XY-AB	IX	83	105	5	43575	2.75	119831.25
		X	138	95	5	65550	2.75	180262.50
		XI	218	85	5	92650	2.75	254787.50
		XII	110	75	5	41250	2.75	113437.50
Total						**243025**		**668318.75**
X	XY-AB	XII	98	75	5	36750	2.75	101062.50
		XIII	198	65	5	64350	2.75	176962.50
		XIV	188	55	5	51700	2.75	142175.00
		XV	178	45	5	40050	2.75	110137.50
		XVI	168	35	5	29400	2.75	80850.00
		XVII	158	25	5	19750	2.75	54312.50
Total						**242000**		**665500.00**
Grand Total						**1214250**		**3339187.50**

2.10 CONCEPTUAL MINING PLAN / FINAL MINE CLOSURE PLAN

Conceptual mining plan is prepared with an object of systematic development of bench layouts, selection of ultimate pit limit, depth of quarrying, ultimate pit slope, selection of sites for construction of infrastructure etc.

The ultimate pit size is designed based on certain practical parameters such as economical depth of mining, safety zones, permissible area, etc. Conceptual cross section and mine closure plan is given in Figure 2.8.

Table 2.11 - Ultimate Pit Dimension

Ultimate Pit dimension (M) end of Mining plan Period			
Pit No	Length (max) in (m)	Width (Avg) in (m)	Depth(max) in(m)
I	323	190	85m BGL

Table 2.12 - Land use pattern of the Project area

Sl. No	Land Use	Present Area (Hect)	Area in use during the end of the Scheme period (Hect)
1.	Quarrying Pit	Nil	6.14.00
2.	Infrastructure	Nil	0.02.00
3.	Roads (Temporary)	Nil	0.04.00
4.	Green Belt	Nil	1.17.80
5.	Unutilized	7.37.80	Nil
Total		**7.37.80**	**7.37.80**

- The Safety Zone of 1.17.80 Ha., will be planted and maintained with 1178 numbers of saplings. In the conceptual stage, the quarried pit will be fenced by using Barbed wire fencing to prevent inherent entry of public and cattle.

Figure 2.8 Conceptual Plan And Cross Section



2.11 PROJECT REQUIREMENT

2.11.1 WATER REQUIREMENT AND SOURCE

The total water requirement estimated for the quarry is 12.2 KLD. The required water will be procured from outside agencies initially and later rainwater harvested in the mine pit shall be used other than drinking purpose.

Table 2.13 Details of Water requirement

Activity	Water Requirement in KLD
Drinking & Domestic	1.7
Dust Suppression	7.0

Greenbelt Development	3.5
Total	12.2

2.11.2 POWER REQUIREMENT

All the equipment will be diesel operated. No electricity is needed for mining operation. The minimum power requirement for office, etc will be met from state grid.

2.11.3 EMPLOYMENT GENERATION

The project will provide employment opportunities totally to 39 persons directly and indirectly.

Table 2.12 EMPLOYMENT GENERATION

Skilled	Operator	12 Nos
	Mechanic	1 No
	Mines Manager	1 No
	Fore Man / Mate	2 Nos
Semi-Skilled	Driver	8 Nos
Unskilled	Labours	15 Nos
Total		**39 Nos**

2.11.4 INFRASTRUCTURE REQUIREMENT

This is a proposed project. Site services like mine office, first aid room, toilets etc. will be provided as semi-permanent structures.

2.11.5 PROJECT COST

The total project cost of this Rough Stone and Gravel Quarry is Rs. 290.57 Lakhs.

PROJECT IMPLEMENTATION SCHEDULE

The proponent proposes to implement the production immediately after obtaining all the statutory approvals. The commercial operation will commence after the grant of Environmental Clearance. CTO and CTE will be obtained from the Tamil Nadu State Pollution Control Board. The conditions imposed during the Environmental Clearance will be compiled before the start of mining operation.

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3.0 DESCRIPTION OF THE ENVIRONMENT

3.1 INTRODUCTION

As a precursor for the prediction of various types of environmental impacts likely to arise due to implementation of the project, it is essential to establish the baseline environmental setting of the project. Details of the baseline environmental parameters are required for decision making for the project design, implementation and operation from the environmental point of views. The data is to be generated through primary data collection (direct monitoring) and secondary sources (published data).

This chapter describes the environmental baseline data of core zone and surrounding areas of the project. The environmental baseline data includes the physical environment (comprising climate & meteorology, air, water, Noise and land components), biological environment and socio-economic environment, which may get affected due to the this proposed project.

3.2 STUDY AREA

The study area has been divided into two zones, namely, core and buffer zones. Core zone is considered as the total lease area of mine lease, while buffer zone encompasses an area of 10 km radius distance from the periphery of core zone. This chapter incorporates the description of existing environmental status in an area encompassed within 10 km radius from the boundary of mine lease. The environmental data for the following Environmental components were collected in the study area:

- Micro-meteorological monitoring in one of the representative locations.
- Ambient air quality study comprising gaseous, particulate matter at 7 different locations.
- Water quality analysis in 7 different locations (Ground Water)
- Noise levels monitoring in 7 different locations
- Soil quality analysis in 7 locations.
- Flora & Fauna status.
- Land use & Land Cover.
- Socio-economic survey.

3.3 STUDY PERIOD

The above-mentioned studies have been carried out systematically and meticulously as per relevant IS codes, CPCB, MoEF&CC guidelines during March to May 2026.

3.4 MONITORING LAB

The baseline information for air, water, noise, and soil was analysed by M/s. Shrient Analytical and Research Labs Pvt Ltd, # 416/15, Dharga Road, Perungalathur, West Tambaram, Chennai – 600 045. (Accreditated by NABL as ISO/IEC/17025:2017) between March to May 2026.

3.5 ENVIRONMENTAL SETTINGS OF THE PROJECT

The Environmental settings of the project covering 10km radius of study area is given in Table 3.2. The study area map is given in Figure- 3.5 and satellite image showing 10 km radius is given in Figure 3.4.

Table 3.1 Environmental Settings of the Study Area – 10 km radius

S.NO	Particulars	Description
1.	Latitude & Longitude	Latitude: 09°36'13.53''N to 09°36'25.58''N Longitude: 77°53'43.15''E to 77°53'53.80''E
2.	The altitude of the area	135 m from MSL
3.	Topography	Plain Terrain
4.	Land use of M.L. area	Patta Land
5.	Extent of the Lease area	7.37.80 Ha.
6.	Nearest Highway	The National Highway (NH-44) Salem-Kanniyakumari is about 5.0Km on southeast side of the area. The State Highway (SH-182) Virudhunagar – Watrap is about 570m on north side of the area.
7.	Nearest Railway Station	Virudhunagar Junction -6.63 km (E) The Nearest Railway line is Virudhunagar to Paramakudi line which is about 7.6Km on north side of the area.
8.	Nearest airport	Madurai Airport – 32.90 km - NE

9.	Nearest Village	Seeniyapuram – 520m NE	
10.	Nearest Town	Virudhunagar – 5.44 km- E	
11	Water Bodies	Odai Kuttai Odai Odai Odai Tank Tank Kousiga River	Adjoining to E & W of the project site (10m safety distance provided) 50m (N) 240m (N) 410m (NE) 450m (SE) 773m (NE) 2.03km (N) 2.20km (NE)
12	Historical Places/Places of Tourist/ Archeological site	NIL within 10 km radius	
13.	Environmental sensitive areas, Protected areas as per Wildlife Protection Act, 1972 (Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and conservation reserves)	NIL within 10 km radius	
14	Reserved / Protected Forests	Nil within 10km radius	
15	Defence Installations	NIL within 10 km radius	
16	Seismic Zone	Zone II	

Figure 3.1 Satellite Image of the Study Area

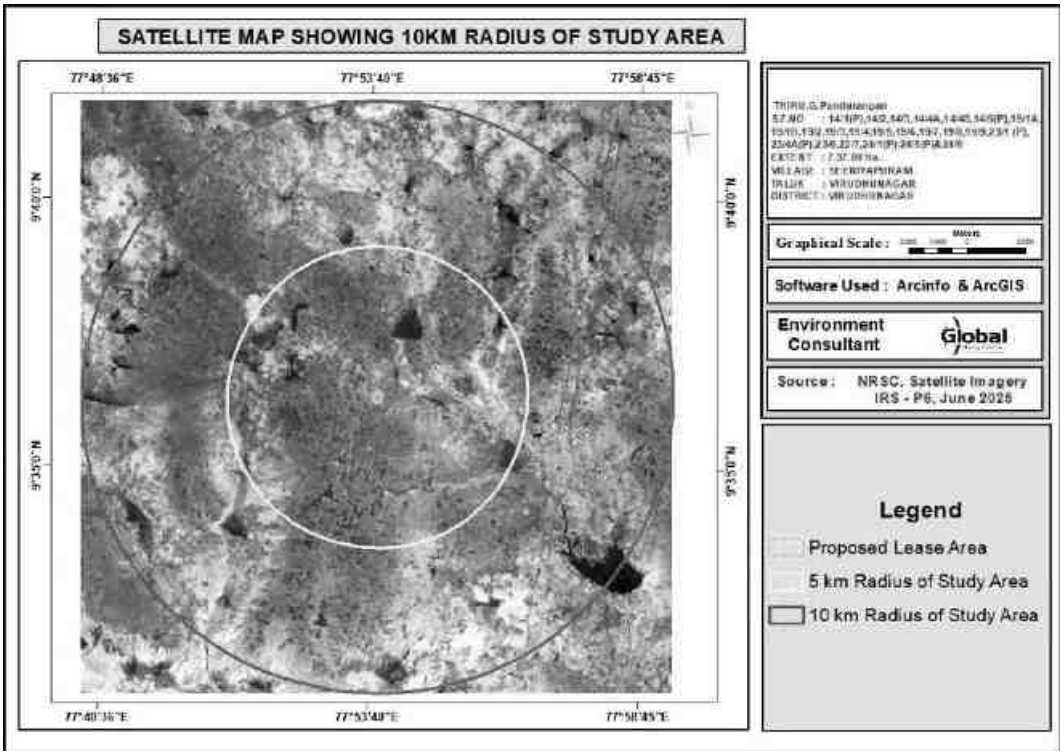


Figure 3.2 Topo map Showing Study Area

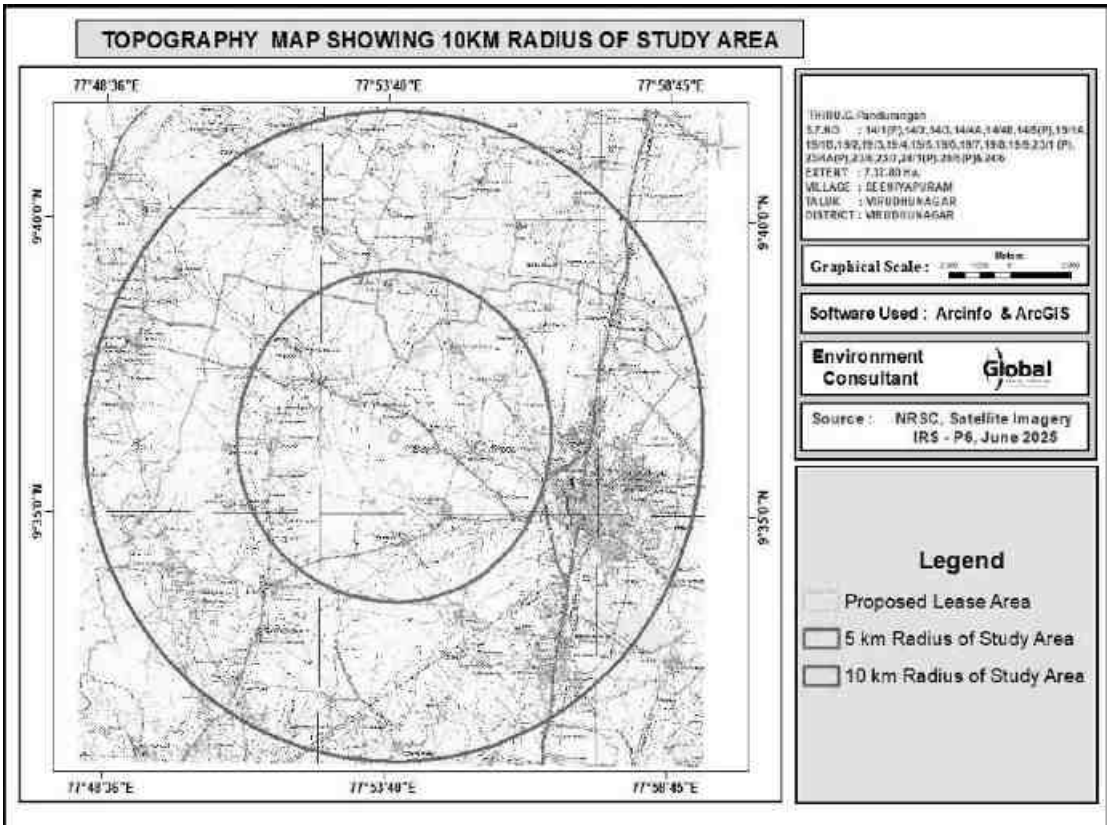
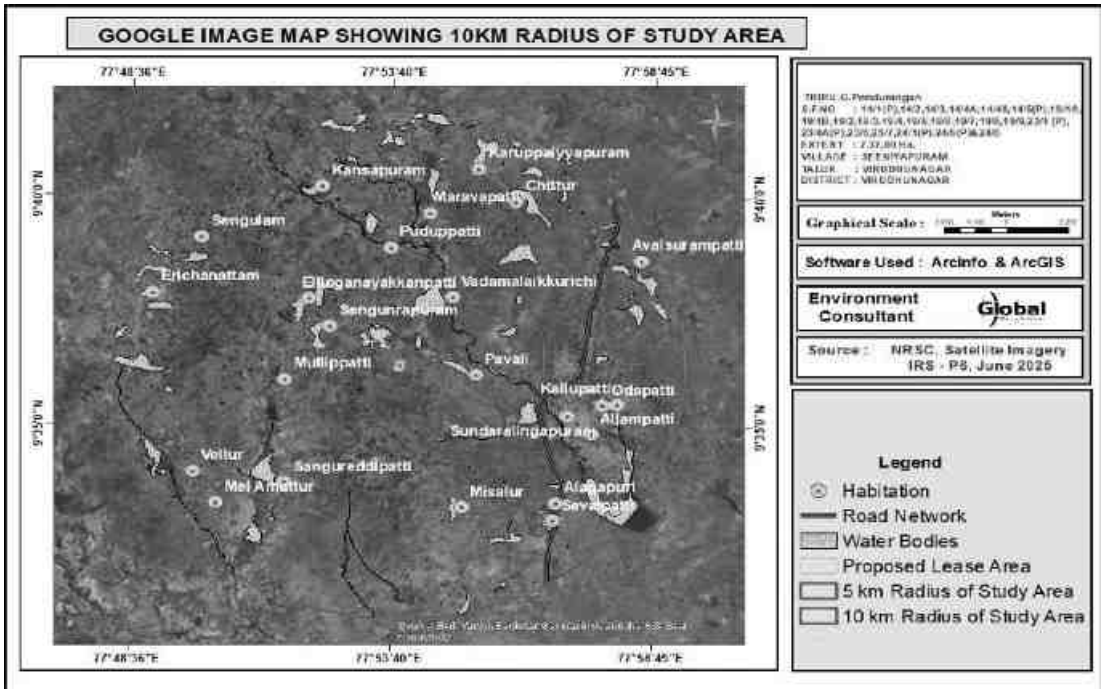


Figure 3.3 Google Image showing 10 km radius



3.6 EXISTING ENVIRONMENTAL SCENARIO

3.6.1 MICRO- METEOROLOGY

Meteorology is the key to understand the Air quality. The essential relationship between meteorological condition and atmospheric dispersion involves the wind in the broadest sense. Wind fluctuations over a very wide range of time, accomplish dispersion and strongly influence other processes associated with them.

3.6.1.1 CLIMATE AND RAINFALL DATA

Virudhunagar has a tropical climate. The summers are much rainier than the winters in Virudhunagar. This location is classified as Aw by Köppen and Geiger (Aw, or the tropical wet and dry climate, also known as the savanna climate, where there is an extended dry season during the winter. During the wet season, rainfall is less than 1000mm, occurring mainly in the summertime). The average annual temperature is 27.4 °C | 81.3 °F in Virudhunagar. The district receives rainfall from North East and South West monsoons.

Rain Fall Virudhunagar district receives rainfall from both southwest and northeast monsoons. The annual normal rainfall (1901-80) for the district is 800mm to 900mm. The contribution of southwest monsoon ranges from 45 to 52 percent, whereas it ranges from 30-43 percent due to northeast monsoon.

Temperature The district enjoys a tropical climate. The highest temperatures are recorded during May and June. The mean daily minimum and maximum temperature are 18 to 42° C. The relative humidity ranges from 37 to 85 percent.

Table 3.2 Rainfall Data

Annual Rainfall in mm						Normal rainfall in mm
2019	2020	2021	2022	2024	2024(As on 30.09.2024)	
713.7	1303.7	968.4	883.1	1166.8	549.1	773

Source: Tamilnadu Water Supply and Drainage Board, Virudhunagar District

3.6.1.2 Seismic Sensitivity

The proposed project site falls in the seismic Zone II, low damage risk zone as per BMTPC, Vulnerability Atlas of Seismic zone of India IS: 1893 – 2002.

3.6.1.3 Meteorological Data of the Project Area

The meteorological data collected in the study area from March to May 2026 which includes Temperature, Wind speed, Wind direction and Relative humidity. Details are given in below table and Figure 3.4.

Table 3.3 Meteorological Data Recorded at Site

S.NO	Parameters		March to May 2026
1.	Temperature (^{0}C)	Min	22
		Max.	40
		Avg	31
2.	Relative Humidity (%)	Min	17
		Max	87
		Avg	53
3.	Wind Speed (m/s)	Min	0.5
		Max	6.7
		Avg	1.0
4.	Wind Direction	Predominant wind blowing from SE	

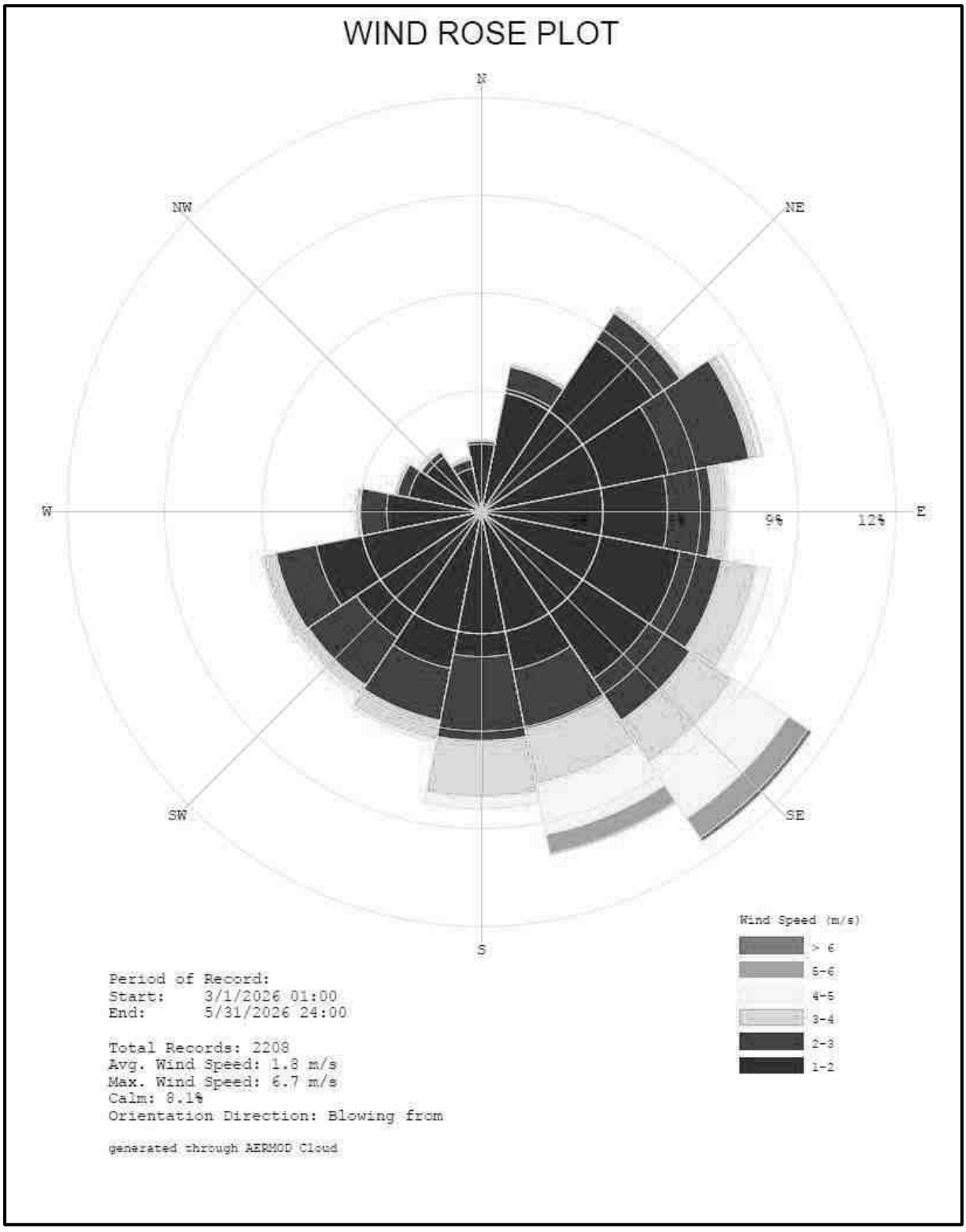


Figure 3.4 Wind Rose Diagram – (MARCH 2026 -MAY 2026)

3.6.2 AIR ENVIRONMENT

The prime objective of the ambient air quality study is to assess the existing air quality of study area and its conformity to NAAQS. The observed sources of air pollution in the study area are industrial, traffic and domestic activities. The baseline status of the ambient air quality has been established through a scientifically designed ambient air quality monitoring network considering the followings:

- Meteorological condition on synoptic scale
- Topography of the study area;
- Representatives of regional background air quality for obtaining baseline
- status;
- Location of residential areas representing different activities;
- Accessibility and power availability; etc.,

3.6.2.1 SAMPLING & ANALYTICAL TECHNIQUES

Table 3.4 Methodology for Air Quality Monitoring

1.	Monitoring Period	Post Monsoon (March to May 2026)
2.	Monitoring Location	The monitoring locations for ambient air study is given in Table – 3.6 and Figure 3.8.
Methodology		
3.	A. Sampling	(IS-5182:Part 1:2018)
	B. Analysis	
	Parameters	**Protocol**
4.	Particulate Matter (PM_{10})	Gravimetric (IS 5182: Part 23:2017)
	Particulate Matter (PM2.5)	Gravimetric (IS 5182: Part 24:2019)
	Sulphur Dioxide	Colorimetric (West & Gaeke Method) (IS 5182: Part 02: 2017)
	Nitrogen Dioxide	Colorimetric (Modified Jacob & Hocheiser Method) (IS 5182: Part 06:2017)
	Carbon Monoxide	CO Monitor
	Monitoring Frequency	2 days in a week, 4 weeks in a month for 3 months in a season.

3.6.2.2 FREQUENCY AND PARAMETERS FOR SAMPLING

Ambient air quality monitoring has been carried out with a frequency of two samples per week at seven (7) locations, adopting a continuous 24 hourly (3 shift of 8-hour) schedule for the period March to May, 2026. The baseline data of ambient air has been generated for PM_{10}, $PM_{2.5}$, Sulphur Dioxide (SO_2), Nitrogen Dioxide (NO_2) and Carbon Monoxide Monitoring has been carried out as per the CPCB, MoEF & CC guidelines and notifications.

It was ensured that the equipment was placed preferably at a height of at least 1.8 to 2.2 m above the ground level at each monitoring station, for negating the effects of wind-blown ground dust. The equipment was placed at open space free from trees and vegetation which otherwise act as a sink of pollutants resulting in lower levels in monitoring results.

3.6.2.3 AMBIENT AIR QUALITY MONITORING STATIONS

Seven (7) monitoring stations were set up in the study area as depicted in Figure 3.8 for assessment of the existing ambient air quality. Details of the sampling locations are as per given below.

Table 3.5 – Ambient Air Quality Monitoring Locations

S.NO	Location Code	Monitoring Locations	Latitude and longitude
1	AAQ1	Within Mine Lease area	9°36'19.27"N & 77°53'49.83"E
2	AAQ2	Moolipatti	9°36'11.20"N & 77°51'39.68"E
3	AAQ3	Virudhunagar	9°35'42.73"N & 77°56'45.98"E
4	AAQ4	M.Puthupatti	9°37'13.94"N & 77°52'29.49"E
5	AAQ5	Vadamalaikurichi	9°37'48.03"N & 77°54'55.38"E
6	AAQ6	Kumaralingapuram	9°35'1.44"N & 77°54'45.79"E
7	AAQ7	Amathur	9°33'53.65"N & 77°51'41.54"E

Figure 3.5 Ambient Air Quality Monitoring Locations

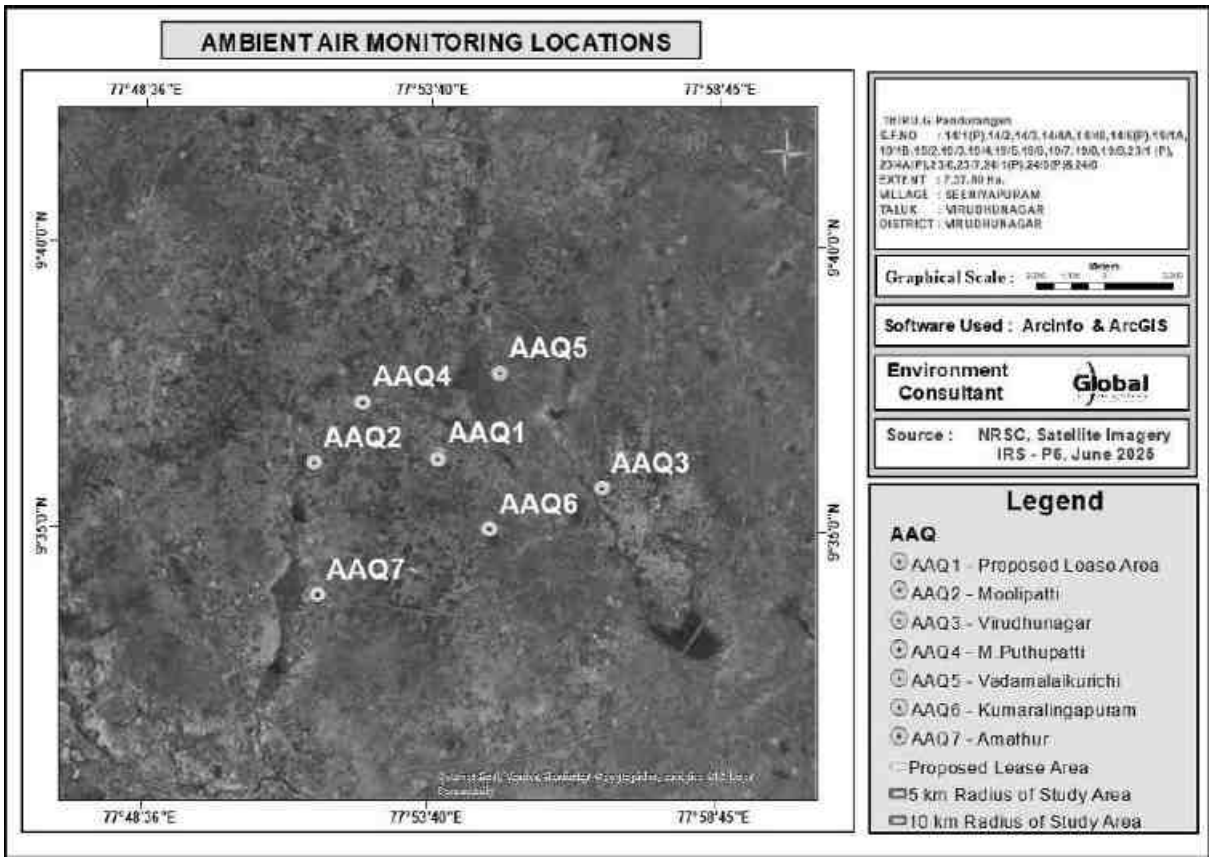


Table 3.6 Ambient Air Quality Data

Station ID	Min	Max	Avg.
Particulate matter $PM_{2.5}$ ($\mu g/m^3$)			
AAQ-1	28.1	37.3	32.5
AAQ-2	24.1	31.6	27.7
AAQ-3	25.6	33.5	29.6
AAQ-4	26.3	34.6	30.7
AAQ-5	20.3	25.8	23.1
AAQ-6	22.5	27.7	25.0
AAQ-7	20.7	26.1	23.4
CPCB NAAQS 2009 for $PM_{2.5}$ - 60 $\mu g/m^3$			
Particulate matter PM_{10} ($\mu g/m^3$)			
AAQ-1	60.1	76.3	68.9
AAQ-2	51.7	67.2	59.1
AAQ-3	54.4	71.6	63.1
AAQ-4	56.2	74.4	65.7
AAQ-5	44.4	56.3	50.4
AAQ-6	49.0	59.3	53.9
AAQ-7	45.5	57.4	51.5
CPCB NAAQS 2009 for PM_{10} - 100 $\mu g/m^3$			
Sulphur Di-oxide as SO_2 ($\mu g/m^3$)			
AAQ-1	6.4	8.8	7.6
AAQ-2	5.5	8.0	6.8
AAQ-3	5.9	8.3	7.1
AAQ-4	6.1	8.5	7.3
AAQ-5	5.2	7.1	6.3
AAQ-6	5.2	7.7	6.4
AAQ-7	5.6	7.6	6.7
CPCB NAAQS 2009 for SO_2 – 80 $\mu g/m^3$			
Oxide of Nitrogen as NO_2 ($\mu g/m^3$)			
AAQ-1	10.7	16.0	12.3
AAQ-2	9.1	12.6	10.5
AAQ-3	9.4	14.3	11.9
AAQ-4	9.8	14.1	11.5
AAQ-5	8.2	11.9	9.6
AAQ-6	8.6	12.1	10.2
AAQ-7	8.7	12.5	10.2
CPCB NAAQS 2009 for NO_2 – 80 $\mu g/m^3$			

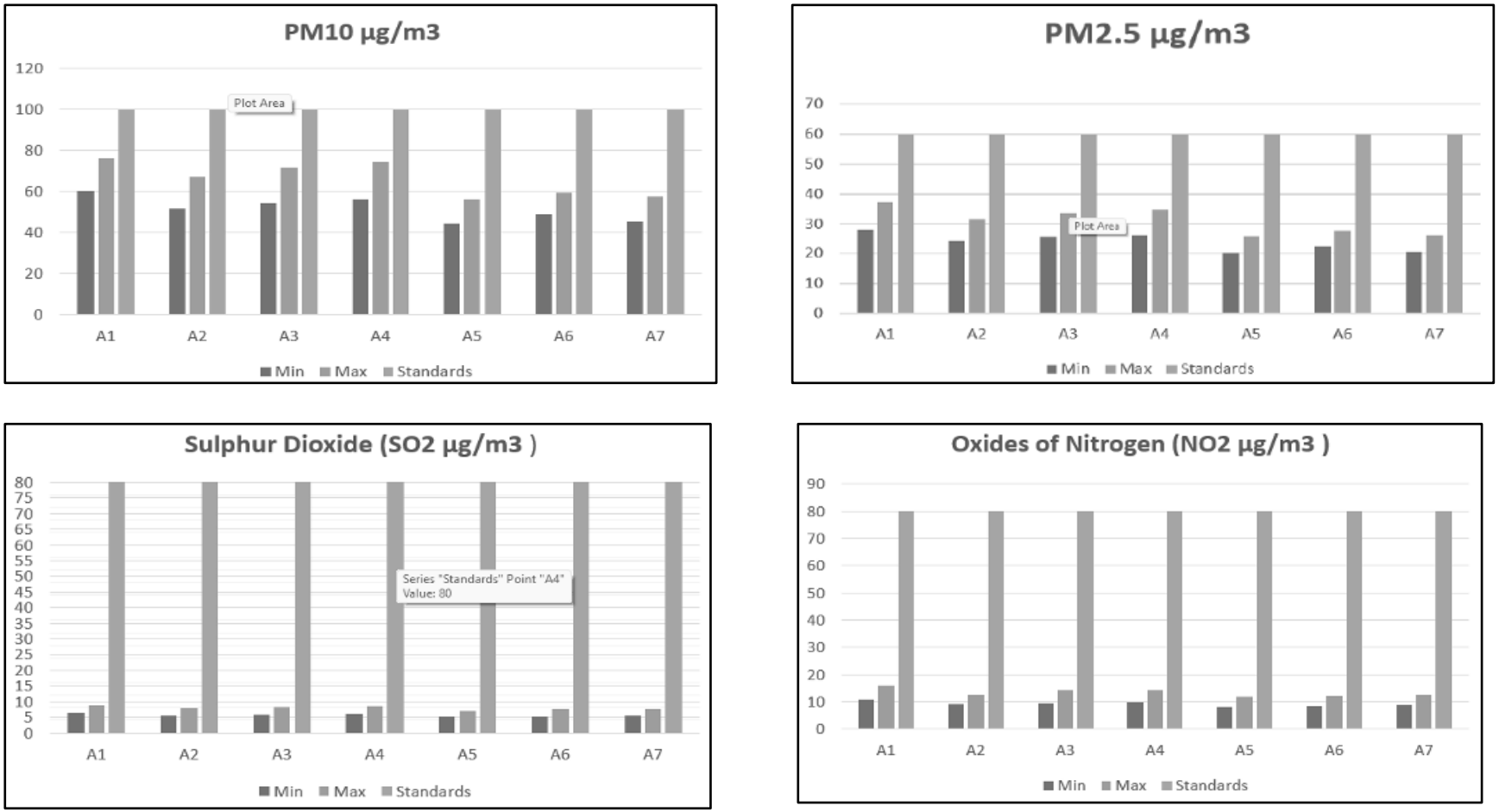


Figure –3.6 - Graphical Representation of Air Quality Data

3.6.2.4 DISCUSSION

From the table it is seen that, in the ambient air, the PM_{10} values were in the range of 44.4 – 76.3 µg/m3. $PM_{2.5}$ values were in the range of 20.3 – 37.3 µg/m3. SO_2 levels were ranging from 5.2 -8.8 µg/m3. NO_2 levels were ranging from 8.2 – 16.0 µg/m3. While comparing with the NAAQ Norms laid by MoEF, all monitored values of PM10, PM2.5, SO2, NO2 & CO were found to be well within the prescribed standards. The CO values in the all locations found to be below detectable limit (DL – 1144 µg/m3).

3.6.3 WATER ENVIRONMENT

The water resources, both surface and groundwater play a significant role in the development of the area. The purpose of this study is to assess the water quality characteristics for critical parameters and evaluate the impacts on agricultural productivity, domestic community usage, recreational resources and aesthetics in the vicinity. The water samples were collected and transported as per the standard guidelines issued by CPCB for analysis.

3.6.3.1 METHODOLOGY

Reconnaissance survey was undertaken and monitoring locations were selected based on:

- Location of the major water bodies
- Location of project site, their water intake and effluent disposal locations
- Likely areas that can represent baseline conditions
- The water samples were collected and were analyzed for physical, chemical, and biological characteristics as per guidelines issued by IS code No.10500/2012.

3.6.3.2 GROUND WATER

The district is underlain by both porous and fissured formations, Unconsolidated & Semi-consolidated formations and Weathered, Fissured and fractured crystalline rocks constitute the important aquifer systems in the Virudhunagar region. Ground

water occurs under phreatic to semi-confined conditions in these formations and is being developed by means of dug wells and filter points. Proterozoic formation is the basement rocks which consist of quartzite, crystalline limestone, calcgranulite, hornblende – biotite gneiss, charnockite or pyroxene granulite, granite and pegmatite. Weathered, a fissured cracks, shear zones and joints in the basement rock act as a good groundwater potential zone in the study area.

3.6.3.3 SAMPLING LOCATIONS

Seven (7) ground water samples & Two (2) Surface water samples were collected from the study area and were analysed for physio-chemical, heavy metals and bacteriological parameters in order to assess the effect of mining and other activities on ground water. The samples were analysed as per the procedures specified by CPCB, IS-10500:2012. The water sampling locations are given in Table 3.8 and shown as Figure 3.10.

Table 3.7 Water Sampling Locations

S.NO	Location Code	Monitoring Locations	Latitude and longitude
Ground Wate			
1	GW1	Within Mine Lease area	9°36'19.27"N & 77°53'49.83"E
2	GW2	Moolipatti	9°36'11.20"N & 77°51'39.68"E
3	GW3	Virudhunagar	9°35'42.73"N & 77°56'45.98"E
4	GW4	M.Puthupatti	9°37'13.94"N & 77°52'29.49"E
5	GW5	Vadamalaikurichi	9°37'48.03"N & 77°54'55.38"E
6	GW6	Kumaralingapuram	9°35'1.44"N & 77°54'45.79"E
7	GW7	Amathur	9°33'53.65"N & 77°51'41.54"E

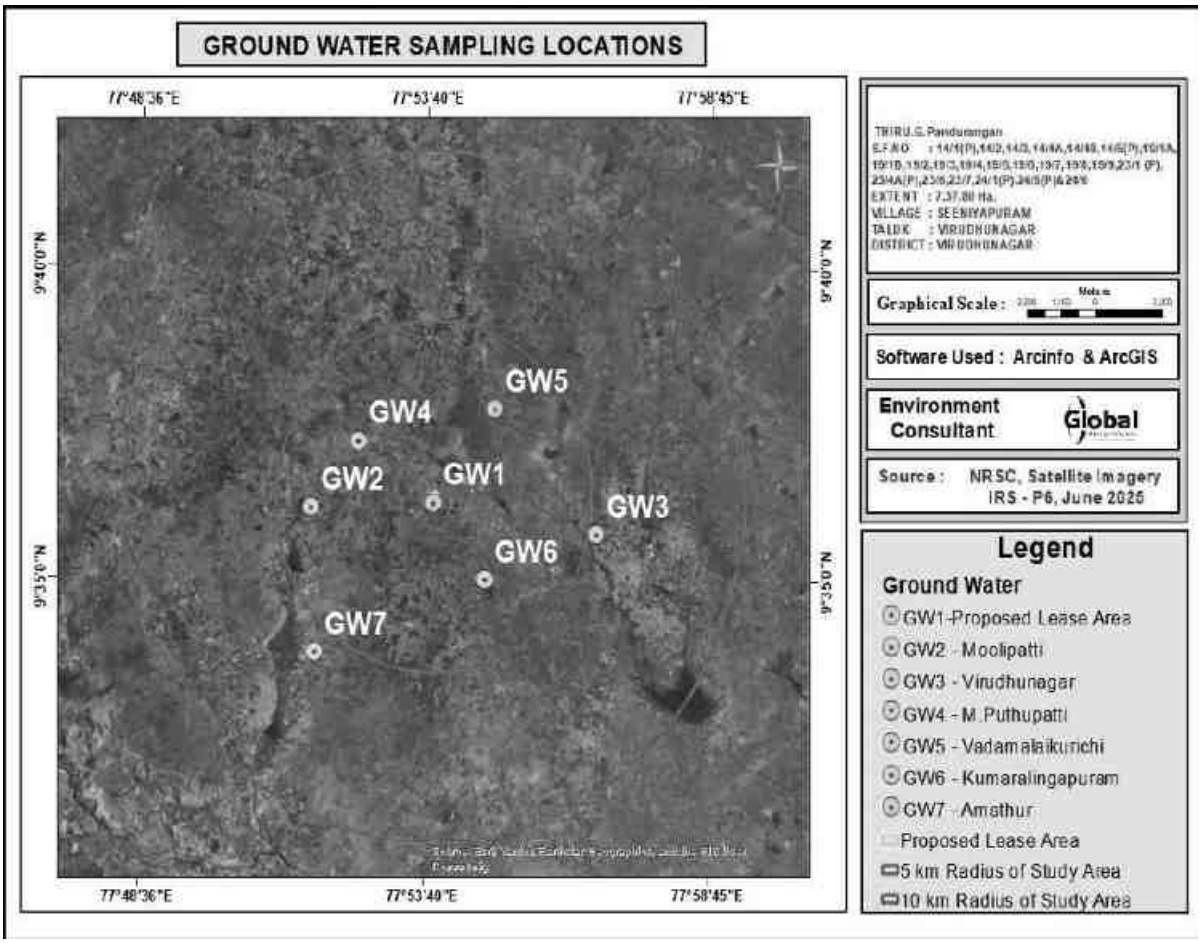


Figure 3.7 – Ground Water Monitoring Locations

Table 3.8 - Results of Ground Water sampling Analysis

S. No.	Test Parameter	Unit	GW1	GW2	GW3	GW4	GW5	GW6	GW7	Specification/Limit (As per IS:10500: 2012)	
										Desirable	Permissible
1	Odour	…	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
2	Taste	…	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	pH	…	7.86	7.48	7.94	7.09	7.54	7.92	7.32	6.5 - 8.5	No Relaxation
4	Turbidity	NTU	<1	<1	<1	<1	<1	<1	<1	1	5
5	TDS	mg/L	448	355	1090	802	410	420	464	500	2000
6	Fluoride,(F)	mg/L	0.18	0.17	0.37	0.40	0.23	0.28	0.31	1	1.5
7	Total Alkalinity, (CaCO3)	mg/L	199	187	297	325	230	189	209	200	600
8	Total Hardness, (CaCO3)	mg/L	209	237	439	328	346	243	267	200	600
9	Calcium,(Ca)	mg/L	56.8	60.4	117	83.2	93.6	58.4	64.8	75	200
10	Calcium as CaCO3		142	151	292	208	234	146	162	-	-

11	Free Residual chlorine as Cl-		BDL (D.L - 0.2)	BDL(D.L -0.2)	BDL(D.L -0.2)	BDL (D.L-0.2)	BDL(D.L-0.2)	BDL(D.L -0.2)	BDL(D.L -0.2)	0.2	1.0
12	Chloride,(Cl)	mg/L	134	79.3	495	349	111	77.0	85.7	250	1000
13	Magnesium,(Mg)	mg/L	16.0	20.8	35.2	28.8	26.9	23.2	25.3	30	100
14	Nitrate,NO3)	mg/L	2.61	3.90	2.08	2.68	BDL(D.L – 1.0)	2.96	3.43	45	No Relaxation
15	Sulphate, (SO4)	mg/L	71.1	34.7	234	122	28.6	37.1	43.1	200	400
16	Iron,(Fe)	mg/L	BDL(D.L - 0.01)	BDL(D.L - 0.01)	0.0532 5	0.0639	BDL(D.L - 0.01)	BDL(D.L - 0.01)	BDL(D.L - 0.01)	1	No Relaxation
17	Manganese, (Mn)	mg/L	BDL (D.L - 0.05)	BDL(D.L -0.05)	BDL(D.L -0.05)	BDL(D.L -0.05)	BDL(D.L-0.05)	BDL(D.L -0.05)	BDL(D.L -0.05)	0.1	0.3
18	Conductivity	µs/cm	739.6	588.3	1808.4	1328.1	680.4	694.8	767.4	Not Specified	Not Specified

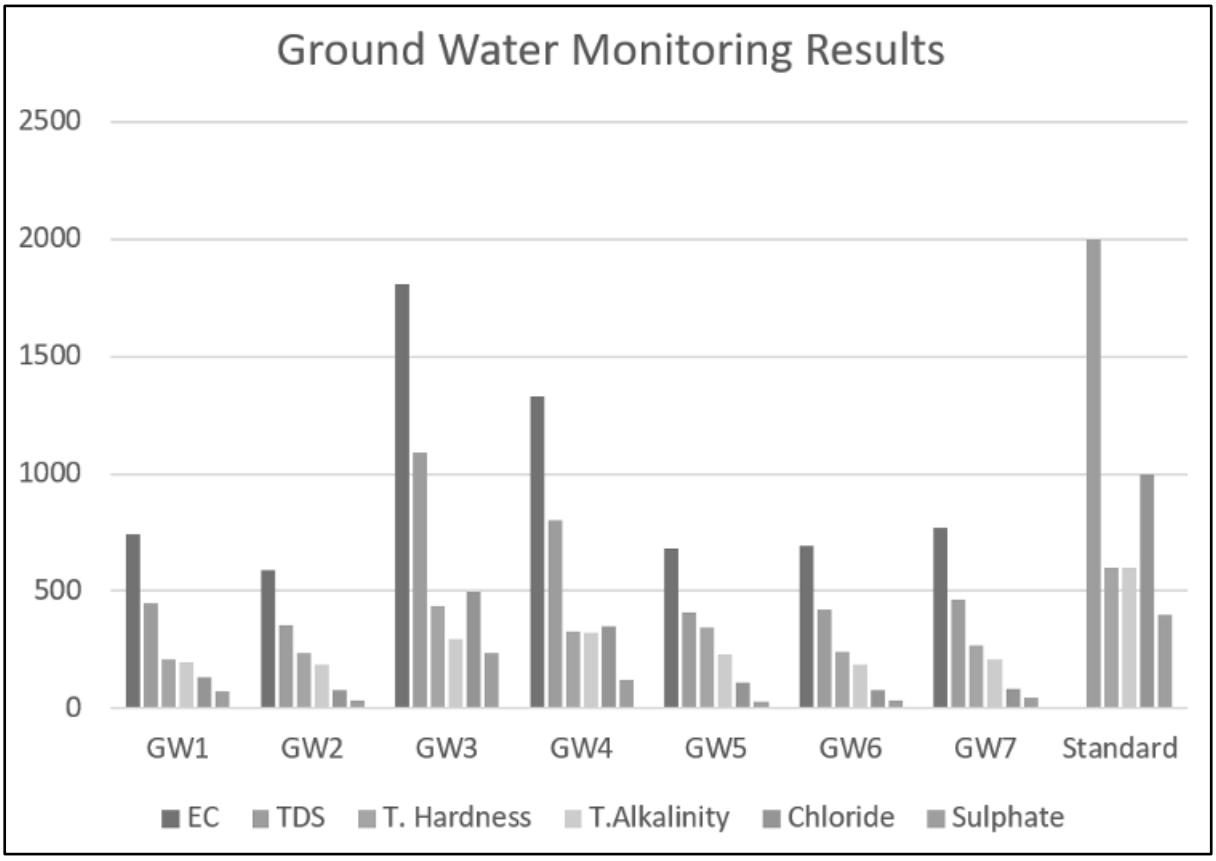


Figure 3. 8 Ground Water - Monitoring Results

Surface Water Sampling Locations

S.NO	Location Code	Monitoring Locations	Latitude and longitude
1	SW1	Kousiga River (upstream)	9°37'26.28"N & 77°54'47.27"E
2	SW2	Kousiga River (Downstream)	9°35'56.69"N & 77°56'9.84"E

S. No	Parameter	Unit	SW1	SW2	Surface water standards (IS 2296 Class-A)
1	Odour	-	agreeable	Agreeable	-
2	Turbidity	NTU	8.5	13.2	1
3	pH at 25 °C	-	7.84	7.82	6.5-8.5
4	Electrical Conductivity	µS/cm	1436	1284	-
5	Total Dissolved Solids	mg/l	0.18	0.17	500
6	Total Suspended Solids	mg/l	6.4	12.8	-
7	Total hardness as CaCO3	mg/l	447	354	300
8	COD	mg/l	BDL(DL-4.0)	BDL(DL-4.0)	-
9	Calcium as Ca	mg/l	83.5	95.0	-
10	Magnesium as Mg	mg/l	141	150	-
11	BOD	mg/l	BDL(DL-2.0)	BDL(DL-2.0)	-
12	Total alkalinity as CaCO3	mg/l	374	368	-
13	Chloride as Cl-	mg/l	199	187	250
14	Sulphates as SO42-	mg/l	134	79.3	400
15	Iron as Fe	mg/l	71.1	34.7	1.0
16	Nitrate as NO3	mg/l	2.86	4.03	20
17	Fluoride as F	mg/l	2.61	3.90	1.5
18	Manganese as Mn	mg/l	BDL(DL-0.05)	BDL(DL-0.05)	0.5

Table 3.9 Results of Surface Water sampling Analysis

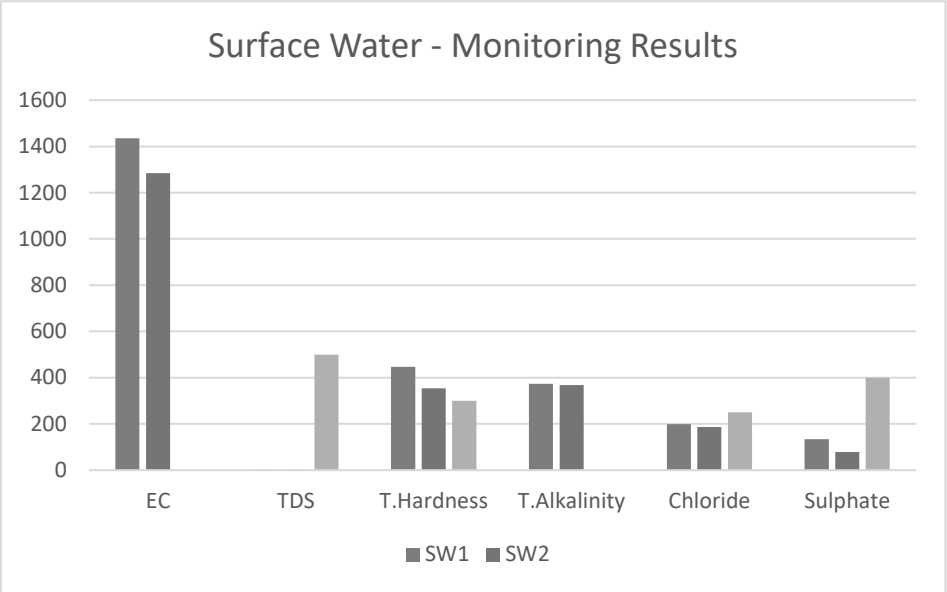


Figure 3.9 Surface Water - Monitoring Results

3.6.3.4 DISCUSSION

Ground Water

Suitability of ground water for drinking/irrigation/industrial purposes is determined keeping in view the effects of various chemical constituents present in water as required human use, plant use. Though many ions are very essential for the growth of plants and human body but when present in excess, have an adverse effect on health and growth.

As Per the data it has been observed that the pH value varies from 7.09 – 7.94, Chlorides Ranges From 77.0 – 495.2 mg/l, Sulphates value found to be between 28.6 – 234.3 mg/l, Fluoride Ranges low in lease area i.e. 0.17 – 0.40 mg/l, Hardness varies from 209 - 439 mg/l, and Total dissolved solid 355 - 1090 mg/l. The ground water has been analyzed as per IS10500: 2012 and found to be suitable for drinking purpose. So the results of chemical and bacteriological analysis of water samples are classified under good class for drinking purpose with respect to total dissolved solids. Total hardness of the samples ranged from soft to moderately hard waters and can be fairly used for drinking. Regular ground water monitoring is suggested as the quality of ground water may fluctuate with groundwater consumption and seasonal variations.

Surface Water

The pH varied from 7.82 – 7.84, while optimal pH range for sustainable aquatic life is 6.5 to 8.5 pH. Chloride varied between 187 - 199 mg/l. Nitrates varied from 2.86 – 4.03 mg/l, while Sulphates varied from 79.3 - 134 mg/l. Turbidity and Total Dissolved Solids varied from 8.5-13.2 mg/l and 0.18 – 0.17 mg/l. From the results, it is observed that Turbidity and TDS values are found to be higher, hence this water can be used for drinking purpose with conventional treatment followed by disinfection.

3.6.4 NOISE ENVIRONMENT

The vehicular movement on road and mining activities is the major sources of noise in study area, the environmental assessment of noise from the mining activity and vehicular traffic can be undertaken by taking into consideration various factors like potential damage to hearing, physiological responses, and annoyance and general community responses.

3.6.4.1 SAMPLING LOCATIONS

In order to assess the ambient noise levels within the study area, noise monitoring was carried out at seven (7) locations. The noise level of monitoring locations were carried out by covering 10 km radius of the project area. A noise monitoring methodology was chosen such that it best suited the purpose and objectives of the study. The noise monitoring locations are given in Figure 3.13 and in below table.

Table 3.10 Noise Monitoring Locations

S.NO	Location Code	Monitoring Locations	Latitude and longitude
1	N1	Within Mine Lease area	9°36'19.27"N & 77°53'49.83"E
2	N2	Moolipatti	9°36'11.20"N & 77°51'39.68"E
3	N3	Virudhunagar	9°35'42.73"N & 77°56'45.98"E
4	N4	M.Puthupatti	9°37'13.94"N & 77°52'29.49"E
5	N5	Vadamalaikurichi	9°37'48.03"N & 77°54'55.38"E
6	N6	Kumaralingapuram	9°35'1.44"N & 77°54'45.79"E

7	N7	Amathur	9°33'53.65"N & 77°51'41.54"E

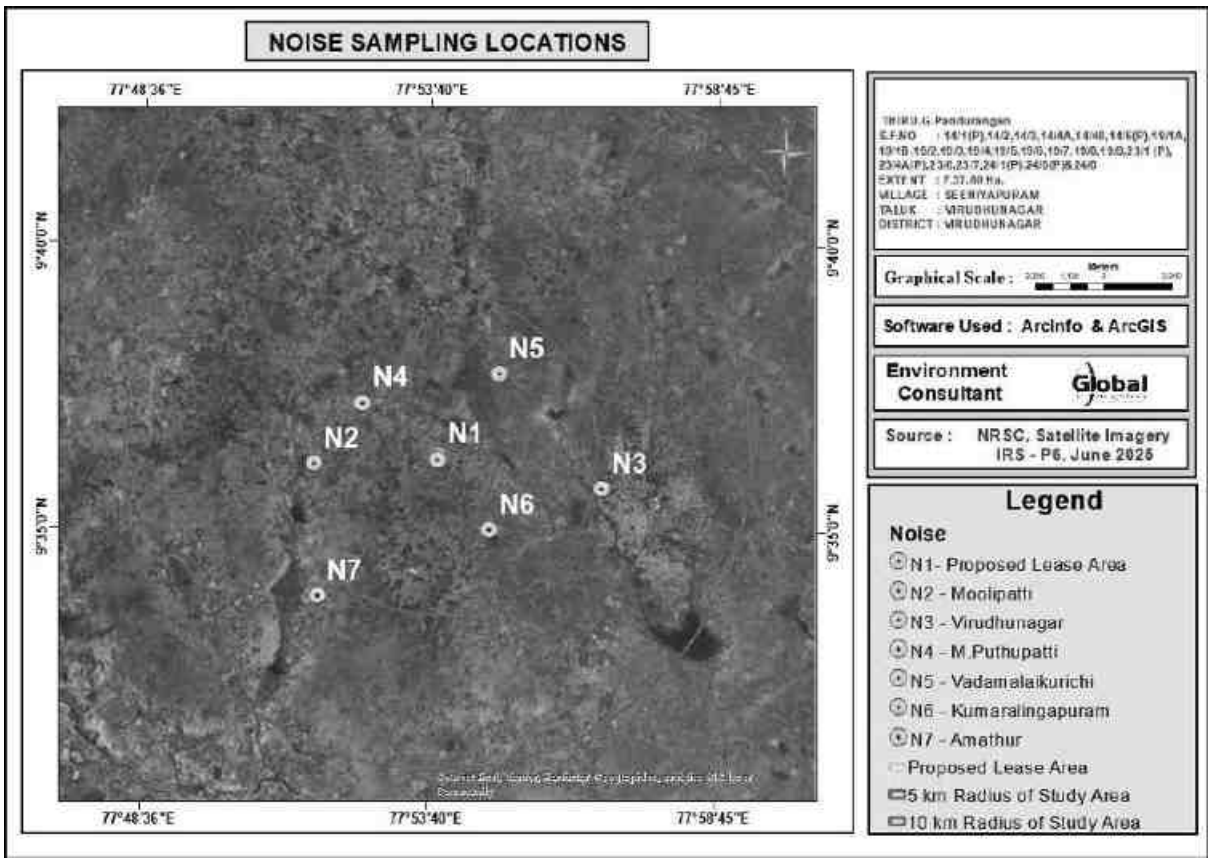


Figure 3.10 Noise Monitoring Location

3.6.4.2 METHOD OF MONITORING

Noise levels were measured using sound level meter manufactured by (Model No - SL4001, Make - Lutron). Sound Pressure Level (SPL) measurements were measured at all locations where ambient air quality monitored; one reading for every hour was taken for 24 hours.

3.6.4.3 NOISE MONITORING RESULT

An analysis of the different Leq data obtained during the study period has been made. Variation was noted during the day-time as well as night-time. The results are presented in below Table 3.12.

Table 3.11 Noise Monitoring Result

Monitoring Location	N1	N2	N3	N4	N5	N6	N7
DAY EQUIVALENT	51.4	50.7	50.5	50.9	48.1	46.9	50.1
NIGHT EQUIVALENT	41.3	42.1	43.1	38.9	41.7	39.8	42.1
DAY & NIGHT EQUIVALENT	46.3	46.3	46.9	44.8	44.9	43.3	46.0

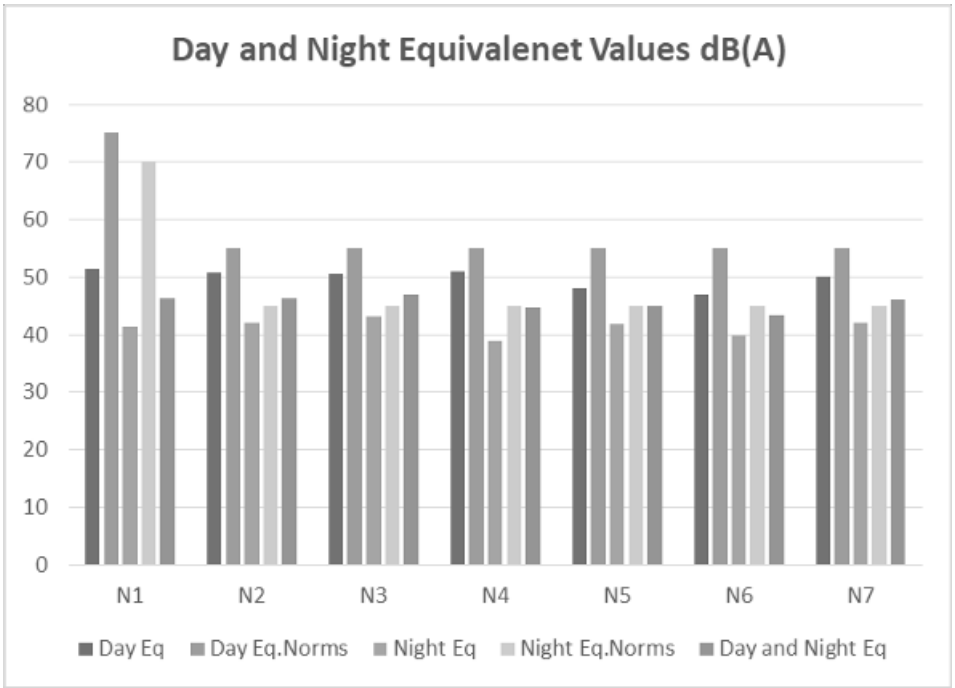


Figure 3.11 Nosie Monitoring Results

3.6.4.4 DISCUSSION

From the table it is observed that the day Equivalent Noise (Leq-d) level were ranging from 46.9-51.4 dB(A) and Night Equivalent Noise (Leq-n) level were ranging from 38.9-43.1 (A). Day and Night Equivalent Noise (Leq-n) level were ranging from 43.3-46.9 dB(A). While comparing with the MoEF Norm of 55 dB(A) for day time and 45 dB(A) for night time in Residential areas, the monitored ambient noise levels are within the limit values.

After commencement of mine operation the anticipated noise level will be 52 dB – 65 dB in the N1 location. (Project Site). It is very negligible and within the prescribed standards of MoEF & CC and DGMS.

3.6.5 SOIL ENVIRONMENT

Soil quality of the study area is one of the important components of the land environment. The composite soil samples were collected from the study area and analyzed for different parameters.

3.6.5.1 MONITORING LOCATIONS

Soil samples were collected from 7 locations to assess the soil quality in and around the mines. Soil samples collected using sampling augers and field capacity apparatus.

Table 3.12– Soil Sampling Locations

S.No	Location Code	Monitoring Locations	Latitude and longitude
1	S1	Within Mine Lease area	9°36'19.27"N & 77°53'49.83"E
2	S2	Moolipatti	9°36'11.20"N & 77°51'39.68"E
3	S3	Virudhunagar	9°35'42.73"N & 77°56'45.98"E
4	S4	M.Puthupatti	9°37'13.94"N & 77°52'29.49"E
5	S5	Vadamalaikurichi	9°37'48.03"N & 77°54'55.38"E
6	S6	Kumaralingapuram	9°35'1.44"N & 77°54'45.79"E
7	S7	Amathur	9°33'53.65"N & 77°51'41.54"E

3.6.5.2 METHODOLOGY

For studying soil quality, sampling locations were selected to assess the existing soil conditions in and around the project site representing various land use conditions. The samples were collected by auger boring into the soil up to 90-cm depth. Three locations were selected for soil sampling on the basis of soil types, vegetative cover, industrial & residential activities including infrastructure facilities, which would accord an overall idea of the soil characteristics.

Composite grab samples of the Gravel were collected by specified depth, and mixed to provide a representative sample for analysis. They were stored in airtight Polythene bags and analyzed at the laboratory.

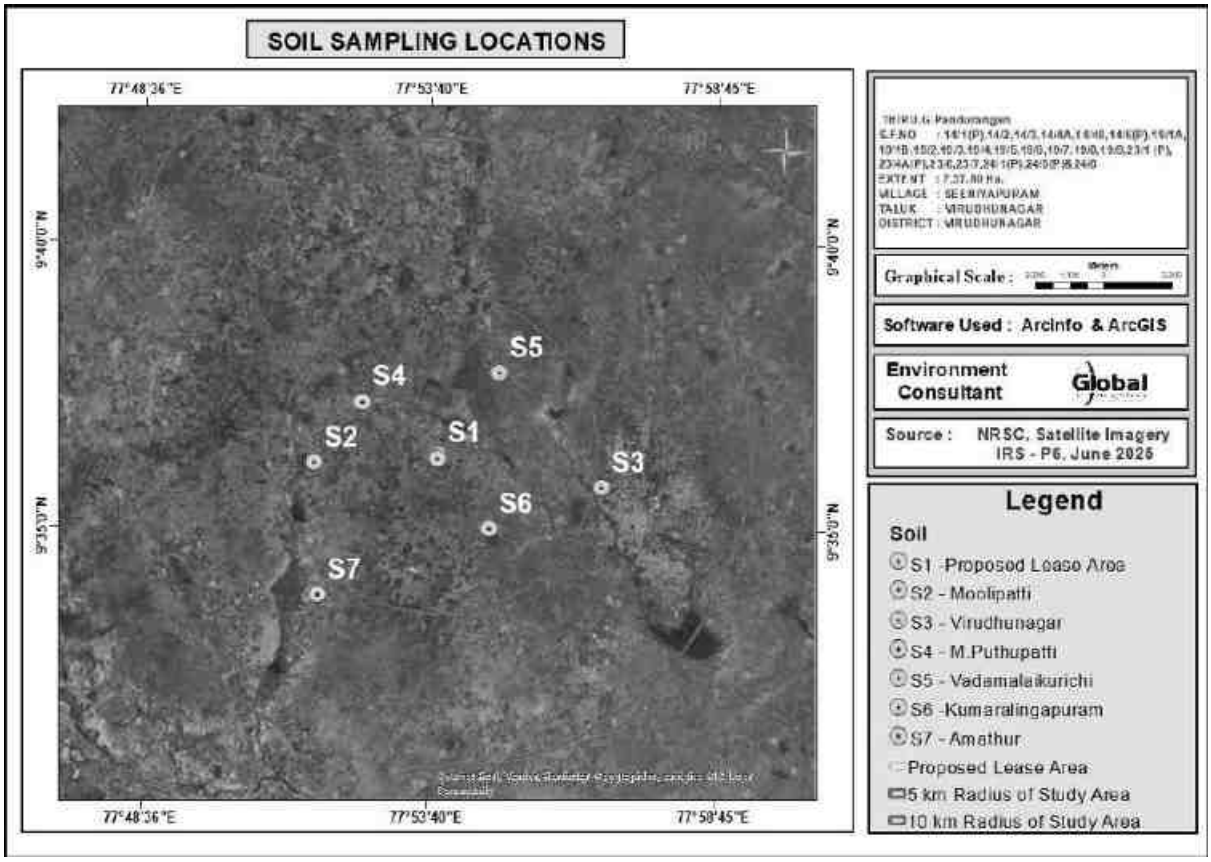


Figure 3.12 - Soil Sampling Stations

3.6.5.3 SOIL TESTING RESULT

Results of the soil samples show that the pH values were found to be 6.8-7.9 and Electrical Conductivity values were ranging between 25.6-128.4 µmhos/cm. Soils are generally Silt Loam. Organic matter values were ranging between 1.05-2.67 %. Total Nitrogen values were ranging between 158-302 mg/kg. Phosphorus values were ranging between 0.77-2.56 µg/g. Potassium values were ranging between 685-1242 mg/kg. Sodium values were ranging between 360-703 mg/kg. Total Sulphate values were observed to be BDL. The soil quality data for the 7 samples collected and analyzed are provided in Table no – 3.13.

Table 3.13 - Soil Testing Result

S. No	Parameter	Unit	S1	S2	S3	S4	S5	S6	S7
1	pH at 25 °C	-	7.9	7.6	6.8	7.4	7.6	7.2	7.2
2	Electrical Conductivity	µmhos /cm	44.6	124.1	25.6	84.1	99.4	101.0	128.4
3	Dry matter content	%	96.67	96.58	97.03	97.35	94.76	95.21	95.04
4	Water Content	%	3.33	3.42	2.97	2.65	5.24	4.79	4.96
5	Organic Matter	%	1.44	1.36	1.05	1.30	2.67	1.19	1.45
6	Soil texture	-	Sandy loam	Clay loam	Sandy clay loam	Clay loam	SILT LOAM	LOAM	Clay loam
7	Grain Size Distribution Sand	%	54.80	14.98	51.18	13.49	18.06	45.09	15.57
8	Silt	%	37.04	25.38	29.95	27.86	54.29	15.62	25.20
9	Clay	%	8.15	59.64	18.87	58.65	27.64	39.28	59.23
10	Phosphorous as P	mg/kg	1.75	1.31	2.56	1.81	0.98	0.77	1.41
11	Sodium as Na	mg/kg	437	360	403	364	703	641	368
12	Potassium as K	mg/kg	706	685	837	740	1242	984	687
13	Total Nitrogen	mg/kg	158	175	163	158	302	171	179
14	Total Sulphur	%	BDL(D.L.0.02)	BDL(D.L.0.02)	BDL(D.L.0.02)	BDL(D.L.0.02)	BDL(D.L.0.02)	BDL(D.L.0.02)	BDL(D.L.0.02)
15	Porosity	%	15.9	15.0	15.4	13.9	13.1	18.4	15.4
16	Water Holding Cabacity	Inches /foot	42.6	42.6	45.8	40.5	41.5	44.7	40.5

3.6.6 LAND ENVIRONMENT

The main objective of this section is to provide a baseline status of the study area covering 10km radius around the project periphery; so that temporal changes due to the mining activities on the surroundings can be assessed in future.

3.6.6.1 LAND USE PATTERN OF THE PROJECT AREA

The present and the post mining land use pattern is shown below.

Table 3.14 Land use pattern of the project site

Sl. No	Land Use	Present Area (Hect)	Area in use during the end of the Scheme period (Hect)
1.	Quarrying Pit	Nil	6.14.00
2.	Infrastructure	Nil	0.02.00
3.	Roads (Temporary)	Nil	0.04.00
4.	Green Belt	Nil	1.17.80
5.	Unutilized	7.37.80	Nil
Total		**7.37.80**	**7.37.80**

- At the end of life of mine, the excavated mine pit / void of 6.14.00 Ha. will act as artificial reservoir for collecting rain water and helps to meet out the demand or crises during drought season.
- After mine closure the greenbelt (1.17.80 Ha.) will be developed along the safety barrier and top benches and 0.06 ha are approach road and Infrastructure.
- Remaining 0.66.0 ha. of land will be covered with vegetation.

3.6.6.2 LAND USE PATTERN OF THE STUDY AREA

A visual interpretation technique has been adopted for land use classification based on the keys suggested in the chapter – V of the guidelines issued by NNRMS Bangalore & Level III classification with 1:50,000 scale for the preparation of land use mapping. Land use pattern of the area was studied through LISS III imagery of Bhuvan (ISRO). The 10 km radius map of study area was taken for analysis of Land use cover. The land use map of the study area is given in Figure 3.17.

Table 3.15 Land use pattern of the Study area of 10 km radius

Sl.No.	LAND USE / LAND COVER	Area in Sq.Km	Area in Percentage
1.	Built-up land	17.32	5.33
2.	Crop land	222.02	68.30
3.	Existing Quarry	1.37	0.42
4.	Fallow land	9.51	2.93
5.	Land with scrub	24.81	7.64
6.	Land without scrub	12.3	3.78
7.	Plantations	16.83	5.17

8.	Salt affected Land	3.87	1.19
9.	Water bodies	17.01	5.24
	Total Area	**325.04**	**100**

Source: Survey of India Toposheet and Landsat Satellite Imagery

From above table it is inferred that the majority of the land in the study area is Crop Land (68.30 %) followed by Land with scrub (7.64%).

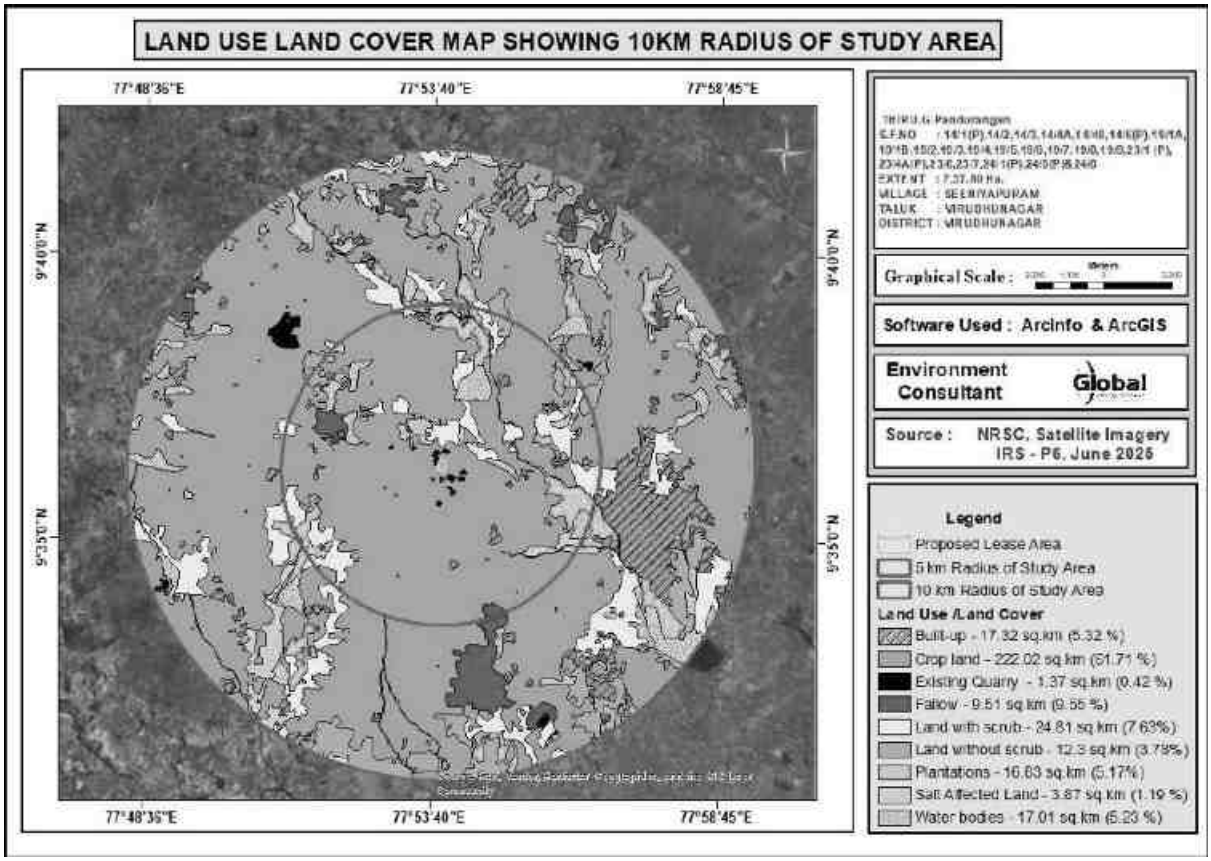


Figure 3.13 Land and use map of the study area

3.6.7 BIOLOGICAL ENVIRONMENT

Study of the biological environment of any area comprises of well-planned ecological survey for the floristic and faunal composition of the areas through various scientifically planned techniques. Accordingly, the ecological survey for the proposed Rough Stone and Gravel Quarry area including core and buffer zone were carried out to identify various species occurring in the area.

3.6.7.1 FLORA

An ecological survey of the study area was conducted with reference to listing of species and assessment of the existing baseline ecological (Terrestrial and Aquatic Ecosystems) conditions. The objective of the survey is as follows:

- Generate existing data from field observations of various terrestrial floristic occurrences.
- Collect secondary data from Government records as well as through discussion with Forest officials, knowledgeable public etc.,
- Compare the data with authentic past records to identify changes, if any.
- Identify the impact of project operations on the biological aspects.

To accomplish the above objectives, a general ecological survey covering an area of 10 km radius was conducted. The locations were identified for phyto-sociological aspects to assess the current status.

3.6.7.2 FLORISTIC COMPOSITION IN CORE ZONE

The lease area is a non- forest, private land with scrub and thorny bushes. In the core zone, there are no trees.

3.6.7.3 FLORISTIC SCENARIO IN BUFFER ZONE AREA

The present report gives the review of published secondary data and the results of field sampling conducted during March to May 2026 and there are no forest blocks in study area. The detailed ecological assessment of the study area has been carried out and are presented in below Table.

Table 3.16 List of Flora

Sl.No	Species	Family	Common Name	Habit	IUCN
1	Abrus precatorius	Fabaceae	Kundumani	Shrub	NA
2	Abutilon indicum	Malvaceae	Perun thuthi	Shrub	NA
3	Acacia nilotica	Mimosaceae	Karuvelam	Tree	LC
4	Acacia planifrons	Mimosaceae	Kodaivelam	Tree	NA
5	Acalypha indica	Euphorbiaceae	Kuppaimeni	Herb	NA
6	Acanthospermum hispidum	Compositae	--	Herb	NA
7	Achyranthes aspera	Amaranthaceae	Nayurivi	Herb	NA
8	Aegle marmelos	Rutaceae	Vilvam	Tree	NA
9	Aerva lanata	Amaranthaceae	Sirupeelai	Shrub	NA

10	Aerva persica	Amaranthaceae	Perumpeelai	Shrub	NA
11	Aeschynomene americana	Fabaceae	--	Herb	NA
12	Aeschynomene aspera	Fabaceae	Thakkai	Shrub	NA
13	Ageratum conyzoides	Compositae	Poom pillu	Herb	NA
14	Alloteropsis cimicina	Poaceae	--	Grass	NA
15	Alternanthera sessilis	Amaranthaceae	Ponnanganni	Herb	NA
16	Anisomeles indica	Labiatae	--	Herb	NA
17	Annona squamosa	Annonaceae	Seetha	Tree	NA
18	Arachis hypogaea	Fabaceae	Verkadalai	Herb	NA
19	Argemone Mexicana	Papaveraceae	Braman Thandu	Herb	NA
20	Aristida adscensionis	Poaceae	--	Grass	NA
21	Aristida hystrix	Poaceae	--	Grass	NA
22	Aristolochia bracteolata	Aristolochiaceae	Aduthinnappalai	Herb	NA
23	Barleria acuminata	Acanthaceae	Vellai kurinji	Shrub	NA
24	Barleria longiflora	Acanthaceae	--	Shrub	NA
25	Barleria noctiflora	Acanthaceae	Barleria	Shrub	NA
26	Boerhavia diffusa	Nyctaginaceae	Mookarattai	Herb	NA
27	Boerhavia erecta	Nyctaginaceae	Seemai mookarattai	Herb	NA
28	Carica papaya	Caricaceae	Pappali	Tree	NA
29	Carissa carandas	Apocynaceae	Kalaa, Perun kala	Shrub	NA
30	Cassia fistula	Caesalpiniaceae	Kondrai	Tree	NA

3.6.7.4 LIST OF FAUNA

The list of fauna within the study area is given in Table No – 3.18.

Table 3.17 List of Fauna

SL.No	Common Name	*Scientific Name*	IUCN status
	Phasianidae		
1	Indian peafowl		
2	Grey francolin	*Francolinus pondicerianus*	LC
	Anatidae		
3	Indian spot billed duck	*Anas poecilorhyncha*	LC
	Threskiornithidae		
4	Black headed Ibis	*Threskiornis melanocephalus*	NT
	Ardeidae		
5	Indian pond heron	*Ardeola grayii*	LC
6	Purple heron	*Ardea purpurea*	LC
7	Grey heron	*Ardea cinerea*	LC
8	Cattle egret	*Bubulcus ibis*	LC
	Phalacrocoracidae		

9	Little cormorant	*Phalacrocorax niger*	LC
	Accipitridae		
10	Brahminy kite	*Haliastur indus*	LC
11	Shikra	*Accipter badius*	LC
12	Black kite	*Milvus migrans*	LC
	Rallidae		
13	White breasted waterhen	*Amaurornis phoenicurus*	LC
14	Purple swamphen	*Porphyrio porphyrio*	LC
	Charadriidae		
15	Red wattled lapwing	*Vanellus indicus*	LC
16	Common ringed plover	*Charadrius hiaticula*	LC
	Columbidae		
17	Common pigeon	*Columba livia*	LC
	Psittaculidae		
18	Rose ringed parakeet	*Psittacula krameri*	LC
	Cuculidae		
19	Common hawk cuckoo	*Hierococcyx varius*	LC
20	Asian koel	*Eudynamys scolopaceus*	LC

The core zone of the area is patta land, No forest land is involved in the project area. The proposed quarry area is covered by thorny bushes. There is no Wild Life Sanctuary or National Park within the study area of 10km. There is no schedule I species of animals observed within study area as per Wildlife Protection Act 1972 as well as no species is in vulnerable, endangered or threatened category as per IUCN. There is no endangered red list species found in the study area. Hence this small mining operation over short period of time will not have any significant impact on the surrounding flora and fauna.

3.6.8 TOPOGRAPHY

The area applied for quarry lease is exhibits almost plain topography covered by Gravel formation. The massive Charnockite formation is noticed below 5m (Avg) Gravel formation and sloping towards southeastern side of the area, the altitude of the area is above 135 m (maximum) from MSL.

3.6.9 DRAINAGE PATTERN OF THE AREA

The area is studded with few tanks that serve as the source of drinking water and also their surplus feeds adjoining tanks. The drainage map of the study area is given in Figure 3.18.

3.6.10 GEOMORPHOLOGY

Predominantly the buffer zone is dominated by Shallow weathered Buried Pediplan, and the lease area falls under the same. Geomorphology of the study area is detailed below. The geomorphology of the study area is given in Figure 3.20.

Table 3.18 Geomorphology

Sl.No.	GEOMORPHOLOGY	Area in Sq.Km	Area in Percentage
1	Pediplain with shallow basement	5.95	1.83
2	Moderately weathered buried Pediplain	69.34	21.39
3	Shallow Weathered buried Pediplain	247.52	76.37
4	Upland	1.32	0.41
	Total Area	**324.13**	**100.00**

3.6.11 GEOLOGY

The regional geology of the study area is shown below in Figure 3.19. The type of rock formation in the core and buffer zone is composed of Hornblende biotite gneiss and the lease area falls under the same category. The geology of the study area is detailed below.

Table 3.19 Geoology

Sl.No.	GEOLOGY	Area in Sq.Km	Area in Percentage
1	Calc granulite and limestone	0.56	0.17
2	Charnockite	0.42	0.13
3	Fluvial	3.58	1.11
4	Garnet-Biotite-Sillimanite-gneiss	15.71	4.90
5	Garnet-biotite gneiss	22.37	6.97
6	Hornblende biotite gneiss	274	85.32
7	Quartzite	4.49	1.40
	Total Area	**321.13**	**100.00**

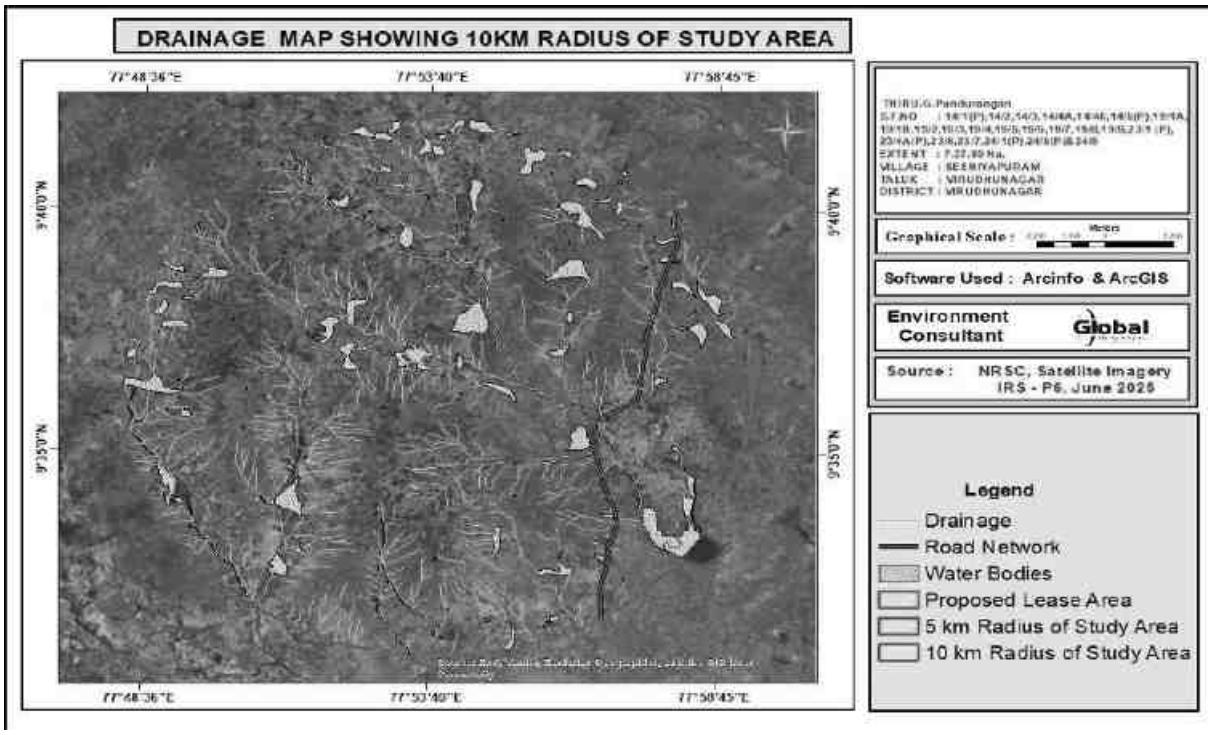


Figure 3.14 Drainage map of the study area

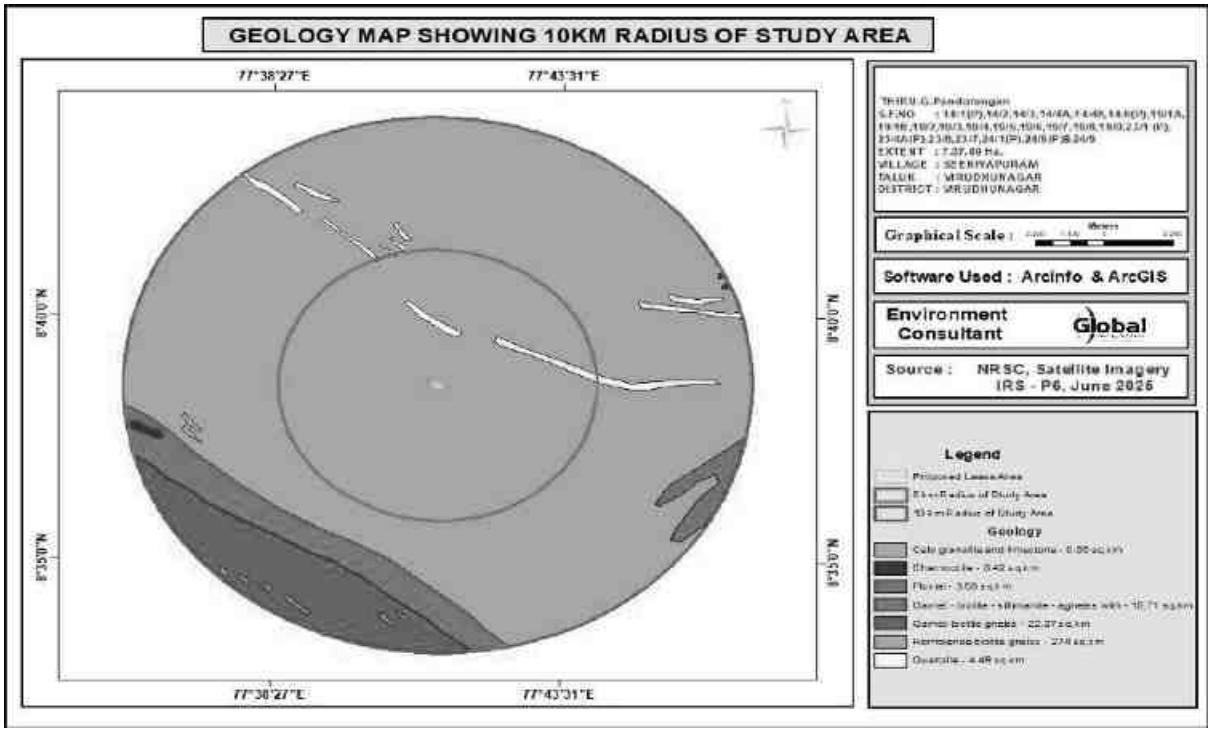


Figure 3.15 Geology map of the study area

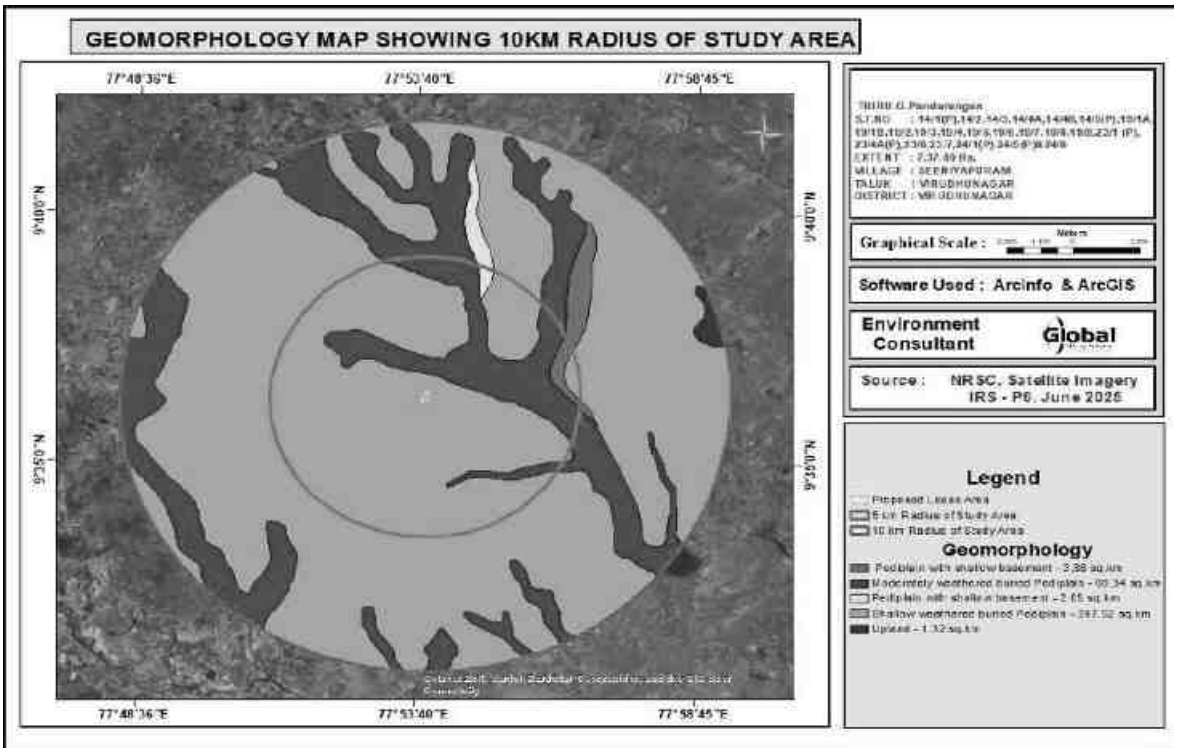


Figure 3.16 Geomorphology map of the study area

3.6.12 SOCIO-ECONOMIC ENVIRONMENT

Socio-economic study is an essential part of environmental study. It includes demographic structure of the area, provision of basic amenities viz., housing, education, health and medical services, occupation, water supply, sanitation, communication, transportation, prevailing diseases pattern as well as feature like temples, historical monuments etc., at the baseline level. This will help in visualizing and predicting the possible impact depending upon the nature and magnitude of the project.

It is expected that the Socio-Economic Status of the area will substantially improve because of this proposed project. As the proposed project will provide direct and indirect employment and improve the infrastructural facilities in that area and, thus, improve their standard of living.

3.6.12.1 OBJECTIVES OF THE STUDY

The objectives of the socio-economic study are as follows:

- To study the socio-economic status of the people living in the study area of the proposed mining project
- To assess the impact of the project on Quality of life of the people in the study area
- To recommend Community Development measures needs to be taken up in the study Area.

3.6.12.2 SCOPE OF WORK

- To study the Socio-economic Environment of the area from the secondary sources;
- Data Collection & Analysis
- Prediction of project impact
- Mitigation Measures

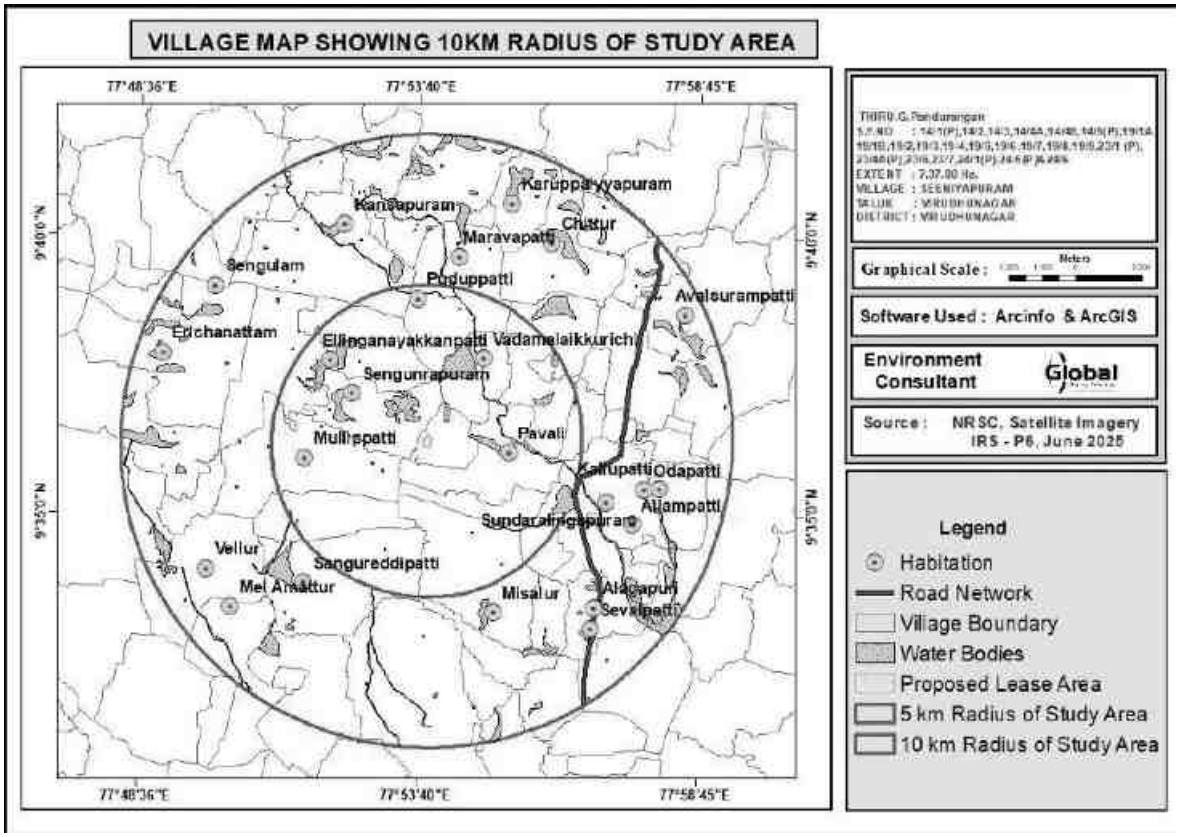


Figure 3.17 Village Map of the Study Area

Table 3.20 - Population profile of the study area

Population profile of the study area		
Particulars	**No of Population**	**Percentage (%)**
A. Population break-up by Gender		
Male Population	22792	49.99
Female Population	22793	50.01
Total	**45585**	100
B. Population break-up by Caste		
Scheduled Caste	11058	24.25
Scheduled Tribes	22	0.05
Others	34505	75.70
Total	**45585**	100
C. Literacy Level		
Total Literate Population	30694	67.33
Others	14891	32.67
Total	**45585**	100
D. Occupational structure		
Main workers	22140	48.57
Marginal workers	2484	5.45
Total workers	24624	54.02
Total Non-workers	20961	45.98
Total	**45585**	**100**

Basic Amenities

A better network of physical infrastructure facilities (well-built roads, rail links, irrigation, power and telecommunication, information technology, market-network and social infrastructure support, viz. health and education, water and sanitation, veterinary services and co-operative) is essential for development of the rural economy. All basic amenities Education (higher education, colleges, universities, Medical college, Transport facilities, Railway station, Bus station are available.

FIG 3.18 GENDER-WISE POPULATION DISTRIBUTION

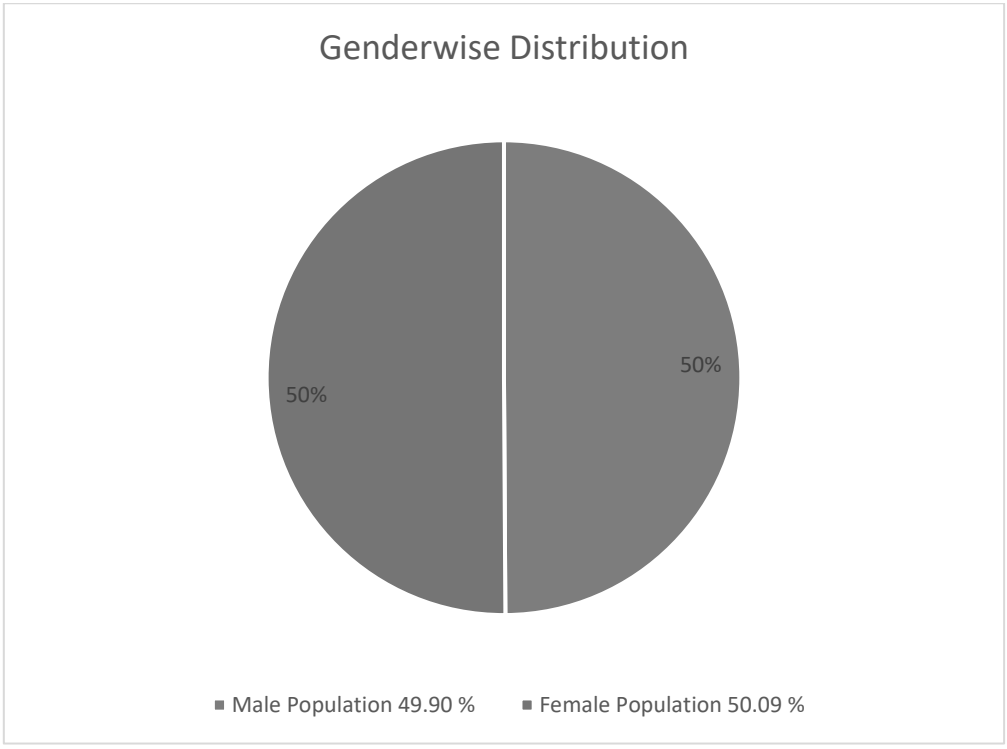


FIG 3.19 GENDER WISE LITERACY DISTRIBUTION

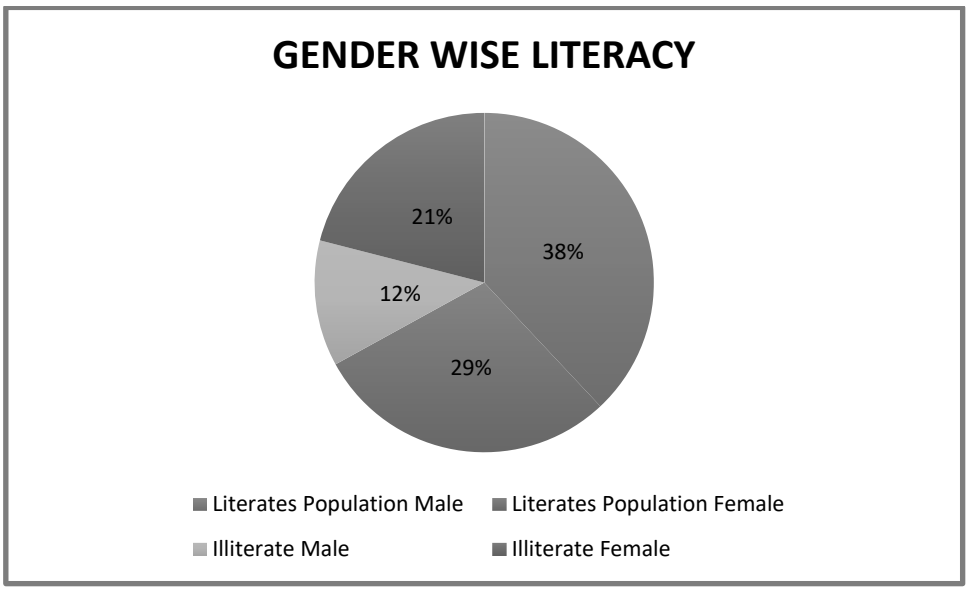
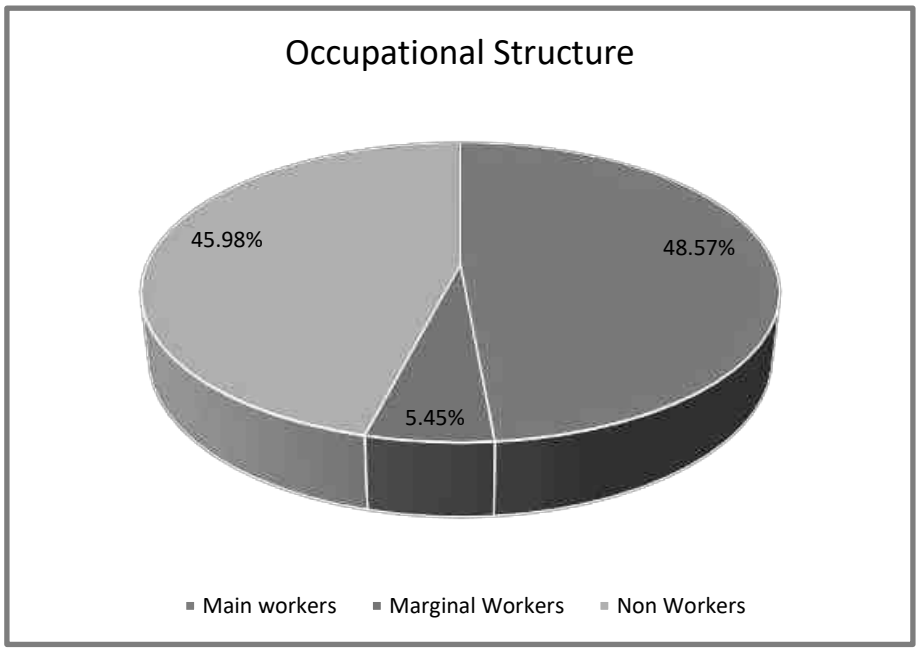


FIG 3.20 OCCUPATIONAL STRUCTURE WITHIN BUFFER ZONE



4.0 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

4.1 GENERAL

Environmental impacts both direct and indirect on various environmental attributes due to cluster quarries will be created in the surrounding environment, during the operational and post–operational phases. The occurrence of mineral deposits, being site specific, their exploitation, often, does not allow for any choice except adoption of eco-friendly operation. The methods are required to be selected in such a manner, so as to maintain environmental equilibrium ensuring sustainable development.

In order to maintain the environmental commensuration with the mining operation, it is essential to undertake studies on the existing environmental scenario and assess the impact on different environmental components. This would help in formulating suitable management plans sustainable resource extraction.

4.2 PROJECT SPECIFIC IMPACTS AND MITIGAION MEASURES

This is a proposed project and Mechanized Open Cast mining will be carried out to quarry out Rough Stone. The identified impacts during mining and associated activities have been studied in relation to various environmental components like Air, water, noise, vibration, land, transport etc., and the details of the same are elaborated in this chapter. The impact assessment is done for the peak production of the mine lease period and the entire area of quarry operation and can be construed as applicable for the entire lease period. Based on the baseline environmental status at the project site, the environmental factors that are likely to be affected (Impacts) are identified, quantified and assessed.

The following parameters are of significance in the Environmental Impact Assessment and are being discussed in detail in this chapter.

- Land environment
- Soil environment

- Water Environment
- Air Environment
- Noise Environment
- Socio economic environment
- Biological Environment

The proposed mining activity is small and not likely to have any serious impacts on the existing environment of the area. However, the potential impacts of the proposed mining and related activities on various environmental parameters are discussed.

4.2.1 LAND ENVIRONMENT

4.2.1.1 ANTICIPATED IMPACT

The main anticipated impact on the Land Environment due to quarrying operation is change in Landscape, change in Land – use Pattern.

The entire mine lease area of 7.37.80 Ha is Patta land. The project area of 7.37.80 Ha is proposed to be altered by effective quarrying operation such as excavation (6.14.00 Ha), Infrastructure (0.02 Ha), Road (0.04 Ha) and greenbelt (1.17.80 Ha). The ultimate depth of quarrying is proposed by formation of 1 pit with maximum depth of 85m below the ground level and will not intersect the ground water table. The mine closure plan is given in 2.8. The present land use pattern and the post mining land use pattern is shown below.

Table 4.1 Land use pattern of the project site

Sl. No.	Land Use	Present Area (Ha)	Area in use during the quarrying period (Ha)
1.	Quarrying Pit	Nil	6.14.00
2.	Infrastructure	Nil	0.02.00
3.	Roads	Nil	0.04.00
4.	Green Belt	Nil	1.17.80
5.	Unutilized	7.37.80	Nil
	Total =	**7.37.80**	**7.37.80**

- Change in topography of the mine lease area will change at the end of the life of the mine.
- At the end of life of mine, the excavated mine pit / void of 6.14.00 Ha. will act as artificial reservoir for collecting rain water and helps to meet out the demand or crises during drought season.
- After mine closure the greenbelt (1.17.80 Ha.) will be developed along the safety barrier and top benches and 0.06 ha are approach road and Infrastructure.
- Problems to agricultural land and human habitations due to dust, and noise caused by movement of heavy vehicles.
- Degradation of the aesthetic environment of the core zone due to quarrying.
- Soil erosion and sediment deposition in the nearby water bodies due to earthworks during the rainy season.
- Siltation of water course due to wash off from the exposed working area.

4.2.1.2 MITIGATION MEASURES

In the Rough Stone and Gravel Quarrying operation, land degradation is minimal. After completion of the quarrying operation, the land will be allowed to collect rainwater, this rough stone does not produce any toxic effluents in the form of solids, liquids, or gases.

It is a simple quarrying operation where 100% of stones will be removed systematically, according to the approved Mining Plan.

The periphery of the mining lease area will be converted to a greenbelt to prevent Noise and sound propagation to the nearby lands.

Entire mined out area will be properly fenced to prevent inadvertent entry of human and animals.

Since the entire material from the quarry face will be directly dispatched to the consumers, there will not be any stockpiles. There are no waste dumps in this quarry. As such there will not be any wash out due to stock pile or waste dumps. To manage surface runoff, garland drain will be constructed around the quarry and connected to a settling pond with silt traps.

In terms of aesthetics, natural vegetation surrounding the quarry will be retained (such as in a buffer area i.e., 7.5 m safety barrier & 10 m provided to the adjoining patta and poramboke lands) so as to help minimize dust emissions.

4.2.2 SOIL ENVIRONMENT

4.2.2.1 ANTICIPATED IMPACT

Mining activities often disrupt the existing environment as they involve disturbing the untouched earth materials. The surface consists of Gravel formation followed by Rough stone which is proposed to excavate completely during the quarrying operation. Erosion of top layer (Gravel), extracted fine material can result in substantial sediment loading to surface waters and drainage ways. During rainy season surface run off may cause sedimentation in low lying areas.

4.2.2.2 MITIGATION MEASURES FOR SOIL EROSION AND SOIL CONSERVATION

- Runoff water will be collected in bottom of the quarry and used for plantation and dust suppression during dry season.no run off water will be discharged beyond lease area.
- Wet drilling and haul road water sprinkling will be carried out to minimise air born dust at source level, which may cause soil pollution due to sedimentation.
- Garland drains will be constructed around the project area with silt traps to control the soil erosion during rainy seasons.
- Greenbelt development (1.17.80 Ha.) all along the periphery of the project area (i.e., 7.5 m safety barrier) will ensure binding strength and minimizes soil erosion.
- Soil sampling will be carried out in the core zone for every season to ensure the soil quality is not affected due to the quarrying activities.
- Monitoring and maintenance – Weekly monitoring and daily maintenance of erosion control systems so that they perform as specified specially during rainy season.

4.2.3 WATER ENVIRONMENT

4.2.3.1 ANTICIPATED IMPACT ON SURFACE AND GROUND WATER

The impact due to quarrying on the water quality is expected to be insignificant because of no use of chemicals or hazardous substances during quarrying process. The quarrying activity will not intersect ground water table as quarrying is proposed upto a depth of 85 BGL and water table is found at a depth of 98m BGL.

An odai passing at adjoining to E and W side of the project site. No other water bodies close to the project site, There is no proposal for discharging of wastewater outside the project area. There is no proposal for a rough stone processing or workshop within the project area, so no effluent is anticipated in the mine.

During rainy season rain water will be collected in the quarry pit and later used for greenbelt development and for the water sprinkling in the haul roads.

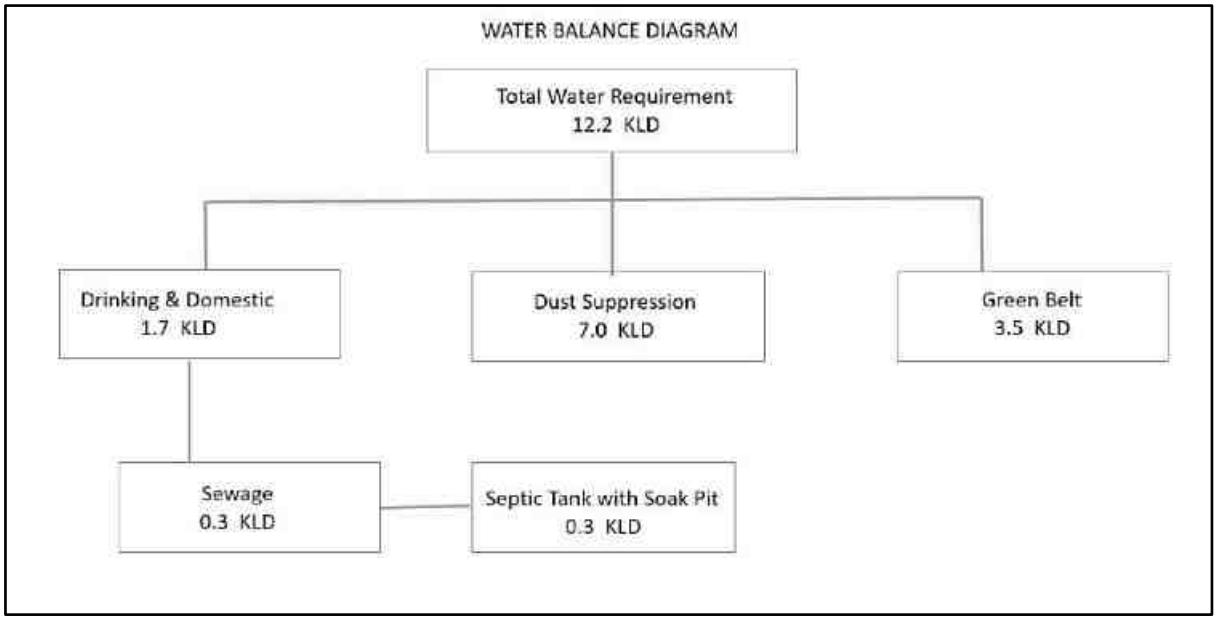
4.2.3.2 ANTICIPATED IMPACT DUE TO WATER USE IN MINE'S

The total water requirement for the project will be 12.2 KLD comprising Drinking & Domestic 1.7 KLD, Dust suppression 7.0 KLD, & Greenbelt 3.5 KLD purpose. The water will be sourced initially from outside agencies. Later the rainwater collected in the mine pit sump will be used for this purpose. The water balance diagram for the same is shown in Figure No 4.1.

4.2.3.3 MITIGATION MEASURES

The following mitigation measures are suggested for water management

Figure 4.1 Water Balance Diagram



- Rainwater will be collected in lower part of the quarry pit by construction of garland drains to divert surface run-off and will be connected to setting tank

of 6 m (l) x 6m (w) x 3m (d) to allow suspended solids to settle down if any. This collected water will act as a rain water harvesting system and will be used for dust suppression and greenbelt development.

- Regular water quality will be carried in nearby villages to ensure the water quality is not affected due to the quarrying activities.
- Domestic sewage from site office & urinals/latrines provided in project area will be discharged through septic tank followed by soak pit system.
- Only clear and settled water free from silt content will be used for dust suppression and greenbelt development.
- De-silting will be carried out before and immediately after the monsoon season and the settling tank and drains will be cleaned weekly, especially during monsoons.

4.2.3.4 RAINWATER HARVESTING PLAN

Since the lease proximate areas are with less water potential and the rainwater is the major source for replenishment of ground water, effective rainwater harvesting and other water augmentation measures are proposed in this project.

- Development of garland drain around the quarry connected to settling tank.
- Cleaning of drain periodically to prevent siltation
- The supernatant clear water from the settling pond will drain into the nearby channel on the eastern side of the lease.
- Utilizing the rainwater harvested in the mine pit to meet the water requirement of the project.

The average annual rainfall of the area is 900 mm. Taking into consideration of 0.35 as runoff co-efficient for mining area, the total quantity of rain water can be harvested per annum from the area has been tabulated as below.

Table 4.2 – Rainwater Harvesting Plan

S.NO	Rainwater Harvesting Area	Area in Sq.m	Average annual rainfall	Volume of harvestable quantity (Cum) of rain water per annum
1	Quarry Area	61400	0.9	19,341
2	Unutilized Area	NIL	0.9	-

Total Harvested Rainfall	**19,341**

Total surface water runoff is 19,341 Cum per Annum. 10% of this amount will be evaporated and rest 17,407 m^3 will be recharged in the rain water harvesting pit.

Four sumps will be proposed to harvest rain water and each sump capacity will be 10,000 Cu.m. The rain water stored in the pond will be utilized for plantation, dust suppression activities. The capacity of Rain water harvesting post will be sufficient to arrest the surface runoff from the lease area considering the highest amount of rain fall.

4.2.4 AIR ENVIRONMENT

The existing ambient air quality in the area has been described in Chapter-3. Opencast mechanized mining, using jackhammer drilling, blasting, and excavation through an excavator, as well as mineral transport through tippers, will be carried out for the excavation of rough stone.

4.2.4.1 ANTICIPATED IMPACT

The proposed mining and allied operations may cause deterioration of air quality due to pollution arising from the project operation if prompt care is not taken. The principal sources of air pollution in general due to mining and allied activities will be:

The air-borne particulate matter generated by quarrying operations and transportation is mainly PM_{10} and PM2.5, and emissions of sulfur dioxide (SO_2) and oxides of nitrogen (NO_2) due to excavation/loading equipment and vehicles plying on haul roads are the cause of air pollution in the project area.

Furthermore, the loading, unloading, and transportation of rough stone, as well as wind erosion of the exposed area and movement of light vehicles, will cause pollution within a 500-meter radius of the project area due to quarrying activities. This has a cumulative impact on the ambient air environment around the project area.

4.2.4.2 MITIGATION MEASURES

The following measures will be adopted to control impact on the air quality due to mining operations in the lease area due to adoption of which, no major impact on air quality is envisaged due to this proposed opencast mining operation.

Table 4.3 Mitigative Measures for Air Environment

S.NO	Activity	Consequence	Mitigative Measures
1	Drilling	Dust Emission	Usage of wet drilling
			Covering of drill holes with wet cloth
			Usage of sharp drill bits for drilling of holes.
			Provision of dust mask to workers working at highly dust prone and affected areas.
2	Blasting	Prompt dust emission	Well-designed blasting parameter, effective stemming to achieve optimum breakage occurs without generating fines.
			Use of appropriate explosives for blasting and avoiding overcharging of blast holes.
			Avoiding blasting during high wind periods where the fine dust is carried out away easily affecting the ambient air quality.
			Use of controlled blasting techniques with milli second delay detonators to keep the dust generation, noise as well as vibration level within the prescribed limits.
3	Excavation and Loading	Dust emission, Gaseous Emission	Proper maintenance of HEMM will be carried out to minimize dust and gaseous emission at the source level.
			Water sprinkling will be carried out at excavation and loading area.
			Imparting sufficient training to operators on safety and environmental parameters.
			Avoiding overloading of dumpers.
4	Transportation	Dust emission, Gaseous Emission	Regular wetting of transport road using mobile water tanker.
			Proper maintenance of haul road and other roads
			Avoiding overloading of tippers
			Covering of loaded tippers with tarpaulins during transportation
			Vehicular emissions will be controlled through regular and proper preventive maintenance only PUC valid vehicles will be used for transportation.
5	Greenbelt	Dust emission, Gaseous Emission	Development of greenbelt / barriers around mine in the safety zone and carrying out plantation within the lease area.
6	Occupation Health	Dust emanation, Gaseous Emission	Dust mask will be provided to the workers and their use will be strictly monitored
			Annual medical checkups, trainings and campaigns will be arranged to ensure awareness about importance of wearing dust masks among all mine workers & tipper drivers
			Ambient Air Quality Monitoring will be conducted six months once to assess effectiveness of mitigation measures proposed.

4.2.4.3 AIR QUALITY IMPACT PREDICTION

The AERMOD atmospheric dispersion modeling (AERMOD Cloud remote version) is used for assessment of incremental Ground level concentration (GLC) for the proposed production. Area source model taken into consideration taking into consideration of wet drilling and loading. Further line source model was taken into consideration for transportation through haul road. Baseline meteorological studies were conducted for the period of March to May 2026. The following sources are considered.

TABLE 4.4 Types of Source for Air Pollution in Mining

S. No.	Type of mining operation	Type of Source
1	Wet drilling	Point
2	Loading	Point
3	Transportation	Line

ARRIVING EMISSION FACTOR

Emission factor for PM_{10} for different activities are given below.

TABLE 4.5 Emission Factors for Mining Activities

S. No.	Activity	Emission factor	Unit
1	Wet drilling	0.00008	lb/s
2	Ore loading	0.0014	Kg/t/s
3	Transportation	0.26	Kg/VKT

Source

1. Jose I. Huertas & Dumar A, Camacho & Maria E. Huertas, Standardized emissions inventory methodology for openpit mining areas, Environmental Science Pollution Research, 2012.
2. AP-42. U.S Environmental Protection Agency, Office of Air Quality Planning and Standards

EMISSIONS FROM THE PROPOSED PROJECT

The emissions from each activity after the application of control and mitigation measures like water sprinkling, proper maintenance of transport vehicles, etc., are given below.

TABLE 4.6 Pm 10 And Pm 2.5 Emission From Mining Activities			
S. No.	**Activity**	**PM10**	**PM2.5**
1	Wet drilling	0.22	0.04
2	Ore loading	0.87	0.16
3	Transportation	0.23	0.05

MODEL INPUT DATA:

The air pollution modeling carried out represents the normal operating scenarios. As the project is a mining project the major source of pollution is particulate matter. The SOx and NOx emission will be very less only due to vehicular emission. So the pollutant taken for prediction of incremental concentration is particulate matter (PM_{10} & $PM_{2.5}$). The predicted incremental Ground Level Concentrations (GLCs) for particulate matter is likely to be contributed by the proposed project. The average predicted 24 hr average concentration has been tabulated as below.

EMISSION ESTIMATION

The emission estimations for the activities are detailed below.

Table 4.7 - Area Emissions – Total Material handling

Quantity, TPA	20,34,000 m^3 OF ROUGH STONE AND 3,06,850 m^3 OF GRAVEL
Operational Hours Per Year	2400
Activity Rate, t/hr.	41.56
Emission of dust, g/t.	0.22
Emission of dust, g /hr.	79,5879
Area of influence, m^2	628
Uncontrolled emission rate g/s/m^2	0.00006804
Controlled emission rate, PM10 g/s/m^2	0.000068048
Controlled emission rate, PM2.5 g/s/m^2	0.00049156

Table 4.7.1 Area Emissions – Total Material handling (Cluster Rough Stone)

Quantity, m3	**Thiru. G.Pandurangan** Rough Stone: 20,34,000 m^3 Gravel: 3,06,850 m^3 (Five years) **Thiru. S.Puliraj** Rough Stone: 26,640 m^3 & Gravel: 22,560 m^3 **Thiru. G.Pandurangan** Rough Stone: 2,90,630 m^3 & Gravel: 1,14,114 m^3 **Thiru. G.Pandurangan** Rough Stone: 4,13,130 m^3 & 1,58,142 m^3 Gravel **Thiru. S. Ramasamy** Rough Stone: 75,912 m^3 & 44,268 m^3 Gravel
Operational Hours Per Year	2400
Activity Rate, t/hr.	455.55
Emission of dust, g/t.	0.78
Emission of dust, g /hr.	995646
Area of influence, m2	645
Uncontrolled emission rate g/s/m2	0.0007804
Controlled emission rate, PM10 g/s/m2	0.00078046
Controlled emission rate, PM2.5 g/s/m2	0.00061458

Table 4.8 - Line Source – Transport of Rough Stone from Pit to Boundary

Quantity, TPA	20,34,000 m3 OF ROUGH STONE AND 3,06,850 m3 OF GRAVEL
Operational Hours Per Year	2400
Capacity of each Dumper (T)	10
Total No. of Tippers/ year	51100
Lead length/trip, Km	2.6
Total VKT/Year	68972
Emission Kg/VKT	0.35
Total emission Kg/Year	72654
Uncontrolled emission rate g/s/m	5.0568
Controlled emission rate, PM10 g/s/m	0.505689
Controlled emission rate, PM2.5 g/s/m	0.39785

Table 4.8.1 Line Source – Transport of Rough Stone (Cluster)

Quantity, m^3	**Thiru. G.Pandurangan** Rough Stone: 20,34,000 m^3 Gravel: 3,06,850 m^3 (Five years) **Thiru. S.Puliraj** Rough Stone: 26,640 m^3 & Gravel: 22,560 m^3 **Thiru. G.Pandurangan** Rough Stone: 2,90,630 m^3 & Gravel: 1,14,114 m^3 **Thiru. G.Pandurangan** Rough Stone: 4,13,130 m^3 & 1,58,142 m^3 Gravel **Thiru. S. Ramasamy** Rough Stone: 75,912 m^3 & 44,268 m^3 Gravel
Operational Hours Per Year	2400
Capacity of each Dumper (T)	10
Total No. of Tippers/ year	97090
Lead length/trip, Km	0.42
Total VKT/Year	956233
Emission Kg/VKT	0.39
Total emission Kg/Year	95653
Uncontrolled emission rate g/s/m	9.9048
Controlled emission rate, PM10 g/s/m	0.990487
Controlled emission rate, PM2.5 g/s/m	0.43098

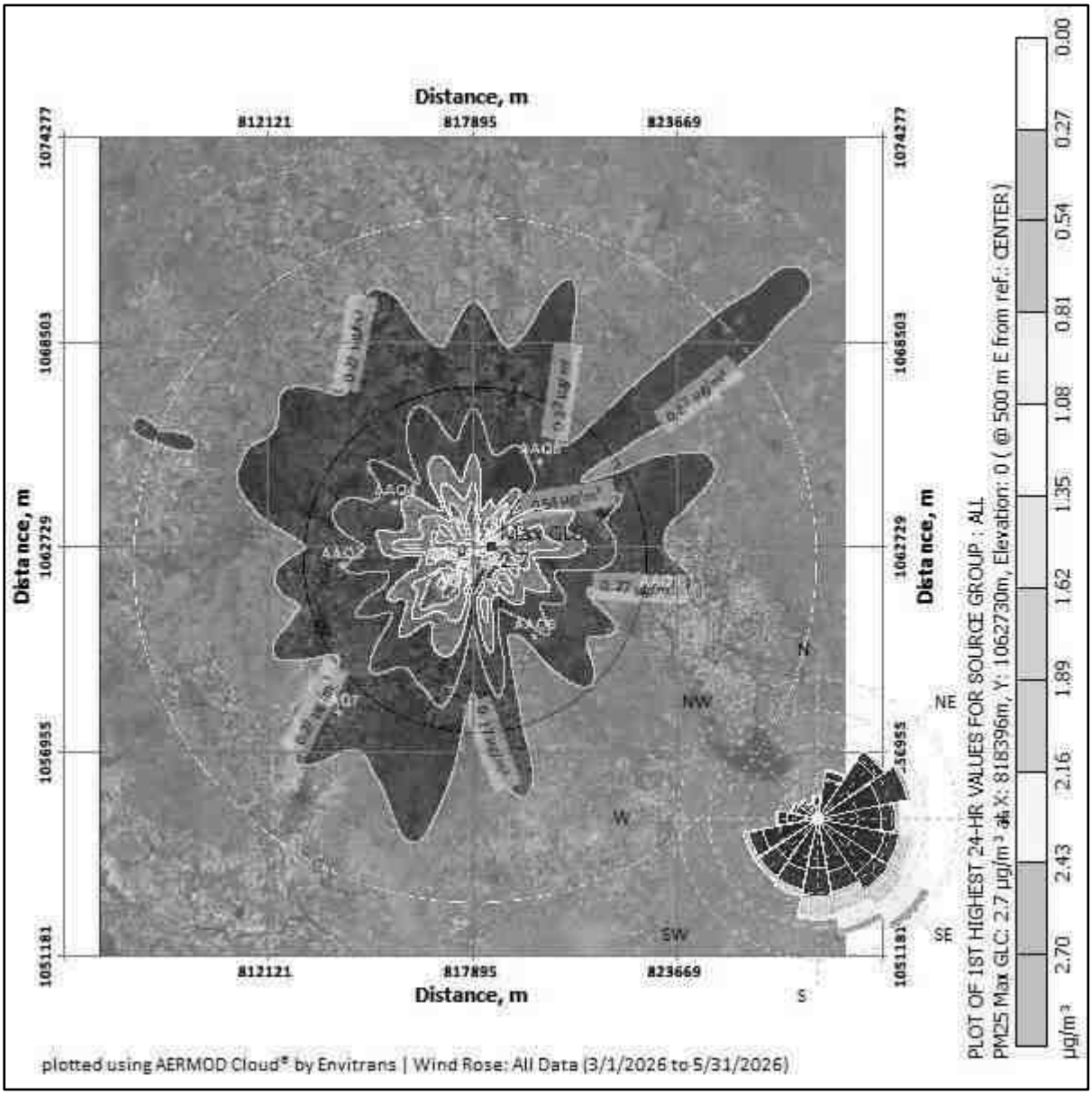


Figure 4.2 Isopleth of GLC Prediction for $PM_{2.5}$

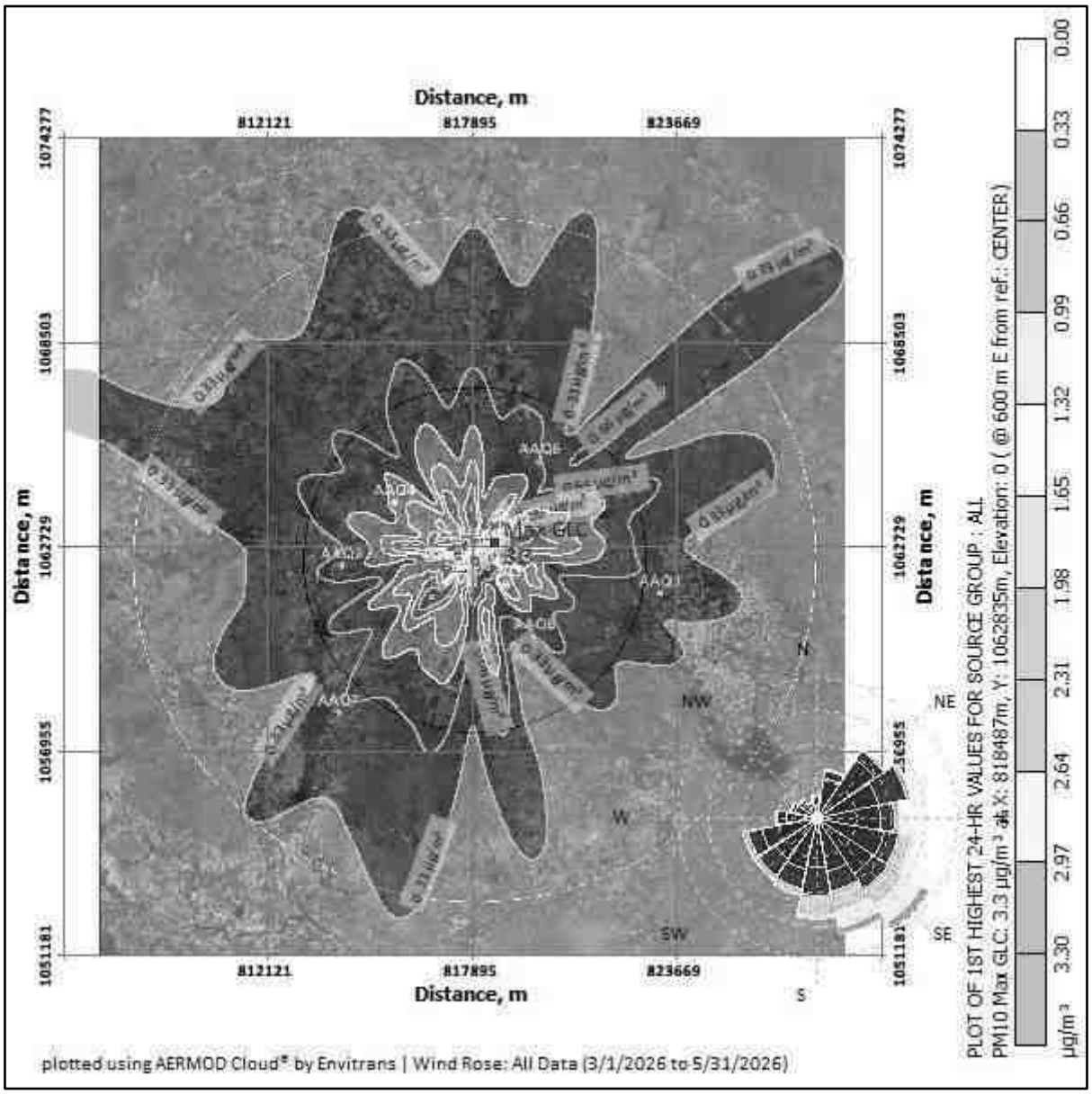


Figure 4.3 - Isopleth of GLC Prediction for PM10

PREDICTED AMBIENT AIR QUALITY:

The post project Concentrations of PM10, PM2.5, (GLC) (base line + incremental) after adopting necessary control measures is given in Table No - 4.9 to 4.10.

Table 4.9: Concentrations of PM $_{2.5}$ after Project Implementation

SL. No	Location	Background Concentration	Predicted incremental Concentration	Post Project Concentration	Statutory Limits in µg/m^3
1	Within Mine Lease area	37.3	2.70	40.00	**60**
2	Moolipatti	31.6	2.43	34.03	
3	Virudhunagar	33.5	2.16	35.66	
4	M.Puthupatti	34.6	1.89	36.49	
5	Vadamalaikurichi	25.8	1.62	27.42	
6	Kumaralingapuram	27.7	1.35	29.05	
7	Amathur	26.1	1.08	27.18	

Table4.10: Concentrations of PM 10 after Project Implementation

SL.No	Location	Background Concentration	Predicted incremental Concentration	Post Project Concentration	Statutory Limits in µg/m3
1	Within Mine Lease area	76.3	3.30	79.6	**100**
2	Moolipatti	67.2	2.97	70.17	
3	Virudhunagar	71.6	2.64	74.24	
4	M.Puthupatti	74.4	2.31	76.71	
5	Vadamalaikurichi	56.3	1.98	58.28	
6	Kumaralingapuram	59.3	1.65	60.95	
7	Amathur	57.4	1.32	58.72	

The above report seems that, even in the worst-case scenario, the resultant added concentrations with baseline figures show that the values of ambient air quality for PM_{10} are in the range of 58.28 µg/m^3 to 79.60 µg/m^3 and for $PM_{2.5}$ are in the range of 27.18 µg/m^3 to 40.00 µg/m^3 which are within the statutory limits in each case. The mitigation measures undertaken in the mine for control of air pollution are given below.

- Wet drilling will be practiced in drilling operation.
- Water sprinkling will be done in haul roads & loading etc.
- The mines workers are provided with the dust masks.
- Three layer plantation in the safety zone.
- DG sets shall be periodically maintained as per manufacturer's specifications.

PREDICTED AMBIENT AIR QUALITY

The cumulative post project Concentrations of PM10, PM2.5, (GLC) (base line + incremental) after proper mitigative measures is given in Table – 7.4 & 7.5.

Table 4.11 Incremental & Resultant GLC within cluster for $PM2_{.5}$

SL. No	Location	Background Concentration	Predicted incremental Concentration	Post Project Concentration	Statutory Limits in µg/m³
1	Within Mine Lease area	37.3	3.02	40.32	**60**
2	Moolipatti	31.6	2.72	34.32	
3	Virudhunagar	33.5	2.41	35.91	
4	M.Puthupatti	34.6	2.11	36.71	
5	Vadamalaikurichi	25.8	1.81	27.61	
6	Kumaralingapuram	27.7	1.51	29.21	
7	Amathur	26.1	1.21	27.31	

Table 4.12 Incremental & Resultant GLC within cluster for PM_{10}

SL.No	Location	Background Concentration	Predicted incremental Concentration	Post Project Concentration	Statutory Limits in µg/m3
1	Within Mine Lease area	76.3	5.87	82.17	**100**
2	Moolipatti	67.2	5.29	72.49	
3	Virudhunagar	71.6	4.70	76.3	
4	M.Puthupatti	74.4	4.11	78.51	
5	Vadamalaikurichi	56.3	3.52	59.82	
6	Kumaralingapuram	59.3	2.94	62.24	
7	Amathur	57.4	2.35	59.75	

The air quality modeling report for cluster seems that, even in the worst-case scenario, the resultant added concentrations with baseline figures show that the

values of ambient air quality for PM_{10} are in the range of 59.75 µg/m^3 to 82.17 µg/m^3 and for $PM_{2.5}$ are in the range of 27.31 µg/m^3 to 40.32 µg/m^3 which are within the statutory limits in each case.

Figure 4.4 Cluster Isopleth of GLC Prediction for $PM_{2.5}$

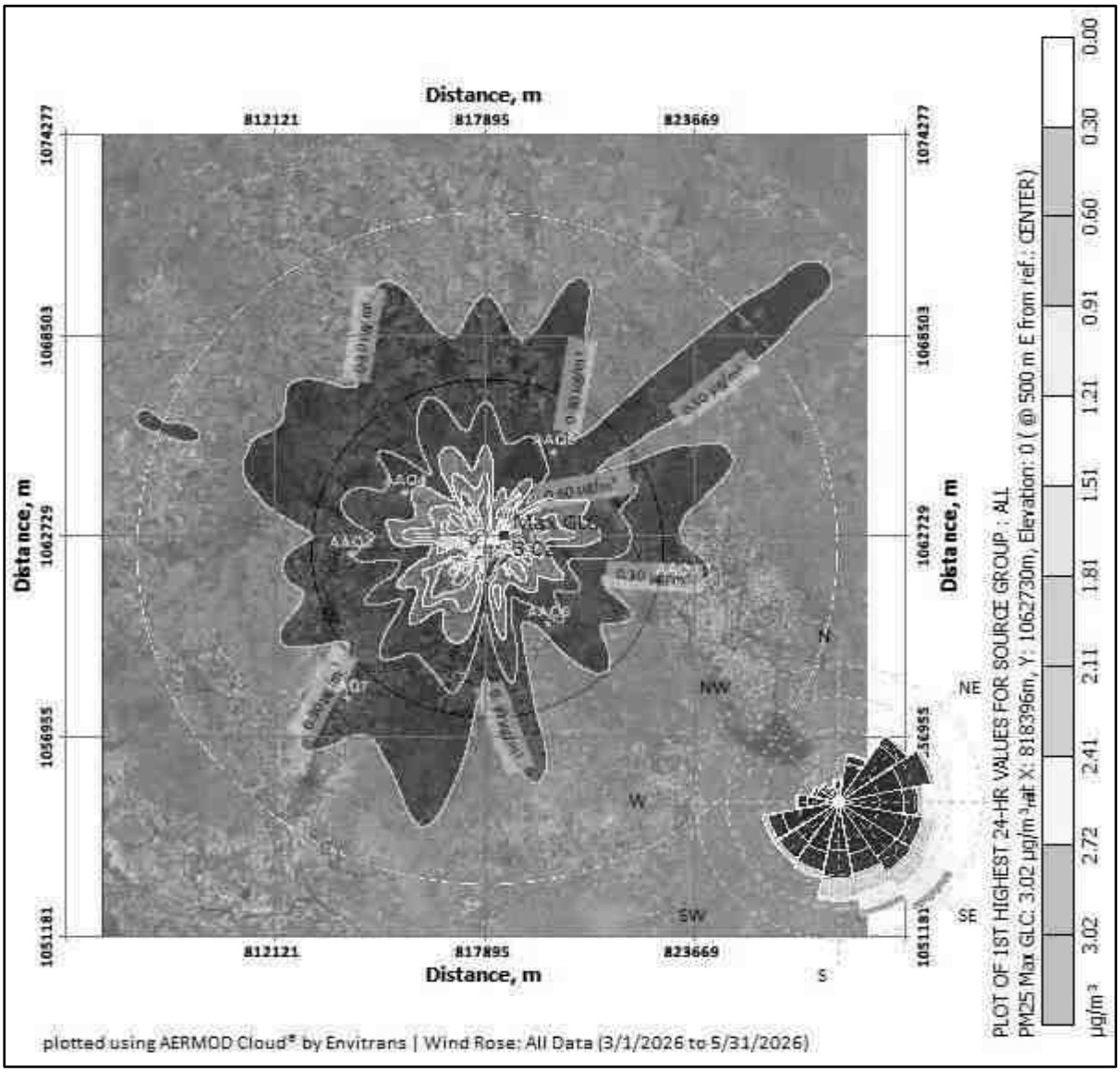
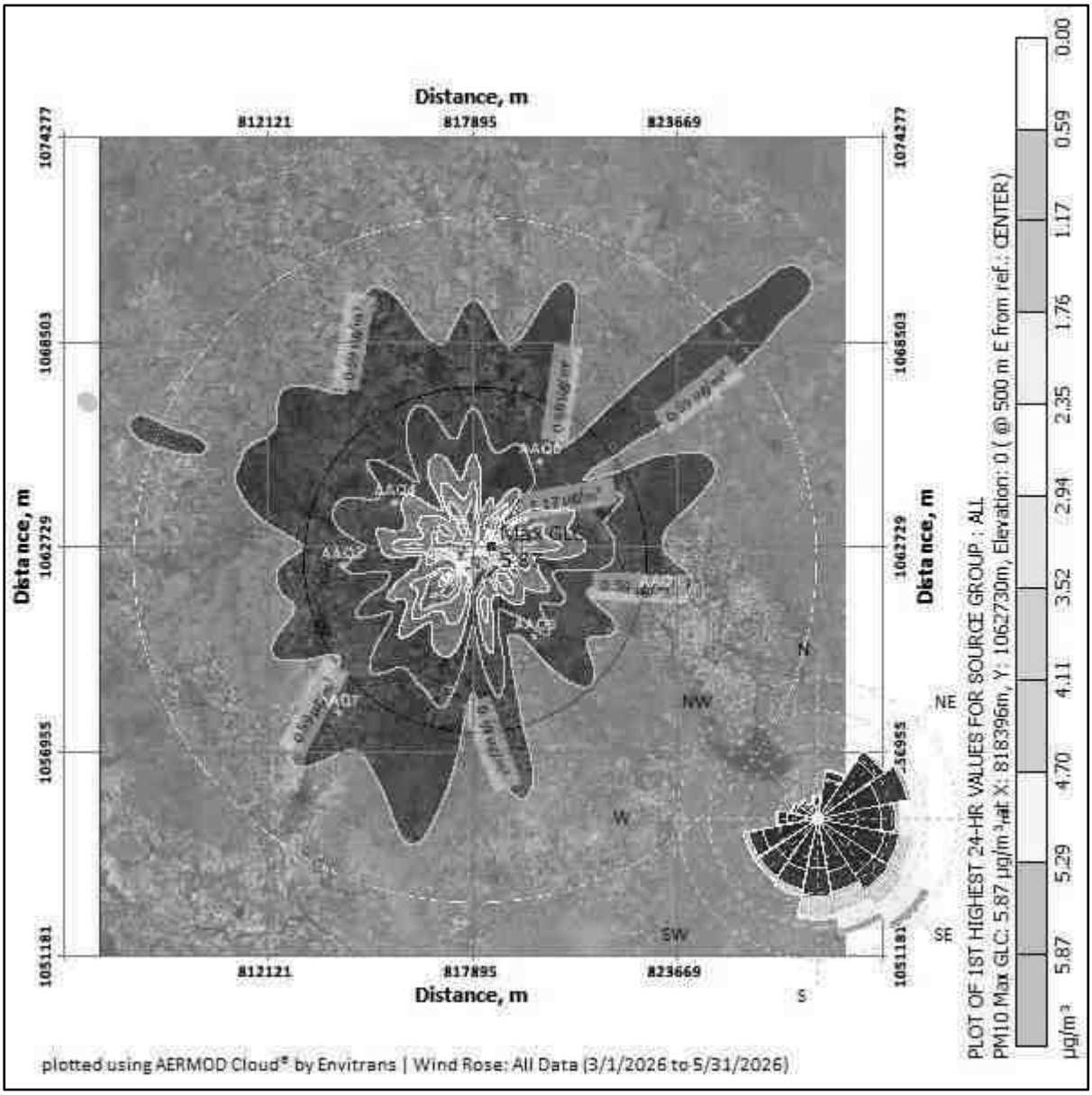


Figure 4.5 - Cluster Isopleth of GLC Prediction for PM_{10}



4.2.5 NOISE ENVIRONMENT

The ambient noise levels in the study area have been discussed in Chapter - 3. The data shows that the existing noise levels are within statutory limits. The impact prediction and control measure for noise environment due to mining and allied activities is described below:

4.2.5.1 IMPACT DUE TO NOISE AND VIBRATION

The main noise generating source during mining operation and related activities are drilling, excavation, loading, unloading and transportation. Intermittent noise is generated due to operation of diesel generator.

Table 4.13 - The likely noise level in the lease area

SL.No	Source Name	Noise Level in dB (A)
1	Diesel generator	102
2	Excavator Operation	95
3	Trucks movement	95
4	Drilling	105
5	Blasting	120

4.2.5.2 MITIGATION MEASURES FOR NOISE CONTROL

The following noise mitigation measures are proposed for control of Noise

- Usage of sharp drill bits while drilling which will help in reducing noise;
- Secondary blasting will be totally avoided and hydraulic rock breaker are utilized for breaking boulders;
- Controlled blasting with proper spacing, burden, stemming and optimum charge/delay will reduce noise;
- The blasting will be carried out during favourable atmospheric condition and less human activity timings by using nonelectrical initiation system;
- Proper maintenance, oiling and greasing of machines will be done every week to reduce generation of noise;
- Provision of sound insulated chambers for the workers working on machines (HEMM) producing higher levels of noise;
- Green Belt will be developed around the project areas and along the haul roads. The plantation minimizes propagation of noise;
- Personal Protective Equipment (PPE) like ear muffs/ear plugs will be provided to the operators of HEMM and persons working near HEMM and their use will be ensured though training and awareness.

- Regular medical check–up and proper training to personnel to create awareness about adverse noise level effects

4.2.5.3 GROUND VIBRATION

The vibration due to blasting can cause damage to the nearby structures if appropriate technology and control measures are not adopted in the blasting operation. Fly rock is another possible damage causing outcome of blasting. There are many factors which influence fly rock during blasting. Most important of these factors are long explosive column with little stemming column, improper burden, loose material or pebbles near the holes and long water column in the hole.

Mitigative Measures

- Proper quantity of explosive, suitable stemming materials and appropriate delay system should be adopted to avoid overcharging and for safe blasting;
- Adequate safe distance from blasting should be maintained as per DGMS guidelines;
- Blasting shelter should be provided as per DGMS guidelines;
- Blasting operations shall be carried out only during day time;
- The charge per delay shall be minimized and preferably more number of delays will be used per blasts;
- During blasting, other activities in the immediate vicinity shall be temporarily stopped;
- Drilling parameters like depth, diameter and spacing will be properly designed to give proper blast;
- Blasting will be carried out under the supervision of statuary persons as approved by DGMS.
- A well-defined SOP will be framed under the leadership of top management and the same will be followed for each blasting.
- Regular PPV monitoring will be carried out to ensure PPV limits i.e., 0.5 mm/s.

4.3 BIOLOGICAL ENVIRONMENT

The details and list of flora, fauna, reserved forest and cropping pattern within the 10km radius of study area is given in chapter 3. The impact on ecology and

biodiversity due to the proposed mining activity has to be studied in detail to prepare the management plan to safeguard the flora, fauna, forest products and aquatic living organism etc.

A detailed anticipated impact of Ecology and Biodiversity due to mining activity is described in below Table.

Table 4. 14 Ecological Impact Assessments and Its Mitigations -Part 1

S.NO	Issues	Assessment	Mitigations
1	Proximity to national park/ wildlife sanctuary / reserve forest / mangroves / coastline/estuary/sea	Nil Within 10 Km	The fugitive dust generated by the mining activity will be suppressed by frequent sprinkling of water based on evaporation rate in the site specific.
2	Activities of the project affects the breeding/nesting sites of birds and animals	No breeding and nesting site was identified in mining lease site. The fauna sighted mostly migrated from buffer area. The fauna in the buffer zone may be affected by noise generated due to mining activity.	The noise due to the mining activity will be controlled by developing green belt all along the lease boundary, regular maintenance of tippers, excavators, transporting the tippers within speed limits.
3	Located near an area populated by rare or endangered species	No endangered, critically endangered, vulnerable species sighted in core mining lease area and also in buffer zone.	NIL
4	Proposed project restricts access to waterholes for wildlife	No waterholes are in core zone. No Wild life sanctuary within 10km radius.	NIL
5	Proposed mining project impact surface water quality that also provide water to wildlife	„NO“ scheduled or threatened wildlife animal sighted regularly in core area. There is no proposal for discharge of wastewater to nearby water bodies.	NIL
6	Proposed mining project increase siltation that would affect nearby Biodiversity area.	Surface runoff management structures like garland drain, settling pond etc. as explained above will be constructed and as such there will not be any appreciable impact on surface water quality which in turn can affect the bio diversity of the area.	

7	Risk of fall/slip or cause death to wild animals due to project activities	In the post mining stage, wire fencing is proposed all around the mined-out void to prevent falling of animals in the mine pits.	
8	The project release effluents into a water body that also supplies water to a wildlife	As the proposed project is mining activity there will be no possibilities of release of effluents. Also, no Wild life sanctuary within 10km radius.	NIL
9	Mining project effect the forest-based livelihood/ any specific forest production which local livelihood depended	No R.F in 10 km radius. So, the proposed mining activity does not affect forest and forest products.	NIL
10	Project likely to affect migration routes	No migration route observed during monitoring period.	NIL
11	Project likely to affect flora of an area, which have medicinal value	No such significantly important medicinal value species within the ML area and its nearby region.	NIL
12	Forestland is to be diverted, has carbon high sequestration	„NO“. There is no forest land within the lease area.	NIL
13	The project likely to affect wetlands, fish breeding grounds, marine ecology	'NO“. No wetland, fish breeding grounds, marine ecology present in core mining area.	NIL

(Format Source: EIA Guidance Manual-Mining and Minerals, 2010)

Table 4.15 Ecological Impact Assessments and Its Mitigations -Part 2

Identified Impacts	Ecological Significance of impact	Magnitude	Phase / duration	Reversibility	Mitigation
Project site Habitat due to Site Clearance.	There are no trees in the core zone. The Mining activity will be carried within the lease area. No clearance of vegetation in the buffer zone	Low impact	Planning stage	Irreversible	The quarried-out pit will be used as water storage pond which increases agricultural activity in the buffer zone.
Impact on Surrounding habitat due to fugitive emission	The fugitive emission due to the mining activities such as drilling, blasting, loading and transportation on the haul road will be deposited on the flora and crop field in the buffer zone which affects growth and its productivity.	Temporary Impact	Operational stage	Reversible	The sprinkling of water over the haul road will be done. Then completely wet drilling will be take place. The transportation vehicles will be maintained and serviced Properly.
road construction	No Road construction is required to assess the project site. The existing internal Road connects the project site to the existing SH and NH	No Impact	-	-	-
Ecological Impact on Surrounding/ Eco sensitive habitat due to waste water generated from the project activity.	Since the proposed project is a mining activity no waste water generation is expected. Sewage will be generated due to the workers	No impact	-	-	-

Ecological Impact on Surrounding / Eco sensitive habitat due to Noise generated from the project activity.	During drilling or blasting, transportation of rough stone, noise will be generated and it may slightly affect the movement of fauna around the lease area.	Temporary impact	Only during drilling, blasting operation and transportation period. (5 years)	NO	Avenue trees will be planted along the lease area to minimize the noise level. Milli second detonators shall be used preferably 25–50ms per delay to control vibrations. Regular maintenance of vehicles and driving the tipper within specified limits also control the noise generations.
Ecological Impact on Surrounding/ Eco sensitive habitat due to Transportation	There is no eco sensitive habitat found around the lease area. The fugitive emission from drilling, blasting, vehicle movement will form layer in leaves thus reducing the gaseous exchange process. This ultimately affects the growth of plants. The animals like dog, cattle may get accident due to truck movement.	Temporary impact	During Operation Phase	NO	The truck driver will be advised to drive the vehicle within 20km/hr inside the lease area and 40km/hr outside the lease area. The sprinkling of water over the haul road will be done. Then completely wet drilling will be take place.

4.4 MITIGATION MEASURES

- Necessary mitigative measures like dust suppression, proper maintenance of equipment's, roads will be carried out to prevent dust generation.
- There is no proposal to discharge any effluent into nearby water bodies.
- Surface runoff management structures like garland drain, settling pond, protective bund etc. as explained above will be constructed and as such there will not be any appreciable impact on surface water quality which in turn can affect the bio diversity of the area.
- Construction of barbed wire fencing all around the boundary to prevent falling of animals in the mine pits.

4.4.1 GREENBELT DEVELOPMENT PLAN

In order to compensate the loss of vegetation cover, it is suggested to carry out afforestation program mainly in proposed mine lease area earmarked for plantation program as per Approved Mining Plan in different phases. This habitat improvement program would ensure the faunal species to re-colonize and improve the abundance status in the core zone. Greenbelt / Plantation will be carried out to enhance the vegetative growth and aesthetic in the safety zone area.

Table – 4.16 Greenbelt Development Plan (inside mine lease area)

S.No.	Year	Species	No. of trees	Spacing	Survival
1	I	*Azadirachta indica, Ficus benghalensis, F. religosa, Holopetea integrifolia, Pongamia pinnata and Tamarindus indica*	1178	3m x 3m	80%
2	II		0		
3	III		0		
4	IV		0		
5	V		0		
Total			**1178**		

Nearly 1.17.80 Ha. of area is proposed for Greenbelt development by planting 1178 Nos of trees .

The objectives of the green belt cover will cover the following:

- Noise abatement.
- Reuse of waste water to the extent possible.
- Prevention of soil erosion.

- Ecological restoration.
- Aesthetic, biological and visual improvement of area due to improved vegetative and plantations cover.

4.4.2 SOCIO – ECONOMIC

From the primary Socio-economic survey & through secondary data available from established literature and census data 2011, it is found that there would be positive impact on Socio-economic condition of the nearby area. There is no habitation within 300 m of the proposed mining lease area. Therefore, no major impact is anticipated on the nearby habitation during the entire life of the mine. The entire lease area is in the proponent's possession. Hence, there are no habitations or hutments in the core zone area and no rehabilitation or resettlement problems will arise here.

The mining operations in the proposed mine will employ about 24 persons directly and 15 people on indirect basis through allied opportunities in logistics, trading, repairing works etc. good employment potential will arise, which will provide raising income levels and standards of living in the area through various service related activities connected with the project operations as shown under.

- Project related logistical operations for transport of Rough Stone, etc,
- Various trading services for consumer goods, spare parts, sundry items, etc.
- Contractual services connected with the project.
- Green belt and horticultural works in the project.
- Casual labor needs for various activities.

The State and the Central governments will also get benefited through financial revenues by way of royalty, tax etc from this project.

Mine management will contribute for the upliftment of these villages by conducting regular medical camps, assistance in developing necessary infrastructure facilities like maintenance of schools, village roads, drinking water supply, etc.

From above details, it is clear that the project operations will have highly beneficial positive impact in the area. However, towards the socio economic development of

the surrounding area, the proponent has earmarked an amount of Rs.5.0 Lakhs under Corporate Environmental Responsibility.

4.4.3 OCCUPATIONAL HEALTH AND SAFETY

Primary data collection through field survey conducted in the study area reveals that there is no reported incident of any occupational diseases in the area. Hazardous jobs like blasting, loading, etc. are planned to be executed safely and with all precautionary measures as prescribed in Metalliferrous Mines Regulations of 1961, so as to minimize hazards and incidences of health problems.

Occupational health and safety hazards occur during the operational phase of mining and primarily include the following:

- Respiratory hazards
- Noise
- Explosive storage and handling

Respiratory Hazards

Long-term exposure to silica dust may cause silicosis the following measures are proposed:

- Cabins of excavators and tippers will be enclosed with AC and sound proof
- Use of personal dust masks will be made compulsory

Noise

Workers are likely to get exposed to excessive noise levels during mining activities.

The following measures are proposed for implementation

- No employee will be exposed to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection
- The use of hearing protection will be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A)
- Ear muffs provided will be capable of reducing sound levels at the ear to at least 85 dB(A)
- Periodic medical hearing checks will be performed on workers exposed to high noise levels

Occupational Health Survey

All the persons will undergo pre-employment and periodic medical examination as per DGMS and 12th National Mines Safety Council recommendation.

The PP will maintain occupational health history card for their Employees.

The PP will establish first aid station within project site.

Good Drinking Water specialty will be provided at the site level.

4.4.4 WASTE MANAGEMENT

4.4.4.1 SOLID WASTE

Since the entire mined out material will be utilized there will not be any solid waste generation from this project. However, the Solid waste (MSW) generated from administrative activities will be properly collected and disposed to Govt. Authorized yards / Re-cylers / Disposers.

4.4.4.2 LIQUID WASTE

There is no process effluent generation from this mine. Hence no liquid waste is generated. Domestic wastewater i.e 0.3 KLD will be discharged in soak pit via septic tank.

4.4.4.3 HAZARDOUS WASTE MANAGEMENT

In this project the following management practices will be followed:

In the quarrying operation, the source of hazardous waste is from machinery maintenance activities that are waste oil/ Waste lubricants / Used filters / Used Hydraulic horses. The said hazardous waste are very negligible quantity , it will be properly collected in the source level, stored in impervious storage yards and disposed off as per the Hazardous waste (Trans-boundary Movement) Management Rules, 2016.

4.4.4.4 PLASTIC WASTE

Single use plastics/ use and throwaway plastics will be banned in the site as directed by the Tamil Nadu Government vide GO(Ms)No.84 regarding ban on use

of plastic products. The employees will be encouraged to use compostable material or reusable material.

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5.0 ANALYSIS OF ALTERNATIVES (TECHNOLOGY AND SITE)

5.1 ALTERNATE TECHNOLOGY

The mining technology is mechanized open cast in single-shift operation without any change in technology. The operation will be carried out as per DGMS norms. No alternate technology will be used. Details of the technology used are given in Chapter 2.

5.2 ALTERNATE SITE

The project is a mining project and will be operated within the lease grant area. So no alternate sites have been assessed. Since the resource (Rough stone) is site-specific, the chosen location is the only site to carry out Rough Stone and Gravel Quarry.

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6 ENVIRONMENTAL MONITORING PROGRAMME

6.1 GENERAL

The monitoring and evaluation of environmental parameters indicates potential changes occurring in the environment, which paves way for implementation of rectifying measures wherever required to maintain the status of the natural environment. Evaluation is also a very effective tool to judge the effectiveness or deficiency of the measures adopted and provides insight for future corrections.

The main objective of environmental monitoring is to ensure that the obtained results in respect of environmental attributes and prevailing conditions during operation stage are in conformity with the prediction during the planning stage. In case of substantial deviation from the earlier prediction of results, this forms as base data to identify the cause and suggest remedial measures. Environmental monitoring is mandatory to meet compliance of statutory provisions under the Environment (Protection) Act, 1986, relevant conditions regarding monitoring covered under EC orders issued by the SEIAA as well as the conditions set forth under the order issued by Tamil Nadu Pollution Control Board while granting CTE/CTO.

6.2 MONITORING MECHANISM

The PP will undertake effective monitoring and implementation of various environmental control measures promptly and effectively and to oversee various environmental management schemes for air quality control, water quality status, noise level control, plantation programme, social development schemes, etc in the mine.

6.3 ENVIRONMENTAL MONITORING SCHEDULE AND FREQUENCY

The monitoring schedules are planned for systematic study of various pollution levels with respect to air and water qualities, noise levels, etc. to ensure that they conform to the standards laid down by Environmental Protection Act and various statutory Limits. However, based on the need and priority it may be suitably modified / improved in consultation with local authorities. Monitoring may include socio-economic interaction, through local liaison activities or even assessment of complaints. The monitoring schedules to be adopted in this quarry are given below.

Table 6.1 - Environmental Monitoring Schedule			
Sl.No.	**Description of Parameters**	**Parameters**	**Frequency**
1	Air	Air Quality for SPM, PM_{10}, $PM_{2.5}$, SO_2 and NO_x	24 hour average samples once in a 3 month
2	Water	General, Physical, and chemical parameters	Once in a season
3	Noise	L_{eq}, L_{max}, L_{min}, L_{eq} Day & L_{eq} Night dB(A)	8 hour average samples Once in a 3 month
4	Soil	Physical and Chemical characteristics	Once in a season

6.4 BUDGET FOR IMPLEMENTAION

The cost in respect of monitoring of environmental attributes, parameter to be monitored, sampling/monitoring locations with frequency and Monitoring work will be outsourced to external laboratory approved by NABL / MoEF. The capital and recurring cost required for the project are detailed in below table.

Total EMP Cost for 10 years is 134.31 Lakhs i.e., Rs.46.65 Lakhs of Capital + Recurring cost Rs. 88.66 lakhs for ten years. The breakup of EMP cost is elaborated in Table 10.2 of Chapter 10.

6.5 SUBMISSION OF PERIODICAL REPORTS

The monitored data on air quality, water quality, noise levels and other environmental attributes will be periodically examined by the Mine Management Coordinator and Respective Head of Organization for taking necessary corrective measures.

The monitoring data will be submitted to Tamil Nadu State Pollution Control Board in the Compliance to CTO Conditions & environmental audit statements every year to MoEF & CC and Half-Yearly Compliance Monitoring Reports to MoEF & CC Regional Office and SEIAA.

Periodical reports to be submitted to: -

- MoEF & CC – Six month EC compliance report
- TNPCB - Half yearly CTO Compliance report

- MOEF & CC & TNPCB – annual Environmental Statement Report. (Form – V)
- Annual Hazardous Waste Return(Form – IV)
- Department of Geology and Mining: quarterly, half yearly annual reports.

6.6 DETAILED BUDGET AND PROCUREMENT SCHEDULES

The summary of budget planned for environmental monitoring is given in below tables. Refer Chapter 10 for detailed EMP budget.

Table 6.2 - Environmental Management Plan Budget (in Lakhs)

Mitigation Measures	Capital cost	Recurring Cost /Annum
Air Environment	27.53	4.91
Water Environment	6.00	0.75
Land Conservation	10.14	0.32
Noise Environment	0.30	0.02
Waste Management	0.25	0.12
Implementation of EC, Mining Plan & DGMS Condition	1.43	0.93
Total	**45.65**	**7.05**
The total EMP Cost is 134.31 Lakhs (For 10 years) i.e., Rs. 45.65 Lakhs of Capital Cost + Rs. 88.66 Lakhs of Recurring cost (@ 5% Escalation) for 10 years		

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7 ADDITIONAL STUDIES

The following Additional Studies were done as per items identified by project proponent and the regulatory authority.

- Public Consultation
- Risk Assessment
- Disaster Management Plan
- Cumulative Impact Study
- Mine Closure Plan
- Slope Stability Plan

7.1 PUBLIC CONSULTATION

This draft EIA/EMP report will be exposed to public consultation as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.

7.2 RISK ASSESSMENT

The DGMS risk assessment process is intended to identify existing and probable hazards in the work environment and all operations and assess the risk levels of those hazards in order to prioritize those that need immediate attention. Further, mechanisms responsible for these hazards are identified and their control measures, set to timetable are recorded along with pinpointed responsibilities. The whole quarry operation will be carried out under the direction of a Qualified Competent person holding certificate of competency to manage a metalliferous mine granted by the DGMS. Factors of risks involved due to human induced activities in connection with this proposed mining & allied activity with detailed analysis of causes and control measures for the mine is given in below Table 7.1.

Table 7.1 Risk Assessment and Control Measures

S.NO	Risk Factor	Causes of risk	Control Measures
1	Accidents due to explosives and heavy mining machineries	Improper handling and unsafe working practice	All safety precautions and provisions of Mine Act, 1952, Metalliferous Mines Regulation, 1961 and Mines Rules, 1955 will be strictly followed during all mining operations. Entry of unauthorized persons will be prohibited. Fire-fighting and first-aid provisions in the mine office complex and mining area. Provisions of all the safety appliances such as safety boot, helmets, goggles etc. will be made available to the employees and regular check for their use. Quarry operation will be done as per approved mining plan and other applicable statutory guidelines issued by DGMS, Dept. of Mining & Geology-TamilNadu. Handling of explosives, charging and firing shall be carried out under competent statutory persons. A comprehensive standard operating procedure (SOP) will be prepared as per DGMS guidelines and the same will be circulated to all the employees and it will be strictly followed in the all face of mining operation.
2	Drilling	Improper and unsafe practices. Due to high pressure of compressed air, hoses may burst. Drill Rod may break.	Safe operating procedure established for drilling (SOP) will be strictly followed. Only trained operators will be deployed.

			No drilling shall be commenced in an area where shots have been fired until the blaster/blasting foreman has made a thorough Examination of all places. Drilling shall not be carried on simultaneously on the benches at places directly one above the other. Periodical preventive maintenance and replacement of worn-out accessories in the compressor and drill equipment as per operator manual. Drills unit shall be provided with wet drilling to ensure efficient working.
3	Blasting	Fly rock, ground vibration, Noise and dust. Improper charging, stemming & Blasting/ fining of blast holes. Vibration due to movement of vehicles.	Restrict maximum charge per delay as per approved mining plan. Proper blasting design with optimum spacing & burden, Charge per delay and stemming. SOP for Charging, Stemming & Blasting/Firing of Blast Holes will be followed by blasting crew during initial stage of operation. Shots are fired during day time only. Charging and firing shall be carried out in the same day. Siren will be done for each blasting. Blasting evacuation plan prepared and executed. The danger zone will be distinctly demarcated (by means of red flags).
5	Transportation	Potential hazards and unsafe workings contributing to accident and injuries. Overloading of material. While reversal & overtaking of vehicle. Operator of truck leaving his cabin when it is loaded.	Before commencing work, drivers personally check the dumper/truck/tipper for oil(s), fuel and water levels, tyre inflation, general cleanliness and inspect the brakes, steering system, warning devices including automatically operated audio-visual reversing alarm, rear view mirrors, side indicator lights etc., are in good condition. Unauthorized person will not be allowed to operate or ride on the vehicle. Loading according to the vehicle capacity. Periodical maintenance of vehicles as per operator manual.

6	Natural calamities	Unexpected happenings	An emergency management plan will be prepared considering all possible national calamity and the same will be executed if any such situation occurs. Escape Routes will be provided to prevent inundation of storm water. Fire Extinguishers & Sand Buckets in the designated areas.
7	Failure of Mine Benches and Pit Slope	Slope geometry, Geological structure	Ultimate or over all pit slope shall be below 60° and each bench height shall be 5m height.

7.3 DISASTER MANAGEMENT PLAN

This being a small rough stone project that too working in a safe area, no major disaster is expected after following all the statutory rules and regulations.

7.3.1 MODEL DISASTER MANAGEMENT PLAN

The lessee has formulated the disaster Management plan keeping all eventualities in mind.

The mining operation will be carried out under the direction of qualified mines manager and supervisors, based on the guidelines and directions of Directorate General of Mines Safety (DGMS) and Indian Bureau of Mines. Code of practice of different operations will be formulated to ensure safety of men and machines and to avoid various hazards mentioned above. Mine workers will be provided training on safe work practices. The following natural/ industrial hazards may occur during normal operation; slope failure at the mine faces; accident due to heavy equipment/ machinery.

In order to prevent or take care of hazard / disasters if any the following control measures have been adopted.

- All safety precautions and provisions of Metalliferous Mines Regulations (MMR), 1961 is strictly followed during all mining operations.
- Observance of all safety precautions for blasting and storage of explosives as per MMR 1961.
- Entry of unauthorized persons into mine & allied areas is completely prohibited.
- Fire-fighting and first-aid provisions in the mines office complex and mining area are provided.
- Provisions of all the safety appliances such as safety boot, helmets, goggles, dust masks, ear plugs and ear muffs etc. are made available to the employees and the use of same is strictly adhered to through regular monitoring.
- Training and refresher courses for all the employees working in hazardous premises. Working of mine, as per approved plans and regularly updating the mine plans.

- Handling of explosives, charging and blasting are carried out only by qualified persons following SOP.
- Checking and regular maintenance of garland drains and earthen bunds to avoid any inflow of surface water in the mine pit.
- Provision of high-capacity standby pumps with generator sets with enough quantity of diesel for emergency pumping especially during monsoon.
- A blasting SIREN is used at the time of blasting for audio signal.
- Before blasting and after blasting, red and green flags are displayed as visual signals. Warning notice boards indicating the time of blasting and NOT TO TRESPASS are displayed at prominent places.
- Regular maintenance and testing of all mining equipment were carried out as per manufacturer's guidelines.

7.3.2 OBJECTIVE OF DISASTER MANAGEMENT PLAN

The objective of disaster management plan is to identify mitigation measures to avoid hazards turning in to risk, the materials required for implementing the same, the personnel requirement and their roles and responsibilities, and the communication and operating procedures to be adopted in case of an emergency.

Communication System

The telephone numbers and addresses of mine sites in the vicinity, nearest fire station, police station, local hospital, electricity department, ambulance, and local public representatives and revenue officials shall be prepared and kept in custody of PP.

Facilities

The office shed will have provision of first aid center to provide first aid in the event of an emergency. The office shed will also function as emergency control room. It will be provided with telephone and mobile phones, and a vehicle for emergency transport.

Personnel

The PP is responsible for overall supervision of the disaster management plan. He will be assisted by supervisors, in implementing the emergency management plan and procedures.

Operating Procedures

The operating procedures during emergencies are related communication to the immediate supervisor, who would relay the same to PP. The PP may assess the requirement of first aid, external assistance, transportation to nearby hospital contingent on the emergency. In the absence of mines manager, the senior most supervisor will be made responsible for disaster management.

7.4 CUMULATIVE IMPACT STUDY

There are one existing Quarry and this proposed quarry are located within a radius of 500 m from this proposed project area. The existing and proposed quarries situated within 500 m radius are presented in below Table 7.2 and the letter received from Dept. of Geology and Mining, Virudhunagar stating the quarries detail within 500m radius is enclosed in Annexure – 4.

Table 7.2 Details of Quarries within 500m radius

S.No	Name of the Quarry Owner	S.F. Nos & Village	Lease Period	Area
a. Abandoned Quarry				
1.	Thiru S.Govindaraj S/o chesathiri, 4/888, Sri balaji Nagar, Soolakkarai, virudhunagr Taluk	S.F.No. 11/1, 11/2, 12/6, 9/7, 9/9 Seeniyapuram Village	KV1/541/2018 dated 15.01.2019 29.01.2019 to 28.01.2024	2.37.50
2.	Tmt R.Subbulakshmi No.4/887A, Balaji Nagar, Sulakkarai - 626003	S.F.No. 25/2, 25/5, 26/1C Seeniyapuram Village	KV1/35293/2016 dated; 12.01.2018 02.02.2018 to 01.02.2023	2.12.50
b. Existing Quarry				
1.	S. Puliraj s/o Sankarraj 4/32, Chandiragiripuram, Pavali Virudhunagar	S.F.Nos.94/2B Seeniyapuram Village	KV1/1008/2024 & 27.06.2025 To 26.06.2030	0.74.00

2.	G.Pandurangan S/o. Govindharaj, 4/888, Balaji Nagar, Soolakkarai, Aruppukottai Taluk	S.F.No. 79/2A(P), 79/2B(P), 81/1(P), 81/2(P), 83/1, 83/2(P), 84/1(P), 85(P) Sengundrapuram Village	KV1/533/2020 Dt. 30.11.2022 07.11.2022 to 06.11.2027	2.51.00
3.	G.Pandurangan S/o. Govindharaj, 4/888, Balaji Nagar, Soolakkarai, Aruppukottai Taluk	S.F.Nos. 84/1(P), 85(P), 86/1, 86/2, 87/1, 87/2, 88, 109/2, 109/3A, 109/3B, 110/1B, 110/2B, 110/2C Sengundrapuram Village	KV1/623/2024 26.11.2025 to 25.11.2035	3.25.50
4.	Thiru.S.Ramasamy, S/o, Sesathiri, 4/887A, Balaji Nagar, Soolakkarai, Aruppukottai Taluk	S.F.Nos. 94/1, 94/2, 94/3 Sengundrapuram Village	KV1/1174/2022 Dt. 06.06.2023 08.06.2023 To 07.06.2028	1.13.50
c. Proposed Quarry				
1.	Thiru.G.Pandurangan, S/o. Govindaraj, Door No:13/3, 7/25,Elagipatti, Pavali Panchayat, Seeniyapuram Village, Virudhunagar - 626103	S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 Seeniyapuram Village	25VNR0402851	7.37.80
Total Area of Cluster		**15.01.80 Ha**		

The total lease within the 500m radius (Proposed + Existing) (1nos + 4 nos) works out to 15.01.80 Ha including this lease area. As such, in the cluster situation, ToR is applicable under the EIA notification of 2006 and its time-to-time amendment. A map showing the existing and proposed quarry located within 500m radius is given in Figure 1.1.

The cumulative production load of existing and proposed Rough stone & Gravel quarries within cluster is shown in below table.

Table 7.3 Salient Features of Existing & Proposed Quarries

Description		P1	P2	P3	P4	P5
Name of the quarry		**G.Pandurangan**	**S.Puliraj**	**G.Pandurangan**	**G.Pandurangan**	**S.Ramasamy**
Geological Resources in Ts	Rough stone	1,62,23,900 Ts	3,05,662.5 Ts	20,07,225 Ts	37,76,850 Ts	7,46,460 Ts
	Gravel	7,37,450 Ts	74,100 Ts	2,89,440 Ts	4,12,020 Ts	1,35,720 Ts

Mineable Reserves in Ts	Roughstone	55,93,500 Ts	73,260 Ts	7,99,232.5 Ts	11,40,892.5 Ts	2,08,758 Ts
	Gravel	6,13,700 Ts	44,720 Ts	2,28,228 Ts	3,18,300 Ts	88,536 Ts
Production quantity for the period of 5years	Roughstone	55,93,500 Ts	73,260 Ts	7,99,232.5 Ts	11,40,892.5 Ts	2,08,758 Ts
	Gravel	6,13,700 Ts	44,720 Ts	2,28,228 Ts	3,18,300 Ts	88,536 Ts
Production per day in Ts	Peak Production	2804	91	911	801	316
Lorry Loads per day in Nos	-	140	9	45	40	32
Employment in Nos		39	10	13	20	9
Proposed Depth in meters		39	10	13	20	9
Status of the quarry		Proposed	Existing	Existing	Existing	Existing

Based on the above production quantities the emissions due to various activities in both 5 mines (4 Existing + 1 Proposed) includes various activities like ground preparation, excavation, handling and transport.

7.4.2 CUMULATIVE IMPACT ON SOCIO-ECONOMIC ENVIRONMENT

The mining operations in the 5 mines will provide direct employment opportunity and indirect employment opportunity for scores of people through allied opportunities in logistics, contract workers, trading, repairing works etc. Various mitigative measures suggested in this report will be properly implemented to ensure that no adverse impact is felt on the socio economic and ecological front in the area. Socio Economic benefits from these two quarries are as follows:

Description	Employment	Project Cost	CER Cost
P1- Proposed Quarry	39	Rs. 290.57 Lakhs	Rs.5,00,000/-
P2- Existing Quarry	10	Rs.34.55 Lakhs	Rs.3,00,000/-
P3 – Existing Quarry	13	Rs.99.16 Lakhs	Rs.6,00,000/-
P4 – Existing Quarry	20	Rs.163.40 Lakhs	Rs.5,00,000/-

P5 – Existing Quarry	9	Rs.40.76 Lakhs	Rs.5,00,000/-
Total	**100**	**Rs. 628.44 Lakhs**	**Rs.24 Lakhs**

7.4.2.1 REHABILITATION AND RESETTLEMENT (R & R) PLAN

No land is acquired from people dwelling in the area. The lease area is an uninhabited land. No R & R plan is proposed.

7.4.2.2 SLOPE STABILITY ACTION PLAN

The proposed quarry is a small quarry and the production is also less. Opencast mechanized mining with a bench height of 5m and bench width of 5m with 80° Slope is proposed. The depth of mining is proposed as 85m BGL, which is the ultimate pit limit. Also, there is no overburden since the entire mined out material will be utilized.

As far as technical factors are concerned, the following precautionary measures will be adopted:

- Strict adherence to DGMS norms
- Frequent inspection by Mines-in-charge/Mines Manager
- Bench height, width, slope will be as per DGMS norms

Project proponent allocated INR 10.0 Lakhs as a Capital cost in the EMP budget for slope stability analysis and implementation of slope stabilization techniques.

7.4.2.3 DISASTER MANAGEMENT PLAN

Proper preventive mechanism exists already in the mines.

- Precautionary measures are well explained to all staff by the mines in-charge.
- PPE necessary for all staff are available in the quarry. No person is allowed to enter inside without PPE. Avoiding quarrying during unfavorable environmental conditions.
- Carrying out safe blasting by following DGMS norms
- Safety equipment like fire extinguisher, first aid kit, etc are present in the mine.
- Proper maintenance of machinery used for mining
- In case of any emergency, the contact numbers of mines in-charge, mines manager, Management contact are available in the mines office.

7.4.3.4 MINE CLOSURE PLAN

The quarrying operation is proposed up to a depth of 50m BGL only, which will be achieved in 5 years. The ultimate pit dimension will be 323m x 190m x (85m BGL). After quarry reaches pit limit of 85m BGL depth (for this lease period), fencing will be constructed around the quarried pit to prevent inherent entry of the public and cattle. This pit will work as rainwater harvesting pit. Below are the action plan for mine closure:

- Office, workshop & internal roads will be planted with local species and maintained for a period of 1 year.
- Filling of Gravel benches with soil and carrying out plantations.
- Fencing the mined out void area with the barbed wire and leaving the void as the water storage area by installing water meter to measure the water level.
- Monitoring the accumulated water in the mined out voids for the period of 3 years of mine closure.

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8 PROJECT BENEFITS

The project area is located on barren land, thereby causing no impact on the loss of agriculture or forest land. The project will create employment opportunities in the area. There will be no adverse effect of mining on the socioeconomic status of the people; rather, mining activities will improve their standard of living. The mining activity creates employment opportunities for the local people, and this definitely raises their economic status. Apart from the overall beneficial impact of the project on the local people of the region, it is felt necessary to augment facilities in the fields of education, health, and social awareness, including concern for the environment and ecosystem.

The mining activity at proposed Rough Stone and Gravel Quarry of Thiru.G.Pandurangan will create direct employment opportunity for 39 local people. The PP has proposed CER amount of Rs. 5.0 Lakhs for surrounding schools development (Annexure No.12).

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9 ENVIRONMENTAL COST BENEFIT ANALYSIS

Environmental Cost Benefit Analysis is recommended during the scoping stage, if needed. In the TOR granted by SEIAA, Tamil Nadu, it is not recommended. Hence not applicable.

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10 ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management plan is a site-specific plan. It is developed to ensure that the project is implemented in an environmentally sustainable manner, where all contractors and subcontractors, including consultants if any, understand the potential environmental risks arising from the project and take appropriate actions to minimize those risks. EMP also ensures that the project implementation is carried out in accordance with the planned design and by taking appropriate mitigation measures to reduce adverse environmental impacts during project's life cycle.

10.1 ENVIRONMENTAL POLICY

The Project Proponent – Thiru.G.Pandurangan shall carry out all the quarrying operations and activities in an environmentally responsible manner and to continually improve environmental performance.

The Proponent will:

- Abide by all laws, ordinances, rules, and regulations that are pertinent to its operations and activities.
- Allocate the resources required to guarantee that the environmental policy is carried out.
- Implement a programme to educate employees about environmental issues in general and their personal environmental responsibilities at work.
- Set up monitoring systems to alert as soon as there is a problem or a performance that is unexpected in relation to environmental protections.

10.2 ENVIRONMENTAL MANAGEMENT PLAN

The impacts due to this mining project are detailed in chapter 4. Mitigation measures at the source level and an overall Management Plan at the site level are elaborated in this chapter. Details of EMP measures for implementation in the mine are given in the table 10.1.

Table 10.1 - ENVIRONMENTAL MANAGEMENT PLAN

Environmental Parameter	Mitigation Measures
Air	Wet drilling to suppress the dust emission from drill machine
	Regular water sprinkling on haulage road through fixed water sprinkler.
	7.0 KLD of water will be used for dust suppression.
	Avoiding blasting during high wind period, night times and temperature inversion periods.
	Regular grading of haul road to clear accumulation of loose material.
	It will be ensured that vehicles are properly maintained to comply with exhaust emission requirements
	Maintenance as per operator manual of the equipment and machinery in the mines to minimizing air pollution
	Ambient Air Quality Monitoring carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted air pollution control measures.
	Afforestation for control of dust.
Water	
Ground Water	The quarrying operation is proposed upto a depth of 85m maximum below ground level, the water table in the area is 98m below ground level, hence the project will not intersect the Ground water table during entire quarry period.
Water Consumption and Wastewater generation	The required water of 12.2 KLD will be procured from outside agencies initially and later rainwater harvested in the mine pit shall be used other than drinking purpose.
	Domestic wastewater generation of 0.3 KLD will be discharged in soak pit via septic tank.
	Conduct ground water and surface water monitoring for parameters specified by CPCB
Noise	The workers employed are provided with personal protective equipment (PPE) as such, earmuffs and ear- plugs for the protection from high noise level generated at the mine site wherever required.

	Noise levels are controlled by using optimum explosive charge, proper delay detonators and proper stemming to prevent blow out of holes.
	Development of thick greenbelt all along the Buffer Zone (7.5 Meters) of the project area to attenuate the noise and the same will be maintained.
	Preventive maintenance of mining machinery and replacement of worn-out accessories to control noise generation.
	Regular ambient noise level monitoring will be carried out in the project area and in surrounding villages to access the impact due to the mining activities and the efficacy of the adopted noise control measures.
Ground Vibration and Fly Rock Control	Controlled blasting using delay detonators will be carried out to maintain the PPV value well within the prescribed standards of DGMS.
	Drilling and blasting will be carried under the supervision of qualified persons.
	ensure blast holes are adequately stemmed for the depth of the hole and stemmed with suitable angular material.
	Undertake noise or vibration monitoring.
Land Environment	There is no change will be in the land use pattern as mentioned in the approved mining plan a such mine pit, safety zone etc., At conceptual stage, the mining pits will be converted into Rain Water Harvesting. Remaining area will be converted into greenbelt area.
	Garland drains with catch pits / settlement traps to be provided all around the project area to prevent run off affecting the surrounding lands.
	The periphery of Project area will be planted with thick plantation to arrest the fugitive dust, which will also act as acoustic barrier.
	Frequent Soil and ground water testing as per Environmental Monitoring Plan.
Gravel / Overburden	There is no waste anticipated in this Rough Stone and Gravel Quarry. The entire quarried minerals will be utilized.

Biological Environment	During mining, three layer thick plantation will be carried out around the project periphery, on safety barrier zone, on top benches of quarried out area etc.,
	The main attributes that retard the survival of sapling is fugitive dust, this fugitive dust can be controlled by water sprinkling on the haul roads and installing a sprinkler unit near the newly planted area.
	Regular review on Greenbelt development programme.
	Year wise greenbelt development plan mentioned in Chapter IV

10.3 ADMINISTRATION AND TECHNICAL SETUP

The Environment Monitoring Cell discussed under Chapter 6 will ensure effective implementation of environment management plan and to ensure compliance of environmental statutory guidelines through Mine Management Level. The organizational chart for the same has been given below.



Figure 10.1 Organization Chart

The action plan for monitoring consists of monitoring of following environmental components.

- Monitoring of the water/ waste water quality, air quality and solid waste generated
- Analysis of the water and air samples collected through external laboratory
- Implementation and monitoring of the pollution control and protective measures/ devices which shall include financial estimation, ordering,

installation of air pollution control equipment, waste water treatment plant, etc.

- Co-ordination of the environment related activities within the project as well as with outside agencies
- Green belt development
- Monitoring the progress of implementation of the environmental monitoring programme
- Compliance to statutory provisions, norms of State Pollution Control Board, Ministry of Environment and Forests and the conditions of the environmental clearance as well as the consents to establish and consents to operate.

10.4 OCCUPATIONAL SAFETY & HEALTH MANAGEMENT

Occupational safety and health are very closely related to productivity and good employer-employee relationship. The main factors of occupational health impact in quarries are fugitive dust and noise. Safety of employees during quarrying operation and maintenance of mining equipment will be taken care as per Mines Act 1952 and Rule 29 of Mines Rules 1955. To avoid any adverse effect on the health of workers due to dust, noise and vibration sufficient measures have been provided. The health status of workers in the mine shall be regularly monitored under an occupational surveillance program. Under this program, all the employees are subjected to a detail medical examination at the time of employment.

10.5 BUDGETARY PROVISION FOR ENVIRONMENTAL MANAGEMENT

Adequate budgetary provision has been made by the Company for execution of Environmental Management Plan. The below Table gives overall investment on the environmental safeguards and recurring expenditure for successful monitoring and implementation of control measures.

Table 10.2 Environmental Management Plan Budget

Activities	Mitigation Measure	Capital cost	Recurring Cost per Annum
Air Environment	Compaction, gradation and drainage on both sides for Haulage Road	0.37	0.37
	Fixed Water Sprinkling Arrangements + Water sprinkling by own water tankers	15.00	1.50
	Muffle blasting – To control fly rocks during blasting	1.00	0.05
	Wet drilling procedure / latest eco-friendly drill machine with separate dust extractor unit	1.00	0.20
	No overloading of trucks/tippers/tractors	0.00	0.10
	Stone carrying trucks will be covered by tarpaulin	0.00	0.16
	Enforcing speed limits of 20 km/hr within ML area	0.16	0.02
	Regular monitoring of exhaust fumes as per RTO norms	0.00	0.04
	Regular sweeping and maintenance of approach roads for at least about 200 m from ML Area	0.00	1.48
	Installing wheel wash system near gate of quarry	10.0	1.00
Sub-Total (A)		**27.53**	**4.91**
Water Environment	Dewatering	3.00	0.60
	Settling Pit	3.00	0.15
Sub-Total (B)		**6.00**	**0.75**
Land Conservation	Installation of Garland Drain	0.74	0.04
	Gravel bench Plantations	0.22	0.04
	Safety Zone Plantations	1.18	0.24
	Final Mine Closure Plan	8.00	0.00
Sub-Total (C)		**10.14**	**0.32**
Noise Environment	Provision for Portable blaster shed	0.30	0.02
Sub-Total (D)		**0.30**	**0.02**

Waste Management	Provision for domestic waste collection and disposal through authorized agency	0.20	0.10
	Installation of dust bins	0.05	0.02
Sub-Total (E)		**0.25**	**0.12**
Implementation of EC, Mining Plan & DGMS Condition	Size 6' X 5' with blue background and white letters as mentioned in MoM Appendix II by the SEAC TN	0.05	0.01
	Air, Water, Noise and Soil Quality Sampling every 6 Months for Compliance Report of EC Conditions	0.00	0.50
	Workers will be provided with Personal Protective Equipment's	0.39	0.04
	Health checkup for workers will be provisioned	0.00	0.20
	First Aid facility Provision	0.00	0.15
	Signage & boards for safety precautions	0.10	0.01
	No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles /HEMMs. Flaggers will be deployed for traffic management	0.74	0.01
	Installation of CCTV cameras in the mines and mine entrance	0.15	0.02
Sub-Total (F)		**1.43**	**0.93**
Grant Total		**45.65**	**7.05**

Table 10.3 - Environmental Management Plan Budget (in Lakhs)

Mitigation Measures	Capital cost	Recurring Cost /Annum
Air Environment	27.53	4.91
Water Environment	6.00	0.75
Land Conservation	10.14	0.32
Noise Environment	0.30	0.02
Waste Management	0.25	0.12
Implementation of EC, Mining Plan & DGMS Condition	1.43	0.93
Total	**45.65**	**7.05**

The total EMP Cost is 134.31 Lakhs (For 10 years)

i.e., Rs. 45.65 Lakhs of Capital Cost + Rs. 88.66 Lakhs of Recurring cost (@ 5% Escalation) for 10 years

10.6 CONCLUSION

Various aspects of mining activities were considered and related impacts were evaluated. Considering all the possible ways to mitigate the environmental concerns, Environmental Management Plan was prepared and fund has been allocated for the same. The EMP is dynamic, flexible and subjected to periodic review. For project where the major environmental impacts are associated, EMP will be under regular review. Senior Management responsible for the project will conduct a review of EMP and its implementation to ensure that the EMP remains effective and appropriate. Thus, the proper steps will be taken to accomplish all the goals mentioned in the EMP and the project will bring the positive impact in the study area.

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11. SUMMARY AND CONCLUSION

11.1 INTRODUCTION

This EIA Report is prepared for Thiru.G.Pandurangan Rough Stone and Gravel Quarry over an extent of 7.37.80 Ha. Government land in S.F. No 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu in compliance with ToR obtained vide TO26B0108TN5346922N (F.No.13627), dated; 15.06.2026.

Although the individual lease area of this project is more than 5 hectares, the existing Quarry within a 500-meter radius, along with this subject project, add up to more than 15 hectares i.e. 15.01.80 Ha. A map showing the existing and proposed quarry located within 500m radius is given in Figure 1.1.

This cluster includes the nearby four existing Quarries namely S.Puliraj (0.74.00Ha), G.Pandurangan (2.51.00 Ha), G.Pandurangan (3.25.50Ha), Thiru.S.Ramasamy (1.13.50 Ha) and this proposed quarry.

This project proposed to produce 20,34,000 m^3 of Rough Stone and 3,06,850m^3 of Gravel for the period of 5 years with ultimate depth upto 85 m BGL.

11.2 PROJECT DESCRIPTION

Table 11.1 Salient Features of the Project

Description	Salient Feature
Name of the Project	Thiru.G.Pandurangan Rough stone & Gravel Quarry
Location of the Project	S.F. No. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Latitude & Longitude	Latitude: 09°36'13.53''N to 09°36'25.58''N

	Longitude: 77°53'43.15''E to 77°53'53.80''E
Toposheet No.	58-G/ 14
ML Area	7.37.80 Ha
Type of Land	Patta Land
Geological Resource	Rough Stone – 58,99,600m^3 Gravel – 3,68,725m^3
Mineable Reserves	Rough Stone – 20,34,000 m^3 Gravel – 3,06,850 m^3
Proposed Production for First Five years	Rough Stone – 8,19,750 m^3 Gravel - 3,06,850 m^3
Production for Second Five years	12,14,250 m3 of Rough Stone
Life of the mine	10 years
Proposed depth of mining	85 m BGL
Method of Mining	Opencast mechanized mining involving drilling and blasting
Proposed bench height and width	Bench Height & Width – 5m.
Total Waste	There is no overburden anticipated.
Gravel / Overburden	There is no overburden anticipated as per the approved Mining Plan.
Water Requirement & source	Total – 12.2 KLD. The required water will be procured from outside agencies initially. Later, water collected in the mine pit will be used to meet the needs.
Proposed Manpower Deployment	39 Nos
Total Project Cost	Rs. 290.57 Lakhs
Nearest Highway	The National Highway (NH-44) Salem-Kanniyakumari is about 5.0Km on southeast side of the area. The State Highway (SH-182) Virudhunagar – Watrap is about 570m on north side of the area.
Nearest Railway Station	Virudhunagar Junction -6.63km (E) The Nearest Railway line is Virudhunagar to Madurai line which is about 6.6Km on east side of the area.
Nearest Airport	Madurai Airport – 32.90 km - NE

Nearest Major Water bodies	Odai Kuttai Odai Odai Odai Tank Tank Kousiga River	Adjoining to E & W of the project site (10m safety distance provided) 50m (N) 240m (N) 410m (NE) 450m (SE) 773m (NE) 2.03km (N) 2.20km (NE)
Environmental sensitive areas, Protected areas as per Wildlife Protection Act, 1972 (Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and conservation reserves)	NIL within 10 km radius	
Reserved / Protected Forests	NIL within 10 km radius	
Nearest Village	Seeniyapuram – 520m NE	
Seismic Zone	Zone II	

11.3 DESCRIPTION OF THE ENVIRONMENT

The baseline monitoring study was carried out during March to May 2025 to assess the existing environmental scenario in the area. For the purpose of EIA studies, project area was considered as the core zone and area outside the project area up to 10km radius from the periphery of the project site was considered as buffer zone. Baseline Environmental data has been collected for: -

a) Land
b) Water
c) Air
d) Noise
e) Biological
f) Socio-economic status

11.3.1 LAND ENVIRONMENT

The existing land use pattern of the study area is tabulated below in table 11.2.

Table - 11.2 Land use Pattern of the study area

Sl.No.	LAND USE / LAND COVER	Area in Sq.Km	Area in Percentage
1.	Built-up land	17.32	5.33
2.	Crop land	222.02	68.30
3.	Existing Quarry	1.37	0.42
4.	Fallow land	9.51	2.93
5.	Land with scrub	24.81	7.64
6.	Land without scrub	12.3	3.78
7.	Plantations	16.83	5.17
8.	Salt affected Land	3.87	1.19
9.	Water bodies	17.01	5.24
	Total Area	**325.04**	**100**

Source: Survey of India Toposheet and Landsat Satellite Imagery

11.3.2 SOIL CHARACTERISTICS

Results of the soil samples show that the pH values were found to be 6.8-7.9 and Electrical Conductivity values were ranging between 25.6-128.4 µmhos/cm. Soils are generally Clay Loam. Organic matter values were ranging between 1.05-2.67 %. Total Nitrogen values were ranging between 158-302 mg/kg. Phosphorus values were ranging between 0.77-2.56 µg/g. Potassium values were ranging between 685-1242 mg/kg. Sodium values were ranging between 360-703 mg/kg. Total Sulphate values were observed to be BDL. The soil quality data for the 7 samples collected and analyzed are provided in Table no – 3.13.

11.3.3 AMBIENT AIR QUALITY

The results of ambient air quality monitoring for the period (March-May 2026) are presented in Chapter 3. The ambient air quality data for PM10, PM2.5, SO2, NO2, CO studied at 7 locations as per prescribed guidelines/ methods. As per the monitoring data, the ambient air, the PM10 values were in the range of 44.4 – 76.3 µg/m3. PM2.5 values were in the range of 20.3 – 37.3 µg/m3. SO_2 levels were ranging from 5.2-8.8 µg/m3. NO_2 levels were ranging from 8.2 -16.0 µg/m3. While comparing with the NAAQ Norms laid by MoEF, all monitored values of PM10, PM2.5, SO2, NO2 & CO were found to be well within the prescribed standards. The

CO values in the all locations found to be below detectable limit (DL – 1144 µg/m3).

11.3.3 WATER ENVIRONMENT

Ground Water

Suitability of ground water for drinking/irrigation/industrial purposes is determined keeping in view the effects of various chemical constituents present in water as required human use, plant use. Though many ions are very essential for the growth of plants and human body but when present in excess, have an adverse effect on health and growth.

As Per the data it has been observed that the pH value varies from 7.09-7.94, Chlorides Ranges From 77.0-495.2 mg/l, Sulphates value found to be between 28.6 – 234.3 mg/l, Fluoride Ranges low in lease area i.e. 0.17-0.40 mg/l, Hardness varies from 209-439 mg/l, and Total dissolved solid 355-1090 mg/l. The ground water has been analyzed as per IS10500: 2012 and found to be suitable for drinking purpose. So the results of chemical and bacteriological analysis of water samples are classified under good class for drinking purpose with respect to total dissolved solids. Total hardness of the samples ranged from soft to moderately hard waters and can be fairly used for drinking. Regular ground water monitoring is suggested as the quality of ground water may fluctuate with groundwater consumption and seasonal variations.

11.3.5 NOISE ENVIRONMENT

From the table it is observed that the day Equivalent Noise (Leq-d) level were ranging from 46.9 to 51.4 dB(A) and Night Equivalent Noise (Leq-n) level were ranging from 38.9 to 43.1 (A). Day and Night Equivalent Noise (Leq-n) level were ranging from 43.3 to 46.9 dB(A). While comparing with the MoEF Norm of 55 dB(A) for day time and 45 dB(A) for night time in Residential areas, the monitored ambient noise levels are within the limit values.

11.3.6 BIOLOGICAL ENVIRONMENT

There is no schedule I species of animals observed within study area as per Wildlife Protection Act 1972 as well as no species is in vulnerable, endangered or threatened category as per IUCN. There is no endangered red list species found in the study area. Hence this small operation over short period of time will not have any significant impact on the surrounding flora and fauna.

11.3.7 SOCIO-ECONOMIC ENVIRONMENT

An attempt has been made to assess the impact of the proposed mining project at Seeniyapuram Village on Socioeconomic aspect of the study area. The various attributes that have been taken into account are population composition, employment generation, occupational shift, household income and consumption pattern. Implementation of the Proposed Mine Project will generate both direct and indirect employment. Besides, Mining operation will be legally valid and it will bring income to the state exchequer.

11.4 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The main scope of the EIA study is to quantify the cumulative impact in the study area due to cluster quarries and formulate the effective mitigation measures for each individual leases. A detailed account of the emission sources, emissions control equipment, background Air quality levels, Meteorological measurements, Dispersion model and all other aspects of pollution like effluent discharge, Dust generation etc., have been discussed in Chapter 4 of this report.

The project proponent will adopt all the necessary mitigation measures and management plan mentioned in this report and also comply the conditions stipulated in Environmental clearance and CTO of this project.

Anticipated Impacts & Mitigation Measures

Impact	Mitigation Measures
Land Environment	
❖ Destruction of natural landscapes ❖ Changes in soil characteristics ❖ Soil erosion and slope instability ❖ Problems to agricultural land and human habitations due to dust, and noise caused by movement of heavy vehicles.	❖ Rough stone does not produce any toxic effluents in the form of solids, liquids, or gases. ❖ At the end of life of mine, the excavated mine pit / void of 6.14.00 Ha. will act as artificial reservoir for collecting rain water and helps to meet out the demand or crises during drought season. ❖ After mine closure the greenbelt (1.17.80 Ha.) will be developed along the safety barrier and top benches and 0.06 ha are approach road and Infrastructure. ❖ The periphery of the mining lease area will be converted to a greenbelt to prevent Noise and sound propagation to the nearby lands. ❖ Entire mined out area will be properly fenced to prevent inadvertent entry of human and animals. ❖ Construction of garland drains all around the quarry pit and construction of settling traps at strategic location in lower elevations to prevent soil erosion due to surface runoff during rainfall and also to collect the storm water for various uses within the proposed area.
Water Environment	
❖ Impact due to Usage of Water in mines ❖ Generation of waste water from vehicle washing ❖ Domestic sewage ❖ Washouts from surface exposure or working areas	❖ There is no proposal for a rough stone processing or workshop within the project area, so no effluent is anticipated in the mine. ❖ The required water (12.2 KLD) will be sourced initially from outside agencies. Later the rainwater

❖ Impact on Surface Water Resources ❖ Impact on Ground water ❖ Impact on Water Quality ❖	collected in the mine pit sump will be used for this purpose. ❖ Regular water quality will be carried in nearby villages to ensure the water quality is not affected due to the quarrying activities. ❖ Domestic sewage from site office & urinals/latrines provided in project area will be discharged through septic tank followed by soak pit system. ❖ Only clear and settled water free from silt content will be used for dust suppression and greenbelt development. ❖ De-silting will be carried out before and immediately after the monsoon season and the settling tank and drains will be cleaned weekly, especially during monsoons. ❖ The dimension of the rain water harvesting pond will be 25m x 20m x20m with capacity of 10000 cu.m. The rain water stored in the pond will be utilized for plantation, dust suppression activities.
Air Environment	
❖ Generation of Fugitive Dust ❖ Dust will be generated mainly during excavation, loading &unloading activities. ❖ Reduction in visibility due to dust plumes. ❖ Coating of vegetation leading to reduced photosynthesis. ❖ Inhibited growth, destroying of foliage, degradation of crops; ❖ Increase in health hazards due to inhalation of dust.	❖ Using Wet drilling methods, Allowing drilling only with PPE, Carrying out blasting only during specified times, Avoiding blasting during unfavourable weather conditions, Using explosives of good quality, Using mist sprayers Regular wetting of transport, Covering the materials carried in tippers with tarpaulin, Proper maintenance of vehicles used for transportation, Conducting regular emission tests for vehicles used for transport. ❖ Speed restrictions will be imposed to avoid spillage of loaded materials upon the road and to reduce wear and tear of the road. ❖ Weekly inspections of the condition of the access road by competent

	person employed, and immediate action will be taken to address any potholes or damage to the road surface. ❖ Development of greenbelt is proposed in the safety zone of 10m and 7.5m barriers in the lease area. ❖ Personal Protective Equipment's will be provided to all workers
Noise & Vibration	
❖ The main noise generating source during mining operation and related activities are drilling, excavation, loading, unloading and transportation.	❖ Usage of sharp drill bits while drilling which will help in reducing noise; ❖ Secondary blasting will be totally avoided and hydraulic rock breaker are utilized for breaking boulders; ❖ Controlled blasting with proper spacing, burden, stemming and optimum charge/delay will reduce noise; ❖ The blasting will be carried out during favourable atmospheric condition and less human activity timings by using nonelectrical initiation system; ❖ Proper maintenance, oiling and greasing of machines will be done every week to reduce generation of noise; ❖ Provision of sound insulated chambers for the workers working on machines (HEMM) producing higher levels of noise; ❖ Green Belt will be developed around the project areas and along the haul roads. The plantation minimizes propagation of noise; ❖ Personal Protective Equipment (PPE) like ear muffs/ear plugs will be provided to the operators of HEMM and persons working near HEMM and their use will be ensured though training and awareness. ❖ Regular medical check–up and proper training to personnel to

	create awareness about adverse noise level effects
Ground Vibration	
❖ The vibration due to blasting can cause damage to the nearby structures if appropriate technology and control measures are not adopted in the blasting operation. ❖ Fly rock is another possible damage causing outcome of blasting.	❖ Proper quantity of explosive, suitable stemming materials and appropriate delay system should be adopted to avoid overcharging and for safe blasting; ❖ Adequate safe distance from blasting should be maintained as per DGMS guidelines; ❖ Blasting shelter should be provided as per DGMS guidelines; ❖ Blasting operations shall be carried out only during day time; ❖ The charge per delay shall be minimized and preferably more number of delays will be used per blasts; ❖ During blasting, other activities in the immediate vicinity shall be temporarily stopped; ❖ Drilling parameters like depth, diameter and spacing will be properly designed to give proper blast; ❖ Blasting will be carried out under the supervision of statuary persons as approved by DGMS. ❖ A well-defined SOP will be framed under the leadership of top management and the same will be followed for each blasting. ❖ Regular PPV monitoring will be carried out to ensure PPV limits i.e., 0.5 mm/s.
Biological Environment	
❖ Direct impacts include land clearance and excavation causing destruction of flora and fauna and loss of habitats.	❖ Only some common herbs, shrubs and grass will be cleared. So, there will be no impact on the biodiversity. ❖ Green belt development with suitable species will enhance the biodiversity of the project area.

❖ Indirect impacts include habitat degradation due to noise, dust, and human activity.	❖ The core zone or buffer zone does not encompass any threatened flora or fauna species.
Socio-Economic Environment	
❖ Health and safety of workers and the general public. ❖ Increase in traffic volumes and sizes of road vehicles. ❖ Economic issues, including the increase in employment opportunities.	❖ Around 39 local workers will get employment opportunities along with periodical training to generate local skills. ❖ Mine management will contribute for the upliftment of these villages by conducting regular medical camps, assistance in developing necessary infrastructure facilities like maintenance of schools, village roads, drinking water supply, etc.
Occupational Health & Safety	
❖ Exposure to Dust ❖ Noise and Vibration Exposure ❖ Physical Hazards ❖ Respiratory hazards due to Dust exposure	❖ Provision of rest shelters for mine workers with amenities like drinking water etc. ❖ All safety measures like use of safety appliances, such as dust masks, helmets, shoes, safety awareness programs, awards, posters, slogans related to safety etc. ❖ Training of employees for use of safety appliances and first aid in vocational training centre. ❖ Weekly maintenance and testing of all equipment as per manufacturers' guidelines. ❖ Pre placement and Yearly Medical Examination of all workers by a medical Officer. ❖ First Aid facility will be provided at the mine site. ❖ Close surveillance of the factors in working environment and work practices which may affect environment and worker's health by the mine's manager employed. ❖ Working of mine as per approved mining plan and environmental plans.

11.5 ANALYSIS OF ALTERNATIVES

There are no alternatives suggested as the proposed mining area has the following advantages:

- The mineral deposit occurs in a non-forest area.
- There is no habitation within the applied lease area; hence, no R & R issues exist.
- There is no river, stream, nallas and water bodies in the or passing through the applied mine lease areas.
- Mine connectivity through road and rail is good.
- The proposed mining operations do not intersect the ground water level. Hence, no impact on ground water environment.

11.6 ENVIRONMENTAL MONITORING PROGRAM

Environmental Monitoring program will be conducted for various environmental components as per conditions stipulated in Environmental Clearance Letter issued by SEIAA & Consent to Operate issued by TNPCB. Post project monitoring program is detailed in Chapter 6.

PP will supervise the overall environmental management plan of the project during operation. Total EMP Cost for 5 years is Rs.134.31 lakhs i.e., Rs.46.65 Lakhs of Capital + Recurring cost Rs.88.66 lakhs for 5 years have been allocated under the EMP budget which includes Environmental Monitoring Cost.

11.7 ADDITIONAL STUDIES

Risk Analysis & Disaster Management Plan

The methodology for the risk assessment has been based on the specific risk assessment guidance issued by the Directorate General of Mine Safety (DGMS). The DGMS risk assessment process is intended to identify existing and probable hazards in the work environment and all operations and assess the risk levels of those hazards in order to prioritize those that need immediate attention.

Further, mechanisms responsible for these hazards are identified and their control measures set to time table are recorded along with pinpointed responsibilities. In the unlikely event that a consequence has occurred, disaster management kicks

in. This includes instituting procedures pertaining to a number of issues such as communication, rescue, and rehabilitation. These are addressed in the disaster management plan. Both, the RA and DMP, are living documents and need to be updated whenever there are changes in operations, equipment, or procedures Assessment is all about preventing accidents and taking necessary steps to prevent it from happening.

The Disaster Management Plan (DMP) is a guide, giving general considerations, directions, and procedures for handling emergencies likely to arise from planned operations. The DMP has been prepared on the basis of the Risk Assessment and related findings covered in the report.

Terms of Reference with Public Hearing (ToR) for the project was issued vide TO26B0108TN5346922N (F.No.13627), dated: 15.06.2026. Now, this Draft EIA / EMP Report is prepared for conducting Public Hearing as the projects falls under B1 Category.

Although the individual lease area of this project is more than 5 Ha, the four existing and this proposed quarries within the 500m radius along with this subject project works out to >5 Ha. A Cumulative impact study is conducted to determine the impact of the existing and proposed quarries located within 500m radius on the environment and are detailed in Section 7.4.

Cumulative Impact Study

The baseline monitoring conducted for this project reflects the cumulative impact of the existing quarry and impact of this proposed project on air environment do not exceed the permissible limits set by CPCB for air pollution.

The existing projects provided employment opportunities for 61 people and this proposed will provide direct employment opportunities for 39 people.

The previous project had a CER budget of Rs. 50, 000/-, and this proposed project has allocated Rs.5.0 Lakhs as the CER budget.

11.8 PROJECT BENEFITS

Financial benefits

- This project will contribute financially through payment of taxes like royalty, GST, etc
- The project will also contribute via CSR.
- The demands of people during public hearing will also be considered by the project proponent

Social benefits

- This project provides employment to 39 people directly. Local people will be hired for unskilled labour.
- Through CSR, nearby schools, hospitals will be benefitted.

11.9 CONCLUSION

EIA study was performed as per the approved ToR. Various environmental attributes were studied relating with aspects of mining activities. The related impacts were identified and evaluated. Considering all the possible ways to mitigate the environmental concerns, Environmental Management Plan was prepared and accordingly fund was allocated. The EMP has been dynamic, flexible and subject to periodic review.

The project will increase the revenue of the State Govt. as well as it will help in the social upliftment of the local community. The green belt development programme will help in increasing the green cover in the area. Thus, the proposed project is not likely to affect the environment or adjacent ecosystem adversely.

The Mine Management will be responsible for the project review of EMP and its implementation to ensure that the EMP remains effective and appropriate. Thus, the proper steps will be taken to accomplish all the goals mentioned in the EMP and the project will bring the positive impact in the study area.

*****

12 DISCLOSURE OF CONSULTANTS

Global Mining Solutions is a NABET Accredited EIA consultant as per NABET certificate NABET/EIA/26-29/RA 0478. The registered office of Global Mining Solutions is at Plot No.6, S.F.No.13/2 A2, VS City, RC Chettypatty, Kottamettupatty, Omalur, Salem, Tamilnadu-636455.

Declaration by Experts contributing to the proposed Rough Stone and Gravel Quarry over a lease extent of 7.37.80 Ha & a cluster extent of 15.01.80 Ha at Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.

I, hereby, certify that I was a part of the EIA team that developed the above EIA.

EIA Coordinator Name: Manikandan Manickam



Period of involvement: March 2026 to May 2026.

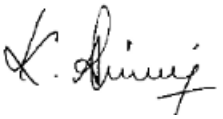
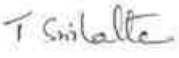
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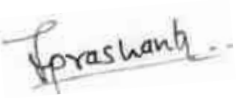
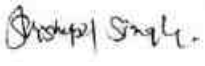
M/s Global Mining Solutions

Plot No.6, SF No. 13/2, A2, VS City, RC Chettypatty,

Kottamettupatty, Omalur,

Salem, Tamil Nadu – 636 455.

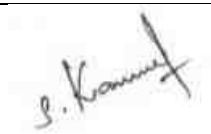
S. No.	Functional areas	Name of the expert/s	Involvement (period and task**)	Signature and Date
1	*AP*	*Dhanalakshmi Ramanathan*	*Assessment of existing air quality, Impact of the project on ambient air and suggested mitigation measures for air pollution.* *Period: March 2026 to May 2026.*	
2	*WP*	*Abirami Kaliaperumal*	*Assessment of existing water quality, impact of the project on surface and ground water quality, suggested mitigation measures for minimizing the impact.* *Period: March 2026 to May 2026.*	
3	*SHW*	*Ramadoss N*	*Assessment of waste generated from the project, suggested waste management practices.* *Period: March 2026 to May 2026.*	
4	*SE*	*Sarasvathy K*	*Baseline SE studies. Data compilation and assessment. Impact of the project on SE status of the area. Formulation of CER plan.* *Period: March 2026 to May 2026.*	
5	*EB*	*Saravanan S*	*Baseline data collection of related to ecology of the area.* *Period: March 2026 to May 2026.*	
6	*HG*	*Ravinthiran N*	*Hydrogeological feature of the area. Ground water depth and impact of project on ground water of the area.* *Period: March 2026 to May 2026.*	
7	*AQ*	*Srilatha Thiruveedhula*	*Air quality modeling utilizing the area source model. Predication of the*	

			ground level concentration of the dust. Suggesting suitable mitigation measures. <u>*Period: March 2026 to May 2026*</u>*.*	
8	*NV*	*Dhanalakshmi Ramanathan*	*Ambient noise study of the area. Incremental noise generation due to quarry operation and impact of the noise due to the project.* <u>*Period: March 2026 to May 2026*</u>*.*	
9	*LU*	*Srilatha Thiruveedhula*	*Preparation of land use map based on satellite imagery. Land use classification and analysis. Impact prediction of the project on the surrounding land environment.* <u>*Period: March 2026 to May 2026*</u>*.*	
10	*RH*	*S.V. Prashant*	*Identification of the Risk related to the mining activities. Preparation of emergency disaster management plan. Plan for supply of safety equipment for the worker.* <u>*Period: March 2026 to May 2026*</u>*.*	
11	*SC*	*Shisupal Sing*	*Soil monitoring, secondary data collection on soil type, soil management practices, utilization of topsoil.* <u>*Period: March 2026 to May 2026*</u>*.*	
12	*GEO*	*Valliappan Meyyappan*	*Geological map, stability of quarry and dump, management plan for mine stability, after use of mining quarry and geological feature of the area.* <u>*Period: March 2026 to May 2026*</u>*.*	

TM- EC

S.No	*Name of TM (EC)*	*Sector(s) proposed*	*Approved (to work under)*	*Period of involvement*	*Type of work*	*Signature*
1.	*Dhanalakshmi Ramanathan*	*1(a)*	*Manikandan Manickam*	*Period: March to May 2026.*	*Associated with EIA Coordinator in overall preparation of Draft EIA/EMP report.*	

TM- FAE:

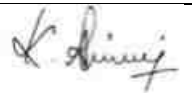
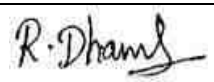
S. No	**Name of TM (FAE)**	**Functional Area**	**Approved FAE (to work under)**	**Period of involvement**	**Type of work**	**Signature**
1	Kamaraj S	HG	Ashok Kumar Rajagopal	*Period: March to May 2026.*	Associated with Experts in studying hydrogeological pattern of study area, Studying ground water and the impact of the	

					project on ground water	
2	B.J.Sampatkkumar	SE	Saraswathy K	*Period: March to May 2026.*	Assisted by the Expert in preparation of socio-economic report.	
		SC	Shishupal Singh	*Period: March to May 2026.*	Assisted by the Expert in interpretation of soil sampling and their quality involved in the project.	
3	Mownica Balaji	NV	Dhanalakshmi Ramanathan	*Period: March to May 2026.*	Associated with the expert team in suggesting control measures for noise and Ground Vibration.	Mownica.B
		AP	Dhanalakshmi Ramanathan		Associated with expert team in assessing existing air quality, impact	

					of the project on ambient air and suggesting mitigation measures for air pollution	
4	Balasubramani G	NV	Dhanalakshmi Ramanathan	*Period: March to May 2026.*	Associated with the expert in selection of base line monitoring stations, Review of Noise quality results, Review of emission sources – drilling, blasting, excavation and transportation, Identification of impacts on environment, identification of remedial measures and input to EIA preparation	
		Geo	Valliappan Meyyappan		Associated with the expert in	

					preparing Geological map.	
5	Suresh Mani	LU	Srilatha Thiruveedhula	*Period: March to May 2026.*	Associated with Experts in preparing Land use map based on satellite imagery, Land use classification and analysis, Impact prediction on surrounding land environment.	
		HG	Ashok Kumar Rajagopal		Associated with Experts in studying hydro-geology pattern of study area, studying water and the impact of the project on ground water.	
6	Asan Ali S	NV	Srilatha Thiruveedhula	*Period: March to May 2026.*	Associated with the expert in monitoring and analysis of blast	

					induced ground vibration in order to develop the site-specific equation for its prediction, monitoring of fly rocks & air blast (noise), preparation of SOP's for the safety blasting practice in the mines.	
		Geo	Valliappan Meyyappan		Associated with the Qualified Person & Experts in preparing Geological map, assessing stability of quarry slope faces and dump, management plan for mine stability and after use of mining quarry and geological features of the area during	

					mine plan preparation.	
7	Prabu M	Geo	Valliappan Meyyappan	*Period: March to May 2026.*	Associated with Experts and involved in Field Investigations, Mapping /Geo-referencing	
8	Abirami Kaliyaperumal	RH	S V Prashant	*Period: March to May 2026.*	Associated with experts and involved in the identification risk and hazard, suggesting safeguard measures.	
9	Dhanalakshmi Ramanathan	AQ	Srilatha Thiruveedhula	*Period: March to May 2026*	Involved with Expert team and involved in calculating air emission values using Meteorological data and Providing inputs for running	

					modelling (ISCT3, AERMOD).	
10	Manikandan Manickam	AP	Ramadoss N	*Period: March to May 2026.*	Associated with expert team in assessing existing air quality, impact of the project on ambient air and suggesting mitigation measures for air pollution	
		WP	Abirami Kaliyaperumal		Involved in the identification of source of water and waste generation, suggesting treatment for safe disposal of wastewater	

ANNEXURE-1

File No: 13627

State Environment Impact Assessment Authority (SEIAA), Tamil Nadu

(Constituted as per the provision of EIA Notification, 2006, as amended by the Ministry of Environment, Forest and Climate Change, Government of India)

Dated: **15/06/2026**

To,

G PANDURANGAN
S/o.Govindaraj, Door No.13/3, 7/25, Elgaipatti, Pavali Panchayath, Seeniyapuram Village,
Virudhunagar District - 626103, AMIL NADU.
pentagonbluemetalsvnr@gmail.com

Subject: Grant of Terms of Reference along with Public Hearing under the provision of the EIA Notification 2006, as amended -regarding.

Sir/Madam,

Sub: SEIAA,TN-Proposed Rough stone and Gravel Quarry over an extent of 7.37.80Ha at S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) & 24/6 in Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu by Thiru.G.Pandurangan - under project category – "B1" of Item 1(a) "Mining of Minerals" of the Schedule to the EIA Notification, 2006 as amended– ToR issued along with Public Hearing- preparation of EIA report – Regarding.

Ref:

1. Online proposal No. SIA/TN/MIN/572606/2026, Dated: 17/03/2026
2. Minutes of the 712th SEAC-II meeting held on 08.05.2026.
3. Minutes of the 1011th meeting of SEIAA held on 09.06.2026.

2. The particulars of the proposal are as below:

(i) TOR Identification No.	TO26B0108TN5346922N
(ii) File No.	13627
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Name of Project	Rough Stone and Gravel Quarry of Thiru.G.Pandurangan
(vii) Name of Company/Organization	G PANDURANGAN
(viii) Location of Project (District, State)	VIRUDHUNAGAR, TAMIL NADU
(ix) Issuing Authority	SEIAA

(x) Applicability of General Conditions	no
(xi) Applicability of Specific Conditions	no

1.In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the SEIAA for an appraisal by the SEAC under the provision of EIA notification 2006 and its subsequent amendments.
2.The above-mentioned proposal has been considered by SEIAA in the meeting held on 09.06.2026. The minutes of the meeting and all the Application and documents submitted [viz. Form-1 Part A, Part B] are available on PARIVESH portal which can be accessed by scanning the QR Code above.
3.The State Expert Appraisal Committee (SEAC), based on the information & clarifications provided by the project proponent and after detailed deliberations on all technical aspects recommended the proposal for grant of Terms of Reference with public hearing under the provision of EIA Notification, 2006 and as amended thereof subject to the stipulation of specific and general conditions as detailed in Annexure (2).
4.The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the SEAC hereby decided to issue the following Terms of Reference with public hearing for instant proposal of **Thiru.G.Pandurangan** under the provisions of EIA Notification, 2006 and as amended thereof.
5.The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.
6.The Terms of Reference with public hearing to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
7.This issues with the approval of the Competent Authority.
8.The TORs with public hearing prescribed shall be valid for a period of three years from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(I)(part) dated 29th August, 2017.

Copy To

N/A

Annexure 1

Specific Terms of Reference s for (Mining Of Minerals)

1. Seac Conditions - Site Specific

S. No	Terms of Reference
1.1	**<u>Major Conditions:</u>** 1. The Project Proponent must furnish drone video/photograph of the quarries belonging to the PP, which are in operation, in the same village, as mentioned in the 500m cluster certificate dated: 03.03.2026, along with EIA report. Further, the PP shall submit the details of HYCR submitted in parivesh portal for the quarries operating in the name of the PP as stated above. 2. The PP shall submit a detailed hydrology report from reputed institution. 3. The name of the Proponent is mentioned as Thiru.K. Bharathiraja S/o of Krishnan in Mining plan approval letter & 500M Cluster Letter Dated:03.03.2026, hence the PP shall correct the lessee's name and submit the revised mining plan approval letter & 500M Cluster Letter. 4. The Survey Nos. 19/1B & 14/4B are Mistakenly mentioned as 19/18 & 14/18 in precious area communication letter. Hence the correction shall be carried out in survey Nos. and the PP shall submit revised precious area communication letter. 5. During the meeting, the Committee observed a scratched portion within the proposed project area

S. No	Terms of Reference
	from the KML furnished by the PP. Hence, the PP shall obtain clarification from the Assistant Director (AD), Department of Mines regarding the nature, extent, and cause of the said scratched portion and furnish at the time of submission of the EIA report. **Site-specific conditions:** 1. A Cluster Management Committee (CMC) shall be constituted including all the mines in the cluster as Committee Members for the effective management of the mining operation in the cluster through systematic & scientific approach with appointment of required statutory personnel, appropriate environmental management, system of maintaining the haul roads and village/panchayat roads, authorized blasting operation, Monitoring system of the environmental & other statutory compliances & its reporting status, etc. The PP shall submit the following details in the form of an Affidavit during the EIA appraisal: (i) Copy of the agreement forming CMC. (ii) The Organisation chart of the Committee with defining the role of the members (iii) The 'Standard Operating Procedures' (SoP) executing the planned activities. 2. The details of enumeration of structures including schools, colleges, primary health centres should be submitted along with the EIA report. 3. The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300m & upto 1km shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc. and spell out the mitigation measures to be proposed for the protection of the above structures, if any during the quarrying operations. 4. The PP shall ensure the installation of CCTV at the proposed quarry site and ensure its inclusion during the EIA presentation.

2. Seiaa Specific Conditions :

S. No	Terms of Reference
2.1	After detailed discussions, the Authority accepts the recommendation of SEAC-II and decided to grant Terms of Reference (ToR) along with Public Hearing for the quantity of **20,34,000m^3 of rough stone & 3,06,850m^3 of Gravel up to the depth of 85m BGL and the annual peak production shall not exceed 2,43,750m^3 of rough stone & 85,500m^3 of Gravel** as per the approved mining plan, under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions & the SEIAA Standard conditions.

3. Seiaa Standard Conditions :

S. No	Terms of Reference
3.1	**Cluster Management Committee** 1. Cluster Management Committee shall be framed which must include all the proponents in the cluster as members including the existing as well as proposed quarry. 2. The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc., 3. The List of members of the committee formed shall be submitted to AD/Mines before the execution of mining lease and the same shall be updated every year to the AD/Mines. 4. Detailed Operational Plan must be submitted which must include the blasting frequency with respect to the nearby quarry situated in the cluster, the usage of haul roads by the individual quarry in the form of route map and network.

S. No	Terms of Reference
	5. The committee shall deliberate on risk & emergency management plan, fire safety & evacuation plan and sustainable development goals pertaining to the cluster in a holistic manner especially during natural calamities like intense rain and the mitigation measures considering the inundation of the cluster and evacuation plan. 6. The Cluster Management Committee shall form Environmental Policy to practice sustainable mining in a scientific and systematic manner in accordance with the law. The role played by the committee in implementing the Environmental policy devised shall be given in detail in the EIA Report. 7. The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner. 8. The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public in the vicinity. **Agriculture & Agro-Biodiversity** 9. Impact on surrounding agricultural fields around the proposed mining Area. 10. Impact on soil flora & vegetation around the project site. 11. Details of type of vegetation including no. of trees & shrubs within the proposed mining area and. If so, transplantation of such vegetation all along the boundary of the proposed mining area shall committed mentioned in EMP. 12. The Environmental Impact Assessment should study the agro-biodiversity, agro- forestry, horti-cultural plantations, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem. 13. Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services. 14. The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock. **Forests** 15. The project proponent shall detailed study on impact of mining on Reserve forests and free ranging wildlife. 16. The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna. 17. The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection. 18. The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site. **Water Environment** 19. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period. 20. Erosion Control measures. 21. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas. 22. The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir. 23. The project proponent shall study and furnish the details on potential fragmentation impact on natural Environment, by the activities. 24. The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts. 25. The Terms of Reference should specifically study impact on soil health, soil erosion, the soil

S. No	Terms of Reference
	physical, chemical components and microbial components. 26. The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites. 27. The EIA shall include the impact of mining activity on the following: a) Hydrothermal/Geothermal effect due to destruction in the Environment. b) Bio-geochemical processes and its foot prints including Environmental stress. c) Sediment geochemistry in the surface streams. **Energy** 28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished. **Climate Change** 29. The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities. 30. The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock, soil health and physical, chemical & biological soil features. 31. Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood. **Mine Closure Plan** 32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued. **EMP** 33. Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued and the scope for achieving SDGs. 34. The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan. **Risk Assessment** 35. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining. **Disaster Management Plan** 36. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities covering the entire mine lease period as per precise area communication order issued. **Others** 37. The project proponent shall furnish VAO certificate with reference to 300m radius regard to approved habitations, schools, Archaeological sites, Structures, railway lines, roads, water bodies such as streams, odai, vaari, canal, channel, river, lake pond, tank etc. 38. As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall address the concerns raised during the public consultation and all the activities proposed shall be part of the Environment Management Plan. 39. The project proponent shall study and furnish the possible pollution due to plastic and microplastic on the Environment. The ecological risks and impacts of plastic & microplastics on aquatic Environment and fresh water systems due to activities, contemplated during mining may be investigated and reported.

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994
1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given
1.3	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee
1.4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the areashould be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone)
1.5	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics
1.6	Details about the land proposed for mining activities should be givenwith information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority
1.7	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large,may also be detailed in the EIA Report
1.8	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided
1.9	The study rea will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period
1.10	Land use of the study rea delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given
1.11	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land

S. No	Terms of Reference
	area, distance from mine lease, its land use, R&R issues, if any, should be given
1.12	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees
1.13	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished
1.14	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated
1.15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given
1.16	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted
1.17	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlifeand copy furnished
1.18	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost
1.19	Proximity to Areas declared as Critically Polluted or the Project areas likely to come under the Aravali Range, (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered
1.20	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority)

S. No	Terms of Reference
1.21	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report
1.22	One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site- specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given
1.23	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map
1.24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated
1.25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided
1.26	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided
1.27	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided
1.28	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished
1.29	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out

S. No	Terms of Reference
1.30	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same
1.31	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given.The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution
1.32	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines
1.33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report
1.34	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report
1.35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed
1.36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations
1.37	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation
1.38	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project
1.39	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project
1.40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given

S. No	Terms of Reference
1.41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out
1.42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report
1.43	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area

SEAC Standard Condition

1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following:
    (i) Original pit dimension
    (ii) Quantity achieved Vs EC Approved Quantity
    (iii) Balance Quantity as per Mineable Reserve calculated.
    (iv) Mined out Depth as on date Vs EC Permitted depth
    (v) Details of illegal/illicit mining
    (vi) Violation in the quarry during the past working.
    (vii) Quantity of material mined out outside the mine lease area
    (viii) Condition of Safety zone/benches
    (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m.
2. Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.
3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
4. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the water bodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.
6. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-

Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC.

8. However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
9. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
10. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.
11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
13. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
14. Quantity of minerals mined out.
    - Highest production achieved in any one year
    - Detail of approved depth of mining.
    - Actual depth of the mining achieved earlier.
    - Name of the person already mined in that leases area.
    - If EC and CTO already obtained, the copy of the same shall be submitted.
    - Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
15. All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the

mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).

16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,
17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.
19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
20. The Project Proponent shall conduct t he hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.
21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.

24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
25. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
26. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
27. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
28. Impact on local transport infrastructure due to the Project should be indicated.
29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
30. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with

GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner

34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detail ed.
37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.
42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this

Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

A. STANDARD TERMS OF REFERENCE

1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5) Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
8) Issues relating to Mine Safety, including subsidence study in case of underground

mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.

9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
12) Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors,

Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.

20) Similarly, for Coastal Projects, a CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease with respect to CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and

for pumping of ground water should also be obtained and copy furnished.

29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.

30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.

31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted cle arly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.

35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures

should be detailed along with budgetary allocations.

37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

38) Detailed Environmental Management Plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.

43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.

44) Besides the above, the below mentioned general points are also to be followed:-

    a) Executive Summary of the EIA/EMP Report
    b) All documents to be properly referenced with index and continuous page numbering.
    c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
    d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
    e) Where the documents provided are in a language other than English, an English translation should be provided.
    f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
    g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-

11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.

h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the ToR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.

i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

In addition to the above, the following shall be furnished:-

The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information on following points:

1. Project name and location (Village, District, State, Industrial Estate (if applicable).
2. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
3. Measures for mitigating the impact on the environment and mode of discharge or disposal.
4. Capital cost of the project, estimated time of completion.
5. The proponent shall furnish the contour map of the water table detailing the number of wells located around the site and impacts on the wells due to mining activity.
6. A detailed study of the lithology of the mining lease area shall be furnished.
7. Details of village map, “A” register and FMB sketch shall be furnished.
8. Detailed mining closure plan for the proposed project approved by the Geology of Mining department shall be shall be submitted along with EIA report.
9. Obtain a letter /certificate from the Assistant Director of Geology and Mining standing that there is no other Minerals/resources like sand in the quarrying area within the

approved depth of mining and below depth of mining and the same shall be furnished in the EIA report.

10. EIA report should strictly follow the Environmental Impact Assessment Guidance Manual for Mining of Minerals published February 2010.
11. Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas.
12. The EIA study report shall include the surrounding mining activity, if any.
13. Modeling study for Air, Water and noise shall be carried out in this field and incremental increase in the above study shall be substantiated with mitigation measures.
14. A study on the geological resources available shall be carried out and reported.
15. A specific study on agriculture & livelihood shall be carried out and reported.
16. Impact of soil erosion, soil physical chemical and biological property changes may be assumed.
17. Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest , eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
18. Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
19. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
20. Likely impact of the project on air, water, land, flora-fauna and nearby population
21. Emergency preparedness plan in case of natural or in plant emergencies
22. Issues raised during public hearing (if applicable) and response given
23. CER plan with proposed expenditure.
24. Occupational Health Measures
25. Post project monitoring plan
26. The project proponent shall carry out detailed hydro geological study through intuitions/NABET Accredited agencies.
27. A detailed report on the green belt development already undertaken is to be furnished and also submit the proposal for green belt activities.
28. The proponent shall propose the suitable control measure to control the fugitive emissions during the operations of the mines.
29. A specific study should include impact on flora & fauna, disturbance to migratory pattern

of animals.

30. Reserve funds should be earmarked for proper closure plan.
31. A detailed plan on plastic waste management shall be furnished. Further, the proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throw away plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986. In this connection, the project proponent has to furnish the action plan.

Besides the above, the below mentioned general points should also be followed:-

a. A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.
b. All documents may be properly referenced with index, page numbers and continuous page numbering.
c. Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
d. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF& CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
e. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. In this regard circular no F. No.J -11013/77/2004-IA-II(I) dated 2nd December, 2009, 18th March 2010, 28th May 2010, 28th June 2010, 31st December 2010 & 30th September 2011 posted on the Ministry's website http://www.moef.nic.in/ may be referred.
    - After preparing the EIA (as per the generic structure prescribed in Appendix-III of the EIA Notification, 2006) covering the above mentioned points, the proponent willtake further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
    - The final EIA report shall be submitted to the SEIAA, Tamil Nadu for obtaining Environmental Clearance.

- The TORs with public hearing prescribed shall be **valid for a period of three years** from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(I)(part) dated 29th August, 2017.

ANNEXURE-2

ANNEXURE I

புவியியல் மற்றும் சுரங்கத்துறை

MINING PLAN APPROVED
Assistant Director
Geology and Mining
Virudhunagar District

ந.க.எண்:25VNR0402851

உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை,
மாவட்ட ஆட்சியர் அலுவலக வளாகம்,
விருதுநகர்.

நாள்: . 09.2025.

குறிப்பாணை

பொருள்: கனிமங்களும் குவாரிகளும் - விருதுநகர் மாவட்டம் மற்றும் வட்டம் - சீனியாபுரம் கிராமம் - பட்டா புல எண். 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50மொத்தம் 7.37.80 ஹெக்டேர்ஸ் - 10 (பத்து) வருடங்களுக்கு உடைகல் மற்றும் கிராவல் குவாரி உரிமம் வழங்கல் - உகந்த பரப்பு (Precise Area) தேர்வு செய்யப்பட்டது - சுரங்கத்திட்டம் மற்றும் மாநில அளவிலான சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்ப்பிக்க கோருவது - தொடர்பாக.

பார்வை:

1. திருபாண்டுரங்கன்,த/பெ.கோவிந்தராஜ்,க.எண்.13/3, 7/25, எல்கெப்பட்டி பாவாலி பஞ்சாயத்து, சீனியாபுரம் கிராமம், விருதுநகர் மாவட்டம் இணைய வழி விண்ணப்பம் நாள்:30.04.2025.
2. இவ்வலுவலக கடிதம் எண் ந.க. 25VNR0402851, நாள்: 30.06.2024 (வருவாய் கோட்டாட்சியர், சாத்தூர் அவர்களுக்கு முகவரியிட்டது).
3. சாத்தூர், வருவாய் கோட்டாட்சியர் கடித எண் மூ.மு.அ2/2566/2025, நாள்: 11.08.2025.
4. உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை அவர்களின் புலத்தணிக்கை அறிக்கை நாள்: 27.08.2025
5. 1959 -ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 41 மற்றும் 42.
6. அரசாணை எண்.169 தொழில் (எம்.எம்.சி.1) துறை, நாள்: 04.08.2020.
7. தொடர்புடைய ஆவணங்கள்.

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ஆணை:

விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம் புல எண். 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 விஸ்தீரணம் 7.37.80 ஹெக்டேர் பரப்பில் 10 (பத்து) ஆண்டுகளுக்கு உடைகல் மற்றும் கிராவல் குவாரி குத்தகை உரிமம் வழங்கக்கோரி விருதுநகர் மாவட்டம் மற்றும் வட்டம், பாவாலி பஞ்சாயத்து, சீனியாபுரம் கிராமம், எல்கெப்பட்டி, க.எண்.13/3,7/25 என்ற முகவரியில் வசித்து வரும் திருபாண்டுரங்கன் என்பவர் பார்வை 1-ல் காணும் விண்ணப்பத்தினை உரிய ஆவணங்களுடன் சமர்பித்துள்ளார்.

சாத்தூர், வருவாய் கோட்டாட்சியர் மற்றும் புவியியல் மற்றும் சுரங்கத்துறை, உதவி இயக்குநரின் அறிக்கையில் மனுதாரர் குவாரி உரிமம் வழங்கக் கோரிய புலம் விருதுநகர் மாவட்டம் மற்றும் வட்டம், புல எண். 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 பரப்பு 07.37.80 ஹெக்டேர்ஸ் பட்டா நிலம் கோவிந்தராஜ் மகன் பாண்டுரங்கன் என்பவர் பெயரில் கிராமக்கணக்கில் தாக்கலாகியுள்ளது. இவ்வாறாக மேற்கண்ட புலங்களுக்கு விண்ணப்பதாரர் முழு உரிமையுடையவராகிறார்.

வ. எண்	புல எண்	பரப்பு (ஹெக)	பட்டா எண் / பட்டாதாரர் பெயர்
1	14/1 (P)	0.16.60	554 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
2	14/2	0.19.50	
3	14/5	0.20.00	
4	23/1 (P)	0.49.90	
5	23/6	0.39.00	
6	14/4A	0.71.00	455 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
7	19/8	0.40.50	
8	23/4A (P)	0.06.00	
9	23/7	0.37.00	
10	14/4B	0.37.50	319 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
11	19/7	0.17.00	
12	24/1 (P)	0.17.00	
13	24/5 (P)	0.23.80	
14	19/9	0.40.50	574 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
15	14/3	0.40.50	597 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
16	19/3	0.16.00	
17	19/2	0.29.00	507 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
18	19/6	0.16.50	
19	19/1A	0.37.50	601 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
20	19/1B	0.28.00	
21	19/4	0.11.00	
22	19/5	0.70.50	
23	24/6	0.48.50	606 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)

நிலத்தின் தன்மை - குவாரி குத்தகை உரிமம் வழங்கக் கோரிய புலங்கள் அனைத்தும் விவசாயப் பணிகள் ஏதுமில்லாத தரிசு நிலங்களாக உள்ளது எனவும்,

நிலஅமைப்பு - குவாரி குத்தகை உரிமம் வழங்கக் கோரிய புலங்களுக்கு 300 மீட்டர் சுற்றளவிற்குள் கிராம நத்தம், குடியிருப்புகள் இல்லை. 50 மீட்டர் சுற்றளவில் வனக்காடுகள், தேசிய மாநில நெடுஞ்சாலைகள், இரயில் இருப்புப் பாதைகள், பள்ளிகள், புராதனச் சின்னங்கள், வழிபாட்டுத் தலங்கள், உயர் மற்றும் தாழ் மின்னழுத்தகம்பிகள், நீர்நிலை ஆதாரங்கள், வனக்காடுகள், அருங்காட்சியகத்துறையினரால் பாதுகாக்கப்பட்ட பகுதியாக அறிவிப்பு செய்யப்பட்ட நிலங்கள் ஏதுமில்லை எனவும்,

பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைகற்கள் நடப்பட்டுள்ளது. குவாரி அமைக்க உரிமம் கோரிய புலங்கள் தடையானைப் புத்தகத்தில் பதிவுகள் இல்லை. நீதிமன்றத்தில் வழக்குகள் ஏதுமில்லை. அரசின் நிலஎடுப்பு ஆணைக்கு உட்பட்ட நிலங்கள் இல்லை. மேற்படி நிலங்களில் அரசுக்கு செலுத்த வேண்டிய நிலவரிப் பாக்கி இல்லை. மேற்படி நிறுவனத்திற்கு சொந்தமான புல எண். 13/9 நிலத்திற்கு மேற்கே ஓடையும், 19/10 மற்றும் 14/8 புலங்களுக்கு கிழக்கே ஓடையும் அமைந்துள்ளது. ஆக்கிரமிப்புகள் ஏதுமில்லை எனவும்,

ஆட்சேபணைவிபரம் - தி/ள்.பெண்டகன் புளு மெட்டல்ஸ் நிறுவனத்தினர் சீனியாபுரம் கிராமத்தில் உடைகல் மற்றும் கிராவல் குவாரி உரிமம் அமைக்க அனுமதி வழங்கக் கோரிய புலங்கள் தொடர்பாக "அ1" விளம்பரம் செய்யப்பட்டதில் பொதுமக்களிடமிருந்து ஆட்சேபனைகள் ஏதும் வரப்பெறவில்லை. மேற்படி நிலங்களுக்கு அருகிலுள்ள புஞ்சை நிலங்களுக்கு பாதிப்புகள் ஏதுமில்லை எனவும்,

அணுகுபாதை - குவாரி குத்தகை உரிமம் வழங்கக் கோரிய புலங்களுக்குச் செல்ல விருதுநகர்-அழகாபுரி வழியாக கனரக வாகனங்கள் செல்வதற்கு போதிய பாதை வசதி உள்ளது எனவும்,

சாத்தூர், வருவாய் கோட்டாட்சியர் அறிக்கையில் மனுதாரர் குவாரி உரிமம் வழங்கக் கோரிய புலம் விருதுநகர் மாவட்டம் மற்றும் வட்டம்,விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம், புல எண்கள் 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 பரப்பு 07.37.80 பத்து (10) வருடங்களுக்கு உடைகல் மற்றும் கிராவல் மண் வெட்டியெடுக்க தி/ள். பெண்டகன் புளு மெட்டல்ஸ் நிறுவனத்தின் உரிமையாளர் திரு.பாண்டுரங்கள் என்பவருக்கு தமிழ்நாடு சிறுகனிம் விதிகளின்படி அனுமதி வழங்கப் பரிந்துரை செய்கிறேன் என தெரிவித்துள்ளார்.

விண்ணப்பிக்கப்பட்ட புலங்கள் புஞ்சை வகைப்பாடுடைய தரிசு நிலங்களாகும். புலங்களின் மேற்பரப்பு சமதளமாகவும், விவசாய பணிகள் ஏதுமின்றி தரிசாக உள்ளது. புலங்களின் மேற்பரப்பில் காணப்படும் மண், சிதைந்த பாறைகளை (Weathered Rock), தொடர்ந்து சார்னகைட் (Charnockite) எனப்படும் கடின பாறைகள் (Hard rock) உள்ளது அருகில் உள்ள குவாரியில் ஆய்வு செய்ததில் தெரியவருகிறது. கடின பாறைகளில் காணப்படும் வேறுபட்ட நிறங்கள் (Different in colours), இணைப்புகள் (Joints), பிளவுகள், கீர்ல்கள் (Cracks) வெடிப்புகள் மற்றும் மாறுபட்ட அளவு கொண்ட கனிமங்கள் காரணமாக இப்பாறைகளில் மெருகேற்றக் கூடிய வண்ண கற்களை (Polished Granite /



Blocks) உற்பத்தி செய்ய இயலாது. இவ்வகை பாறைகளில் இருந்து கட்டிடப்பணிகள் மற்றும் சாலை / இரயில்வே பணிகளுக்கு தேவைப்படும் கற்கள், ஜல்லிகள் மற்றும் எம்-சாண்ட் ஆகியவற்றை உற்பத்தி செய்ய இயலும்.

விண்ணப்பிக்கப்பட்ட புலங்களை சுற்றிலும் 300 மீட்டர் சுற்றளவில் குடியிருப்புகள், பள்ளிகள், கோயில்கள், மசூதிகள், சுடுகாடு ஏதும் இல்லை. 50 மீட்டர் சுற்றளவில் தேசிய / மாநில நெடுஞ்சாலைகள், ஆறுகள், கட்டிடங்கள், உயர் /தாழ்வழுத்த மின்கம்பிகள் இல்லை. உயர்வகை மரங்கள் ஏதுவும் இல்லை. வனத்துறையால் பாதுகாக்கப்பட்ட பகுதியாக அறிவிக்கப்பட்ட சரணாலையங்கள், தேசிய பூங்காக்கள் சுற்றுச்சுழல் உணர் திறன் மிக்க பகுதிகள் (ECO-SENSITIVE ZONE), 1 கி.மீட்டர் சுற்றளவில் காடுகள், 500 மீட்டர் சுற்றளவில் அருங்காட்சியக துறையின் மூலம் பாதுகாக்கப்பட்ட பகுதிகளாக அறிவிக்கப்பட்ட இடங்கள் மற்றும் வரலாற்று சின்னங்கள் எதும் இல்லை. புலங்களுக்கு சென்று வர பாதை வசதி உள்ளது.

மேற்படி, நிலங்களில் 10 வருடங்களுக்கு உடைகல் மற்றும் கிராவல் குவாரி அமையவுள்ள இடத்தின் சொந்தமான புல எண். 13/9 நிலத்திற்கு மேற்கே ஓடையும், 19/10 மற்றும் 14/8 புலங்களுக்கு கிழக்கே ஓடையும் அமைந்துள்ளது. மேற்படி நிலங்களில் 10 வருடங்களுக்கு உடைகல் மற்றும் கிராவல் குவாரி அமைய உள்ள இடத்திற்கு முறையான பாதைத (விருதுநகரிலிருந்து — வத்திராயிருப்பு, அழகாபுரி, ஸ்ரீவில்லிபுத்தூர் செல்லும் நெடுஞ்சாலையின் வழியாக புதிதாக அமையவுள்ள குவாரிக்கு செல்ல அணுகு பாதை வசதி உள்ளது.

எனவே, புவியியல் மற்றும் சுரங்கத்துறை, உதவி இயக்குநரின் அறிக்கையில் மனுதாரர் குவாரி உரிமம் வழங்கக் கோரிய விண்ணப்பதாரர் திரு.பாண்டுரங்கன் என்பவரின் கோரிக்கையினை ஏற்று விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம், பட்டா புல எண. 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 மொத்தம் 7.37.80 ஹெக்டேரில் உடைகல் மற்றும் கிராவல் குவாரி உரிமம் பத்தாண்டுகளுக்கு (10) தமிழ்நாடு சிறுகனிம சலுகை விதிகள் விதிஎண்.19 மற்றும் 20-ன் படி பின்வரும் நிபந்தனைகளுக்குட்பட்டு வழங்க பரிந்துரை செய்கிறேன்.

நிபந்தனைகள்:

1. அருகிலுள்ள பட்டா நிலங்களுக்கு 7.5 மீ பாதுகாப்பு இடைவெளி விடுத்து குவாரி செய்தல் வேண்டும்.
2. புல எண். 13/9 நிலத்திற்கு மேற்கே உள்ள ஓடைக்கும், 19/10 மற்றும் 14/8 புலங்களுக்கு கிழக்கே உள்ள ஓடைக்கும் பாதிப்பு ஏற்படுத்தாதவாறு 10 மீ பாதுகாப்பு இடைவெளி விடுத்து குவாரி பணிகள் செய்தல் வேண்டும்.
3. பொதுமக்கள் / விவசாய நிலங்களுக்கு பாதிப்பு ஏற்படாத வகையில் தகுதி வாய்ந்த அங்கீகரிக்கப்பட்ட நபர்கள் மூலம் வெடிமருந்துகள் சேமிக்கப்பட்டு குவாரியில் வெடித்தல் வேண்டும். குவாரியில் குறைந்த சக்தி கொண்ட வெடி மருந்துகளை பயன்படுத்தல் வேண்டும்.
4. சுரங்கத்திட்டம் மற்றும் சுற்றுச்சூழல் தடையில்லாச் சான்று குத்தகை உரிமம் வழங்குவதற்கு முன் சமர்ப்பிக்க வேண்டும்.

5. குவாரியில் வேலை செய்யும் தொழிலாளர்கள் தொழிலாளர் நலத்துறையிடம் மற்றும் காப்பீடு திட்டத்தில் பதிவு செய்து தொழிலாளர் நலன் பேணபட வேண்டும்.
6. குழந்தை தொழிலாளர்களை குவாரி பணியில் அமர்த்தக் கூடாது.
7. கனிமங்களை வாகனங்களில் கொண்டு செல்லும் போது பாதசாரிகள், பொது மக்கள் மற்றும் பிற வாகனங்கள் பாதிக்காதவண்ணம் தார்பாய்கள் கொண்டு மூடி எடுத்துச் செல்ல வேண்டும்.

எனவே, துறை அலுவலர்களின் பரிந்துரையினை ஏற்றும் நிபந்தனைகளுக்கு உட்பட்டும், விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம், பட்டா புல எண்: 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50) மொத்த பரப்பு 7.37.80 ஹெக்டேரில் 1959 -ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள் விதி எண்: 19 (1) மற்றும் 20 -ன் படி பத்து (10) வருடகாலத்திற்கு உடைகல் மற்றும் கிராவல் குவாரி உரிமம் வழங்க தகுதி வாய்ந்த நிலப்பரப்பாக (Precise Area) கருதப்படுகிறது.

தமிழ்நாடு சிறுகனிம சலுகை விதிகள்-1959 விதி எண்:41-ன்படி குவாரி பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்கத் திட்டத்தினை (Mining Plan) 90 தினங்களுக்குள்ளும் விதி எண்:42-ன்படி மாநில அளவிலான சுற்றுசூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் (State Level Environmental Impact Assessment Authority) இசைவினைப் பெற்று சமர்ப்பிக்குமாறும் மனுதாரர் திருபாண்டுரங்கன் என்பவர் கேட்டுக் கொள்ளப்படுகிறார்.

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

உதவி இயக்குநர்,
புவியியல் மற்றும் சுரங்கத்துறை,
விருதுநகர்.

பெறுநர்
திரு.பாண்டுரங்கன் , த/பெ.கோவிந்தராஜ்,
க.எண்.13/3,7/25, எல்கெப்பட்டி,
பாவாலி பஞ்சாயத்து,
சீனியாபுரம் கிராமம்,
விருதுநகர் மாவட்டம்.

நகல்
உறுப்பினர் செயலர்,
மாநில சுற்றுசூழல் தாக்க மதிப்பீட்டு ஆணையம் (SEIAA),
சென்னை.

ANNEXURE-3

From
Dr.S.Suhatharahima, M.Sc.,Ph.D.,
Assistant Director,
Geology and Mining,
Virudhunagar.

To
Thiru.G.Pandurangan,
S/o.Govindaraj,
Door No.13/3,7/25,
Elgaipatti, Pavali panchayat,
Seeniyapuram village,
Virudhunagar District.

Roc.No:25VNR0402851, Dated:03.03.2026.

Sir,

Sub: Mines and Minerals - Minor Mineral – Virudhunagar Taluk and district - Seeniapuram Village – Patta Land - S.F.Nos: 14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00), 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50)- over an Extent of 7.37.80 Hectares – Quarry lease application preferred by Thiru.K.Bharathiraja, S/o.Thiru.Krishnan, for quarrying Rough Stone and Gravel - Approval of Mining Plan - Regarding.

Ref:
1. Quarry lease application received from Thiru.G.Pandurangan, S/o.Govindaraj dated:30.04.2025.
2. The Assistant Director, Geology and Mining, Virudhunagar Rc.No.25VNR0402851, Dated: 04.09.2025.
3. Thiru.G.Pandurangan, S/o.Govindaraj letter dated: 12.01.2026.

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Thiru.G.Pandurangan, S/o.Govindaraj has preferred an application for the grant of quarrying lease to quarry Rough Stone and Gravel over an extent of 7.37.80 Hectares of Patta Lands in S.F.Nos: 14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00), 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50) of Seeniapuram

Village, Virudhunagar Taluk and District for a period of 10 (Ten) Years Under Rule 19 of Tamil Nadu Minor Mineral Concession Rules 1959.

2) The application was examined and consented to grant lease to quarrying Rough Stone and Gravel over an extent of 7.37.80 Hectares of Patta Lands in S.F.Nos: 14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00), 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50) for a period of 10 (Ten) years subject to produce Mining Plan for approval and to obtain Environment Clearance from SEIAA in the reference 2nd cited.

3) The applicant has submitted the Mining Plan, prepared as per the guidelines issued by the Commissioner of Geology and Mining and as per the Rules and Acts for a period of Ten years. The Geological reserves, Mineable reserves and yearwise production are discussed in Table 1, 2 & 3 of the mining plan. The Geological reserves available within the area is estimated as 1,62,23,900 MT of Roughstone and 7,37,450 MT of Gravel. The mineable reserves is estimated as 55,93,500 MT of Roughstone and 6,13,700 MT of Gravel upto a depth of 85.0 m from the ground level.

The yearwise production of roughstone and gravel are furnished in the mining plan as detailed below.

Year wise - Production Schedule for the first five Years

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Gravel in m^3	Rough stone in m^3	Bulk Density	Gravel in Ts	Mineable Reserves of Rough stone in Ts
I	XY-AB	I	90	190	5	85500	-	2	171000	-
		II	75	175	5	-	65625	2.75	-	180468.75
		III	65	165	5	-	53625	2.75	-	147468.75
		IV	55	155	5	-	42625	2.75	-	117218.75
Total						**85500**	**161875**	-	**171000**	**445156.25**
II	XY-AB	I	87	190	5	82650	-	2	165300	-
		II	95	175	5	-	83125	2.75	-	228593.75

		III	95	165	5	-	78375	2.75	-	215531.25
		IV	10	155	5	-	7750	2.75	-	21312.50
Total						**82650**	**169250**	-	**165300**	**465437.50**
III	XY-AB	I	48	190	5	45600	-	2	91200	-
		IV	85	155	5	-	65875	2.75	-	181156.25
		V	140	145	5	-	101500	2.75	-	279125.00
Total						**45600**	**167375**	-	**91200**	**460281.25**
IV	XY-AB	I	48	190	5	45600	-	2	91200	-
		VI	130	135	5	-	87750	2.75	-	241312.50
		VII	120	125	5	-	75000	2.75	-	206250.00
Total						**45600**	**162750**	-	**91200**	**447562.50**
V	XY-AB	I	50	190	5	47500		2	95000	-
		VIII	110	115	5	-	63250	2.75	-	173937.50
		IX	100	105	5	-	52500	2.75	-	144375.00
		X	90	95	5	-	42750	2.75	-	117562.50
Total						**47500**	**158500**	-	**95000**	**435875.00**
Grand Total						**306850**	**819750**	-	**613700**	**2254312.50**

Year wise - Production Schedule for the second five Years

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Rough stone in m^3	Bulk Density	Mineable Reserves of Rough stone in Ts
VI	XY-AB	II	138	175	5	120750	2.75	332062.50
		III	138	165	5	113850	2.75	313087.50
		IV	10	155	5	7750	2.75	21312.50
Total						**242350**		**666462.50**
VII	XY-AB	IV	128	155	5	99200	2.75	272800.00
		V	138	145	5	100050	2.75	275137.50
		VI	65	135	5	43875	2.75	120656.25
Total						**243125**		**668593.75**
VIII	XY-AB	VI	73	135	5	49275	2.75	135506.25
		VII	138	125	5	86250	2.75	237187.50
		VIII	138	115	5	79350	2.75	218212.50
		IX	55	105	5	28875	2.75	79406.25
Total						**243750**		**670312.50**
IX	XY-AB	IX	83	105	5	43575	2.75	119831.25
		X	138	95	5	65550	2.75	180262.50
		XI	218	85	5	92650	2.75	254787.50
		XII	110	75	5	41250	2.75	113437.50
Total						**243025**		**668318.75**
X	XY-AB	XII	98	75	5	36750	2.75	101062.50
		XIII	198	65	5	64350	2.75	176962.50
		XIV	188	55	5	51700	2.75	142175.00
		XV	178	45	5	40050	2.75	110137.50
		XVI	168	35	5	29400	2.75	80850.00
		XVII	158	25	5	19750	2.75	54312.50
Total						**242000**		**665500.00**
Grand Total						**1214250**		**3339187.50**

The Environmental Management Plan and Mine Closure plan are discussed in Part – B (09) and all conditions have been incorporated in the Mining Plan as laid down by the authorities.

4) In view of the above, in exercise of the powers delegated under Rule 41 of Tamil Nadu Minor Mineral Concession Rules, 1959, I hereby approve the Mining Plan submitted by Thiru.G.Pandurangan, S/o.Thiru.Govindaraj for quarrying lease to quarry Rough Stone and Gravel over an extent of 7.37.80 Hectares of Patta Lands in S.F.Nos: 14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00), 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50) of Seeniapuram Village, Virudhunagar Taluk and District for a period of 10(Ten) to obtain Environment Clearance from SEIAA, Chennai subject to the following conditions:

1. The Mining Plan is approved without prejudice to any other law applicable to the quarry permission from time to time where such Laws are made by the State Government or any other authority

2. This approval of the Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Tamil Nadu Minor Mineral Concession Rules, 1959.

3. The Mining Plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.

4. The approval of the Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Mines and Minerals (Development and Regulation) Amendment Act, 2015 or any other connected Laws including, Environment Protection.

5. Act, 1986, and the Rules made there under in Tamil Nadu Minor Mineral Concession Rules, 1959.

Encl: Two copies of Mining Plan.

3/3/26

Assistant Director,
Geology and Mining,
Virudhunagar.

Copy to:
The Member Secretary,
State Level Environmental Impact
Assessment Authority,
State Expert Appraisal Committee
at SEAC Conference Hall 9th Floor,
Metros (CMRL building),
Nandanam, Chennai-600035.

APPROVAL MINING PLAN

MINING PLAN FOR SEENIYAPURAM ROUGH STONE & GRAVEL QUARRY

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

(Prepared under rule 19(1), 41 & 42 of Tamil Nadu Minor Mineral Concession Rules, 1959)

LOCATION OF THE QUARRY LEASE APPLIED AREA

STATE	:	TAMIL NADU
DISTRICT	:	VIRUDHUNAGAR
TALUK	:	VIRUDHUNAGAR
VILLAGE	:	SEENIYAPURAM
S.F.NOS	:	14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) AND 24/6
EXTENT	:	7.37.80Ha

FOR

APPLICANT

Thiru.G.Pandurangan,
S/o.Govindaraj,
Door No.13/3, 7/25, Elgaipatti,
Pavali Panchayath, Seeniyapuram Village,
Virudhunagar District.

ECO-FRIENDLY



SUSTAINABILITY



SAFETY



PREPARED BY

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person
M/s. GLOBAL MINING SOLUTIONS
(NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT)
PLOT NO. 6, SF NO. 13/2, A2, VS CITY, RC CHETTYPATTY,
KOTTAMETTUPATTY,
OMALUR, SALEM, TAMIL NADU – 636 455
NABET ACCREDITATION NO – NABET/ EIA/23-26 / SA 0241
CONTACT: 97502 23535, 94446 54520
Email: infoglobalmining@gmail.com, globalminingsolutionssalem@gmail.com



(PPE)

G.Pandurangan,
S/o.Govindaraj,
Door No.13/3, 7/25, Elgaipatti,
Pavali Panchayath, Seeniyapuram Village,
Virudhunagar District.

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

CONSENT LETTER FROM THE APPLICANT

The Mining Plan in respect of **Rough Stone and Gravel** quarry over an extent of 7.37.80hectares of Patta lands in S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu State has been prepared by

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person

I request the Assistant Director, Department of Geology and Mining, Virudhunagar District to make further correspondence regarding modifications of the Mining Plan with the said Qualified Person on this following address.

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person
M/s. GLOBAL MINING SOLUTIONS
(NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT)
PLOT No. 6, SF No. 13/2, A2, Vs City, RC Chettypatty,
Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455
NABET ACCREDITATION NO – NABET/ EIA/23-26 / SA 0241
CONTACT: 97502 23535, 94446 54520

I hereby undertake that all modifications so made in the Mining Plan by the Qualified Person may be deemed to have been made with my knowledge and consent and shall be acceptable to me and building on me in all respects.

Signature of the Applicant

G.Pandurangan

Place: Virudhunagar
Date: 06.09.2025

G.Pandurangan,
S/o.Govindaraj,
Door No.13/3, 7/25, Elgaipatti,
Pavali Panchayath, Seeniyapuram Village,
Virudhunagar District.

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

DECLARATION

The Mining Plan in respect of **Rough Stone and Gravel** quarry over an extent of 7.37.80hectares of Patta lands in S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu State has been prepared with my consultation and I have understood the contents and agree to implement the same in accordance with the Mining Laws.

Signature of the Applicant

G.Pandurangan

Place: Virudhunagar
Date: 06.09.2025

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person
M/s. GLOBAL MINING SOLUTIONS
(NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT)
PLOT No. 6, SF No. 13/2, A2, Vs City, RC Chettypatty,
Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455
NABET ACCREDITATION NO – NABET/ EIA/23-26 / SA 0241
CONTACT: 97502 23535, 94446 54520

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

CERTIFICATE

This is to certify that, the provisions of under rules 41 & 42 as Amended in under Tamil Nadu Minor Mineral Concession Rules, 1959, have been observed in the Mining Plan for the grant of **Rough Stone and Gravel** quarry lease over an extent of 7.37.80hectares of Patta lands in S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu State applied by Thiru.G.Pandurangan, for fresh quarry lease.

Wherever specific permission / exemptions / relaxations or approvals are required, the applicant will approach the concerned authorities of State and Central Governments for granting such permissions etc.

Certified
Signature of Qualified Person.

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person
C.NATARAJAN M.Sc.,M.Phil.,
Qualified Person

Place: Salem
Date: 08.09.2025

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person
M/s. GLOBAL MINING SOLUTIONS
(NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT)
PLOT No. 6, SF No. 13/2, A2, Vs City, RC Chettypatty,
Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455
NABET ACCREDITATION NO – NABET/ EIA/23-26 / SA 0241
CONTACT: 97502 23535, 94446 54520

CERTIFICATE

Certified that, in preparation of Mining Plan for **Rough Stone and Gravel** quarry over an extent of 7.37.80hectares of Patta lands in S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu State for Thiru.G.Pandurangan, covers all the provisions of Mines Act, Rules, and Regulations etc made there under and whenever specific permission are required, the applicant will approach the Director General of Mines Safety, Chennai. The standards prescribed by DGMS in respect of Mines Health will be strictly implemented.

Certified
Signature of Qualified Person.

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person
C.NATARAJAN M.Sc.,M.Phil.,
Qualified Person

Place : Salem
Date : 08.09.2025

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

CERTIFICATE

Certified that I, C.Natarajan, M/s. GLOBAL MINING SOLUTIONS (NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT) Plot No. 6, SF No. 13/2, A2, Vs City, RC Chettypatty, Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455 NABET ACCREDITATION NO – NABET/ EIA/23-26 / SA 0241. I am a Post graduate in Geology (M.Sc., Geology) from Annamalai university and more than five years of experience in mining Field.

Rule 15(1)(a) and (b) of Minerals (Other than Atomic, Hydro Carbons Energy Minerals) concession Rules 2016 stipulates the eligibility for preparing Mining Plans as *"(1)(a) a post graduate degree in Geology granted by a university established" and (1)(b) "Professional experience of five years of working in a supervisory capacity in the field of mining after obtaining the degree".* Since my qualification and experience are satisfied the Rule (1)(a) and (1)(b) of 15 of the Said Rules, I am eligible to prepare Mining Plans for both Major and Minor Minerals.

Accordingly I prepared this Mining Plan in respect of Rough Stone and Gravel quarry lease applied for an extent of 7.37.80hectares of Patta lands in S.F.Nos. 14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, by Thiru.G.Pandurangan, for a period of Ten Years. Since the Mining Plan is prepared as per the provisions contained in Rule 15(1) (a) and (b) of Minerals (Other than Atomic, Hydro Carbons Energy Minerals) concession Rules 2016, the same may be approved by the Competent Authority.

C.Natarajan, M.Sc.,M.Phil.,

Qualified Person

C.NATARAJAN M.Sc.,M.Phil.,
Qualified Person

Place : Salem

Date : 08.09.2025

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

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MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

Annexure

S. No.	Description	Annexure
1.0	Precise Area Communication letter issued by the Assistant Director, Department of Geology and Mining,	I
2.0	Copy of FMB	II
3.0	Copy of Village map	III
4.0	Copy of Patta	IV
5.0	Copy of Adangal	V
6.0	Copy of A Register	VI
7.0	Copy of Identity Proof	VII
8.0	Copy of QP Certificate	VIII

LIST OF PLATES

S. No.	Description	Plate No.
1.0	Location Plan	I
2.0	Environmental Plan	I-A
3.0	Satellite imagery map	I-B
4.0	Topo sketch of Quarry lease applied area for 10Km Radius	I-C
5.0	Key Plan	I-D
6.0	Quarry lease & Surface plan	II
7.0	Topography, Geological plan and sections	III
8.0	Mineable plan and sections	IV
9.0	Year wise Development and Production Plan & Sections	V
10.0	Second Five Year wise Development and Production Plan & Sections	VA
11.0	Progressive Quarry Closer Plan & Sections	VI
12.0	Conceptual Plan & Sections	VII

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

MINING PLAN FOR MINOR MINERALS

ROUGH STONE AND GRAVEL

Over an extent of 7.37.80hectares of Patta land in S.F.Nos.14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6 of Seeniyapuram Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu State.

(PREPARED UNDER RULE 19(1), 41 and 42 OF TNMMCR 1959)

1.0 Introduction and Executive Summary:

1. The present Mining Plan is prepared for Thiru.G.Pandurangan, S/o.Govindaraj, Door No.13/3, 7/25, Elgaipatti, Pavali Panchayath, Seeniyapuram Village, Virudhunagar District.
2. The application was processed by the Assistant Director, Department of Geology and Mining, Virudhunagar, and passed an order vide Rc.No. 25VNR0402851 dated 04.09.2025. directing the applicant to produce approved Mining Plan under Rule 41(5) of the Tamil Nadu Minor Mineral Concession Rules, 1959 and Environmental Clearance Certificate under Rule 42 from the State Level Environmental Impact Assessment Authority (SEIAA) for the grant of quarry lease to quarry Rough Stone and Gravel over an extent of 7.37.80 hectares of Patta lands in S.F.Nos.14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6of Seeniyapuram Village, Virudhunagar Taluk and Virudhunagar District of Tamil Nadu State for a period of ten years.
3. Accordingly, Mining Plan is prepared under the provisions of rule 19(1), 41 and 42 as per the amendments under Tamil Nadu Minor Mineral Concession Rules, 1959 by incorporating following the conditions imposed in the precise area communication letter.

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

a) A 7.5 meters of safety distance should be left out for the adjacent pattalands while quarrying operation.

b) A 10 meters of safety distance should be provided to the Odai passing on west side of S.F.No.13/9, and east side of S.F.Nos.19/10 & 14/8, while quarrying operation.

c) Explosives will be stored, and blasting will be carried out by recognized person (approved blaster) By using low power explosives avoid hindrance to the public and adjacent agricultural land.

d) The Draft Mining Plan and Environmental clearance should submit before the grant of lease.

e) All the labours should be registered with the labour welfare Board of Government of Tamil Nadu and to be enrolled in the Group insurance Scheme.

f) The applicant should not engage Child labour during quarry work.

g) The minerals should be covered with Tarpaulin during transportation without any hindrance to Transpellers and public people.

4. Geological Resources is estimated at 1,62,23,900Ts of Rough stone and 7,37,450Ts of gravel formation and Mineable Reserves is estimated 55,93,500Ts of Rough Stone and 6,13,700Ts of gravel formation and after leaving necessary safety distance from the lease boundary as indicated in the precise area letter and relevant mining laws in force.

5. The production schedule is proposed production of 22,54,312.50Ts of Rough Stone, 6,13,700Ts of gravel formation for the period of first five years upto a depth of 50m (below ground level) and remaining quantity of 33,39,187.50Ts of Rough Stone will be proposed for the period of second five years upto a depth of 85m.

6. The applicant ensured that, child labours under 18 years of age will not be engaged for quarrying operation.

7. The applicant ensure that will appoint should have valid certified persons (Mines Manager, Foreman, Mate) during quarrying operation.



8. Environmental parameters,

i) The area does not attract the Forest Conservation Act, 1980 as there is no forest around 10km radius.

ii) There is no interstate boundary around 10Kms radius.

iii) There is no wild life animal sanctuary within 10Kms radius from the project site area under the Wildlife (Protection) Act, 1972.

Therefore the project seeks clearance only from State Level Environmental Impact Assessment Authority (SEIAA).

9. Environmental measures to be adopted shall be,

i) Dust Control at source while drilling and blasting,

ii) Dust suppression at loading point and transport haul roads,

iii) Noise Control in blasting, control of fly rock missiles and vibration by doing peak particle velocity with in standard as prescribed by the DGMS and MOEF.

iv) Unnecessary land degradation should be avoided or damaged land should be reclaimed or rehabilitated.

v) Avoid uneven rat hole mining and follow scientific and systematic mining by safe bench system of open cast mining.

vi) Mining near major fracture zones if any should be avoided to control ground water fluctuation in the adjacent agricultural lands.

vii) Emission test of vehicles should be in tack to maintain minimum emission level of flue gases.

viii) Noise level should not exceed 80db and the vehicles should use only permitted Air Horn while on road near residential areas.

ix) Safety zones as prescribed by the Department of Geology and Mining from adjacent infrastructures should be strictly adhere to.

x) And any other conditions as stipulated by the concerned authorities should be followed to protect the environment.



EXECUTIVE SUMMARY:

a.	Name of the Village Panchayat	:	Seeniyapuram
b.	Name of the Panchayat Union	:	Virudhunagar
c.	The proposed total Minable Reserves	:	55,93,500Ts of Rough Stone, 6,13,700Ts of gravel formation
d.	The proposed quantity of reserves (level of production) for Five years to be mined is(Recoverable reserves)	:	22,54,312.50Ts of Rough Stone, 6,13,700Ts of gravel formation.
e.	Total extent of the area	:	7.37.80Ha
f.	Proposed Period of mining	:	Five Years
g.	Existing depth	:	It is fresh quarry lease applied area
h.	Proposed Depth of mining	:	50m (below ground level) for the proposed mining plan.
i.	Method of mining/level of mechanization	:	Opencast, Semi-mechanized Mining with a bench height of 5m and bench width of 5m is proposed.
j.	Types of Machineries used in the quarry	:	Machineries like Tractor mounted compressor attached with Jack hammers, Excavators are proposed to deploy for quarrying operation.
k.	Cost of the Project A. Fixed Assets Cost B. Operational Cost C. EMP Cost		Rs. 47,26,800/- Rs. 1,04,00,000/- Rs. 7,90,000/- Total Project cost(A+B+C)= **Rs. 1,59,16,800/-**

l. The area applied for lease is bounded by Eighteen corners and the coordinates are clearly marked in plate no II.

Corners	Co- ordinates		Distance between the corners
	Latitude	Longitude	
1	09° 36' 15.04"N	77° 53' 43.15"E	1-2 = 78.6m
2	09° 36' 17.44"N	77° 53' 44.02"E	2-3 = 76.6m
3	09° 36' 19.61"N	77° 53' 45.25"E	3-4 = 43.0m
4	09° 36' 20.93"N	77° 53' 45.73"E	4-5 = 47.8m
5	09° 36' 22.10"N	77° 53' 46.76"E	5-6 = 128.0m
6	09° 36' 25.58"N	77° 53' 49.07"E	6-7 = 52.8m
7	09° 36' 24.97"N	77° 53' 50.69"E	7-8 = 65.8m
8	09° 36' 23.67"N	77° 53' 52.40"E	8-9 = 54.0m
9	09° 36' 22.59"N	77° 53' 53.80"E	9-10 = 85.2m
10	09° 36' 19.97"N	77° 53' 52.90"E	10-11 = 26.6m
11	09° 36' 19.18"N	77° 53' 52.56"E	11-12 = 105.0m
12	09° 36' 15.77"N	77° 53' 52.02"E	12-13 = 10.0m
13	09° 36' 15.71"N	77° 53' 52.34"E	13-14 = 69.0m



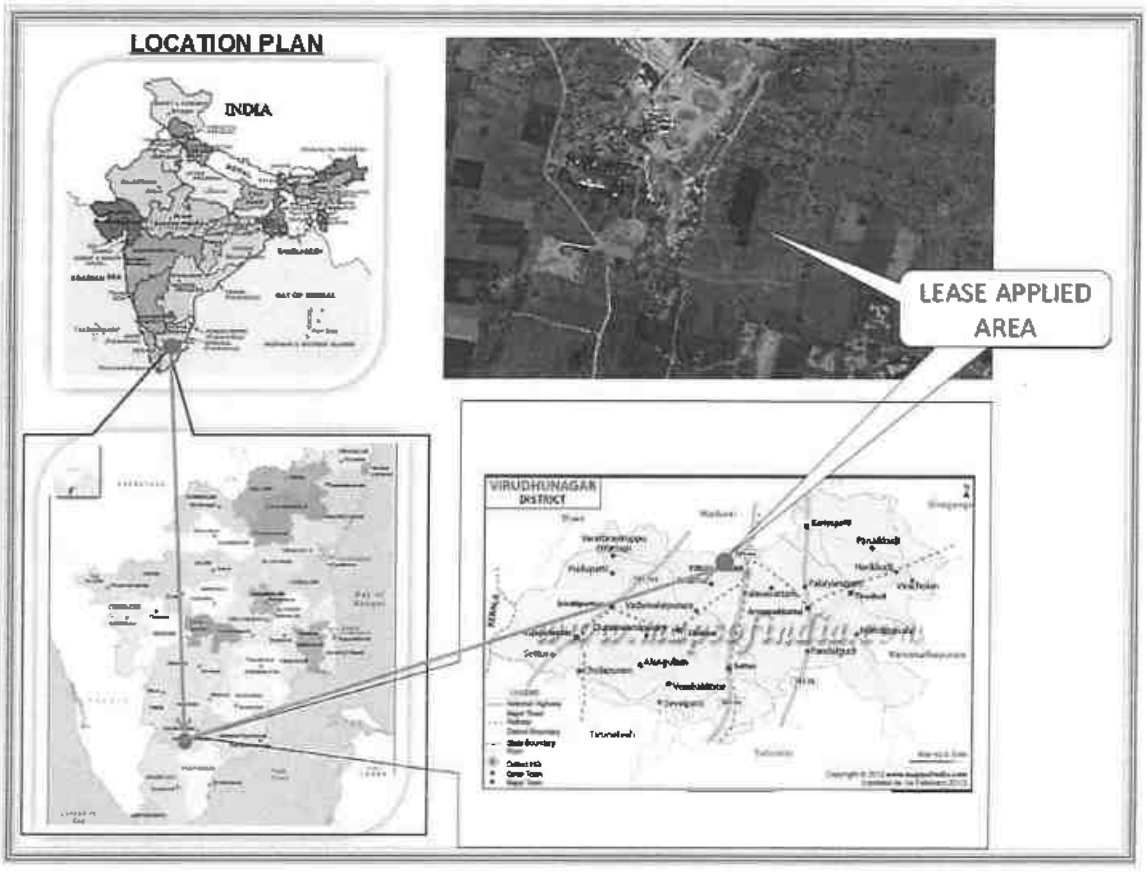
	14	09° 36' 13.53"N	77° 53' 51.81"E	14-15 = 68.2m
	15	09° 36' 13.98"N	77° 53' 49.62"E	15-16 = 33.0m
	16	09° 36' 13.85"N	77° 53' 48.55"E	16-17 = 25.0m
	17	09° 36' 13.73"N	77° 53' 47.66"E	17-18 = 69.6m
	18	09° 36' 14.29"N	77° 53' 45.45"E	18-1 = 74.0m

2.0 General Information:

2.1	a.	Name of the Applicant	:	Thiru.G.Pandurangan,
	b.	Address of the Applicant with phone No and e-mail id if any	:	S/o.Govindaraj, Door No.13/3, 7/25, Elgaipatti, Pavali Panchayath, Seeniyapuram Village, Virudhunagar District. Pin code - 626103 Cell No.: 9842118297
	c.	Status of the Applicant	:	Individual
2.2	a.	Mineral Which the applicant intends to mine	:	Rough Stone and Gravel.
	b.	Precise area communication letter No.	:	Precise area communication letter received from the Assistant Director, Department of Geology and Mining, Virudhunagar, vide Rc.No. 25VNR0402851 dated 04.09.2025.
	c.	Period of permission / lease granted	:	The Assistant Director, Department of Geology and Mining, Virudhunagar, has grant of lease period for **ten years.**
	d.	Name and Address of the QP preparing Mining Plan	:	**C.Natarajan, M.Sc.,M.Phil.,** **Qualified Person** **M/s. GLOBAL MINING SOLUTIONS** (NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT) PLOT No. 6, SF No. 13/2, A2, Vs City, RC Chettypatty, Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455 NABET Accreditation No – NABET/ EIA/23-26 / SA 0241 Contact: 97502 23535, 94446 54520.

3.0 Location:

S.No		Details of the Area:
1	Corner Coordinates	Latitude : 09°36'13.53"N to 09°36'25.58"N Longitude : 77°53'43.15"E to 77°53'53.80"E
2	Toposheet Number	58 G/14
3	The altitude of the area	135m (MSL)
4	Extent	7.37.80Ha
5	Survey Nos	14/1(P), 14/2, 14/3, 14/4A, 14/4B, 14/5(P), 19/1A, 19/1B, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 23/1(P), 23/4A(P), 23/6, 23/7, 24/1(P), 24/5(P) and 24/6
6	Village	Seeniyapuram
7	Taluk	Virudhunagar
8	District	Virudhunagar
9	State	Tamil Nadu

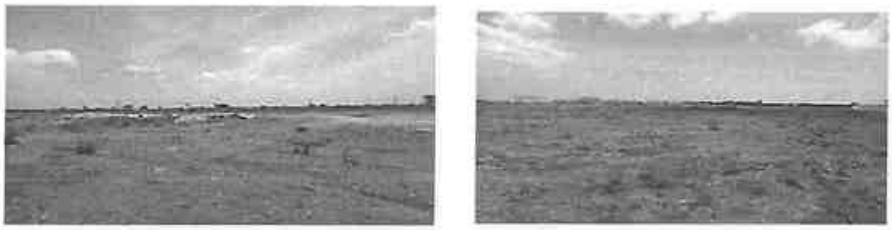


MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

a.	Classification of the Area (Ryotwari / poramboke / others)	:	Patta land
b.	Ownership / Occupancy of the Applied area (Surface rights)	:	It is patta land registered in the name of Applicant vide Patta Nos.554, 455, 319, 574, 597, 507, 601 and 606, Please refer Annexure No: IV.
c.	Toposheet No. with Latitude and Longitude	: : :	Topo Sheet No: 58 G/14 Latitude : 09°36'13.53"N to 09°36'25.58"N Longitude : 77°53'43.15"E to 77°53'53.80"E
d.	Existence of Public Road / Railway line if any nearby the area and approximate distance	:	There is an existing road from the area leads to Sengunrapuram– Virudhunagar road on North side of the area. The Nearest Railway line is Virudhunagar to Madurai line which is about 6.6Km on east side of the area.



SATELLITE IMAGERY OF THE LEASE APPLIED AREA



TOPOGRAPHICAL VIEW OF THE LEASE APPLIED AREA

Fig. Location of the lease applied area



PART - A

4.0 Geology and Mineral Reserves:

4.1	a.	Topography	:	➢ The area applied for quarry lease is exhibits almost plain topography covered by Gravel formation. The massive Charnockite formation is noticed below 5m (Avg) Gravel formation and sloping towards southeastern side of the area, the altitude of the area is above 135m (maximum) from MSL. ➢ No major river is found nearby the lease applied area. ➢ Water table is found at a depth of 98m in summer and 95m in rainy seasons. ➢ Temperature of the area is reported to be 18°C to a maximum of 42°C during summer. ➢ Rainfall of this area is about 800mm to 900 mm during the both NE & SW monsoons.
	b.	General Geology of the Area	:	The area is underlain by the wide range of metamorphic rocks of peninsular gneissic complex. These rocks are extensively weathered and overlain by the recent valley fills and alluvium at places. The geological formations found in the district are Archaean rocks like Gneisses, Granites, Charnockites basic granulites and calc-gneisses. The younger formations are Quartz veins and pegmatite. The rock type noticed in the area for lease is Charnockite which contains mostly Quartz and Feldspar with some ferromagnesian minerals. The Charnockite is part of peninsular Gneisses, a high grade metamorphic rock. The strike of the Charnockite formation is N45°E –S45°W with dipping towards SE60°.

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				The general geological succession of the area is given as under. **AGE** - **ROCK TYPE** Recent - Gravelly soil Unconformity Archaean - Dolerite dyke Charnockite. Peninsular Gneissic complex and Calc Gneiss
4.2		Details of Exploration already carried out if any	:	No exploration was carried out, as the Rough stone formations are clearly visible as outcrops within the lease applied area.
4.3	a	Estimation of Reserves	:	The Geological and Recoverable reserves are estimated by cross sectional method. Two sections have been drawn, one section drawn length wise as (X-Y) and another one section drawn width wise as (A-B) to cover maximum area considered for lease. The Plans and Sections have been drawn with a scale of 1:1000 and 1:500 respectively. Please refer plate No.III.

a. Geological Resources

The quarrying is restricted up to a depth of 85m (below ground level) only, availability of resources is given below.

Table No-1

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m^3	Rough stone in m^3	Bulk Density	Gravel formation in Ts	Geological Resources of Rough stone in Ts
XY-AB	I	343	215	5	368725	-	2	737450	-
	II	343	215	5	-	368725	2.75	-	1013993.75
	III	343	215	5	-	368725	2.75	-	1013993.75
	IV	343	215	5	-	368725	2.75	-	1013993.75
	V	343	215	5	-	368725	2.75	-	1013993.75
	VI	343	215	5	-	368725	2.75	-	1013993.75
	VII	343	215	5	-	368725	2.75	-	1013993.75
	VIII	343	215	5	-	368725	2.75	-	1013993.75
	IX	343	215	5	-	368725	2.75	-	1013993.75
	X	343	215	5	-	368725	2.75	-	1013993.75
	XI	343	215	5	-	368725	2.75	-	1013993.75
	XII	343	215	5	-	368725	2.75	-	1013993.75
	XIII	343	215	5	-	368725	2.75	-	1013993.75
	XIV	343	215	5	-	368725	2.75	-	1013993.75
	XV	343	215	5	-	368725	2.75	-	1013993.75
	XVI	343	215	5	-	368725	2.75	-	1013993.75
	XVII	343	215	5	-	368725	2.75	-	1013993.75
	Total				**368725**	**5899600**	-	**737450**	**16223900.00**

Gravel Formation : 7,37,450Ts

The Geological Resources of Rough stone : 1,62,23,900Ts

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b. Mineable Reserve

The mineable reserve calculated by deducting 7.5m and 10m safety distance and bench loss.



Table No-2

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m^3	Rough stone in m^3	Bulk Density	Gravel formation in Ts	Mineable Reserves of Rough stone in Ts
XY-AB	I	323	190	5	306850	-	2	613700	-
	II	308	175	5	-	269500	2.75	-	741125.00
	III	298	165	5	-	245850	2.75	-	676087.50
	IV	288	155	5	-	223200	2.75	-	613800.00
	V	278	145	5	-	201550	2.75	-	554262.50
	VI	268	135	5	-	180900	2.75	-	497475.00
	VII	258	125	5	-	161250	2.75	-	443437.50
	VIII	248	115	5	-	142600	2.75	-	392150.00
	IX	238	105	5	-	124950	2.75	-	343612.50
	X	228	95	5	-	108300	2.75	-	297825.00
	XI	218	85	5	-	92650	2.75	-	254787.50
	XII	208	75	5	-	78000	2.75	-	214500.00
	XIII	198	65	5	-	64350	2.75	-	176962.50
	XIV	188	55	5	-	51700	2.75	-	142175.00
	XV	178	45	5	-	40050	2.75	-	110137.50
	XVI	168	35	5	-	29400	2.75	-	80850.00
	XVII	158	25	5	-	19750	2.75	-	54312.50
	Total				**306850**	**2034000**	-	**613700**	**5593500.00**

The mineable reserve is computed as 55,93,500Ts of Rough stone and 6,13,700Ts of Gravel formation upto a depth 85m (below ground level) only.



5. Mining:

5.1	Method of Mining	:	1. Opencast method of semi mechanized mining with 5.0m height 5m width of the bench. 2. However, as far as the quarrying of Rough stone is concerned, observance of the provisions of Regulation 106(2) (b) as above is seldom[possible due to various inherent petrogenetic factors coupled with mining difficulties. Hence it is proposed to obtain relaxation to the provisions of the above regulation from the Director of mines safety for which necessary provision is available with the regulation 106 (2) (b) of MMR-1961, under Mine Act-1952.
5.2	Mode of Working	:	The rough stone is proposed to quarry 5m bench height, 5m width with conventional opencast semi-Mechanized method. The quarry operation involves shallow jack hammer drilling, slurry blasting, excavation, Loading and transportation of Rough stone to the needy crushers/other buyers. The production of Rough stone in this quarry involves the following method which is typical for Rough Stone quarrying in contrast to other major mineral mining. Splitting of rock mass of considerable volume from the parent rock mass by jackhammer drilling and blasting, hydraulic excavators are used for loading the Rough Stone from pithead to the needy crushers/other buyers. Occasionally hydraulic excavators are attached with rock breakers for fragmentation to avoid secondary blasting. The primary boulders thus splitted are removed from the pits by excavators and further made to smaller sizes by rock breakers attached in excavators. It is a conventional opencast semi mechanized method of mining.
5.3	Proposed bench height & Width	:	Quarrying of Rough Stone is proposed bench height of 5m and bench width of 5m.
5.4	Details of Overburden / Mineral Production proposed for the first 5 years.	:	The overburden in the form of Gravel, after the excavation of Gravel and Rough stone will be directly loaded into tipper to the needy crushers/other buyers for road project and construction works for filling and leveling of low lying areas.

The Yearwise Production and Development Table

Table No –3

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Gravel in m³	Rough stone in m³	Bulk Density	Gravel in Ts	Mineable Reserves of Rough stone in Ts
I	XY-AB	I	90	190	5	85500	-	2	171000	-
		II	75	175	5	-	65625	2.75	-	180468.75
		III	65	165	5	-	53625	2.75	-	147468.75
		IV	55	155	5	-	42625	2.75	-	117218.75
Total						**85500**	**161875**	-	**171000**	**445156.25**
II	XY-AB	I	87	190	5	82650	-	2	165300	-
		II	95	175	5	-	83125	2.75	-	228593.75
		III	95	165	5	-	78375	2.75	-	215531.25
		IV	10	155	5	-	7750	2.75	-	21312.50
Total						**82650**	**169250**	-	**165300**	**465437.50**
III	XY-AB	I	48	190	5	45600	-	2	91200	-
		IV	85	155	5	-	65875	2.75	-	181156.25
		V	140	145	5	-	101500	2.75	-	279125.00
Total						**45600**	**167375**	-	**91200**	**460281.25**
IV	XY-AB	I	48	190	5	45600	-	2	91200	-
		VI	130	135	5	-	87750	2.75	-	241312.50
		VII	120	125	5	-	75000	2.75	-	206250.00
Total						**45600**	**162750**	-	**91200**	**447562.50**
V	XY-AB	I	50	190	5	47500		2	95000	-
		VIII	110	115	5	-	63250	2.75	-	173937.50
		IX	100	105	5	-	52500	2.75	-	144375.00
		X	90	95	5	-	42750	2.75	-	117562.50
Total						**47500**	**158500**	-	**95000**	**435875.00**
Grand Total						**306850**	**819750**	-	**613700**	**2254312.50**

The applicant has proposed to carry out 22,54,312.50Ts of Rough stone and 6,13,700Ts of Gravel formation upto a depth of 50m (below ground level) for the period of first five years and remaining quantity of 33,39,187.50Ts of Rough Stone will be proposed for the period of second five years upto a depth of 85m (below ground level).

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The proposed tentative yearwise production for 6th to 10th year is given below

Table No-4

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Rough stone in m^3	Bulk Density	Mineable Reserves of Rough stone in Ts
VI	XY-AB	II	138	175	5	120750	2.75	332062.50
		III	138	165	5	113850	2.75	313087.50
		IV	10	155	5	7750	2.75	21312.50
Total						**242350**		**666462.50**
VII	XY-AB	IV	128	155	5	99200	2.75	272800.00
		V	138	145	5	100050	2.75	275137.50
		VI	65	135	5	43875	2.75	120656.25
Total						**243125**		**668593.75**
VIII	XY-AB	VI	73	135	5	49275	2.75	135506.25
		VII	138	125	5	86250	2.75	237187.50
		VIII	138	115	5	79350	2.75	218212.50
		IX	55	105	5	28875	2.75	79406.25
Total						**243750**		**670312.50**
IX	XY-AB	IX	83	105	5	43575	2.75	119831.25
		X	138	95	5	65550	2.75	180262.50
		XI	218	85	5	92650	2.75	254787.50
		XII	110	75	5	41250	2.75	113437.50
Total						**243025**		**668318.75**
X	XY-AB	XII	98	75	5	36750	2.75	101062.50
		XIII	198	65	5	64350	2.75	176962.50
		XIV	188	55	5	51700	2.75	142175.00
		XV	178	45	5	40050	2.75	110137.50
		XVI	168	35	5	29400	2.75	80850.00
		XVII	158	25	5	19750	2.75	54312.50
Total						**242000**		**665500.00**
Grand Total						**1214250**		**3339187.50**

5.5 Machineries to be used :

a. Drilling : It is proposed to use following machineries for quarrying rough stone

S.No	Type	Nos	Dia Hole mm	Make	Motive power
1	Jack hammer	10	32	Atlas Copco	Compressed air
2	Compressor	2	-	Atlas Copco	Diesel Drive



	b.	Loading	:	Excavator of 0.90m³ bucket capacity (with Rock breaker attachment) (3No).
	c.	Transportation	:	Tipper 8Nos (10/20Ts) capacity.
5.6		Disposal of Overburden	:	The overburden in the form of Gravel, after the excavation gravel will be directly loaded into tipper to the needy buyers for road project and construction works for filling and leveling of low lying areas.
5.7		Brief Note on Conceptual Mining Plan for the entire lease period	:	Conceptual Mining Plan is prepared with an object of ten years of systematic development of bench lay outs, selection of ultimate pit limit, depth of quarrying, ultimate pit slope, selection of sites for construction of infrastructures etc. Ultimate pit size is designed based on certain practical factors such as the economical depth of mining, safety zones, permissible areas etc. Ultimate Pit dimension is given as under,

Ultimate Pit dimension (M) end of Mining plan Period			
Pit No	Length (max) in(m)	Width (Avg) in (m)	Depth(max) in(m)
I	323	190	50
Ultimate pit dimension End of the lease period			
Pit No	Length (max) in(m)	Width (Avg) in (m)	Depth(max) in(m)
I	323	190	85

Afforestation has been proposed on all along the boundary barrier by planting trees.

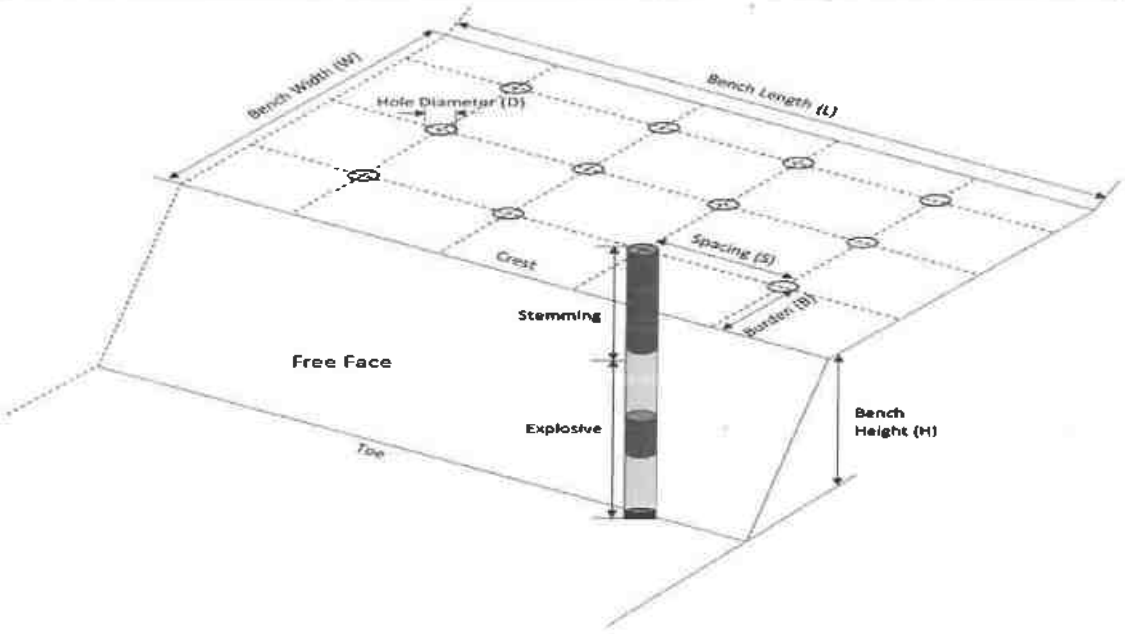
All the baseline information studies like Air Quality monitoring, Noise and Vibration monitoring, Water Analysis studies will be carried out every year as per the MOEF norms.

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6.0 Blasting:

6.1	Blasting Pattern	:	The massive formation shall be broken into pieces of portable size by drilling and blasting using jack hammers and shot hole blasting. Powder factor of explosives for breaking such hard rock shall be in the order of 6 to 7 Tonnes per Kg of explosives. Blasting parameters are as follows.

Diameter of the hole	Spacing	Depth	Burden for hole	Pattern of hole	Inclination of hole
32-36mm	0.6m	1 to 1.5m	0.6m	Zig Zag	70^0 from the horizontal



6.2	Types of Explosives	:	Small dia, 25mm slurry explosive are proposed to be used for shattering and heaving effect for removal and winning of Rough stone. No deep hole drilling or primary blasting is proposed.

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6.3	Measures proposed to minimize ground vibration due to blasting	:	➢ Controlled blasting measures will be adopted for minimizing ground vibration and fly rock. ➢ Shallow depths jackhammer drilling and blasting is proposed to be carried out with minimum use of explosive mainly to give shattering effect in rough stone for easy excavation and to control fly rock.

Number of holes	:	500
Powder factor	:	6Ts/Kg of explosives
Total explosive required	:	250Kg slurry explosives
Charge / hole	:	0.5Kg
Blasting time	:	12-2 Pm

6.4	Storage of Explosives and safety measures to be taken while blasting.	:	➢ The applicant will engage an authorized explosive agency to carry out the small amount of blasting and it will be supervised by competent and statutory foreman/ mines manager. ➢ ***The applicant ensure that will appoint the Mate (Should have Valid Blaster Certificate) during Blasting Operation.***

7.0 Mine Drainage:

7.1	Depth of Water table	:	The ground water table is reported as 98m below ground level. In the proposed mining plan only 50m (below ground level) and 85m depth has been envisaged as workable depth for safe & economic quarrying for the entire lease period. Hence the quarrying operation may not affect the ground water.
7.2	Arrangement and Places where the mine water is finally proposed to be discharged	:	The ground water may not rise immediately in this type of mining. However, the rain water percolation and collection of water from the seepage shall be less than 300lpm and it shall be pumped about periodically by a stand by diesel powered Centrifugal pump motivated with 7.5H.P.Motor. The quality of water is potable and it is not contaminated with any hazardous things. Hence, water stored in the quarry pit will be pumped into the adjacent agricultural fields. Further the water stored in the old pit will also be used for plantation purposes



8.0 Other Permanent Structures:

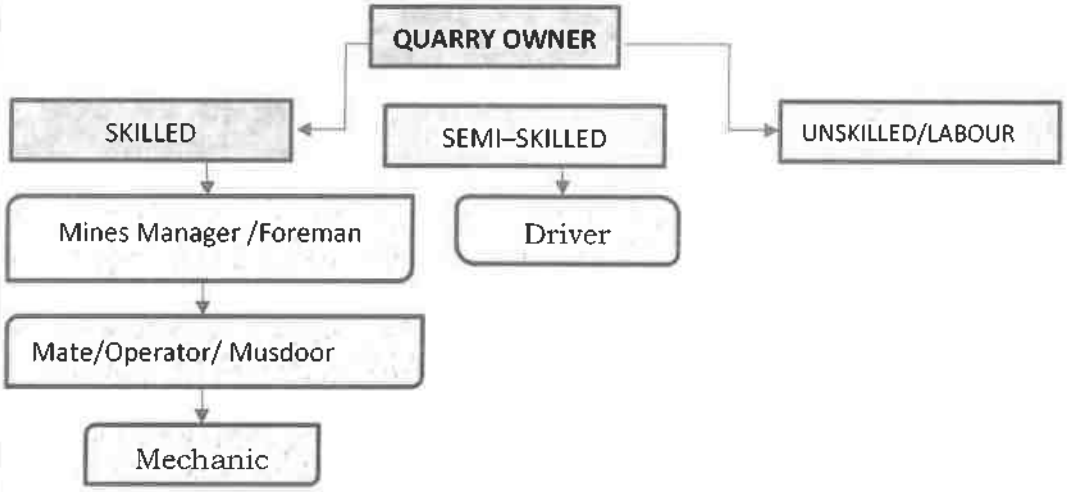
8.1	Habitations / Village	:	There is no habitations situated within a radius of 300m.
8.2	Power lines (HT/LT)	:	There is no LT/HT power lines within a radius of 50m.
8.3	Water bodies (River, Pond, Lake, Odai, Channel etc)	:	There is seasonal odai passing on west and east side and is 10m safety distance is maintained. There is Kuttai situated on north side of the area which is 50m away from the area. There is seasonal odai passing on west, north northeast and Southeast side of the area and is 260m, 240m, 410m and 450m away from the area.
8.4	Archeological / Historical Monuments	:	There are no Archaeological / Historical Monuments within a radius of 300m.
8.5	Road (NH, SH, Village Road etc)	:	The National Highway (NH-44) Salem-Kanniyakumari is about 5.0Km on southeast side of the area. The State Highway (SH-182) Virudhunagar – Watrap is about 570m on north side of the area.
8.6	Places of Worship	:	There are no Places of Worship within a radius of 50m.
8.7	Reserved Forest / Forest / Social Forest / Wild Life Sanctuary etc.,	:	There is no Reserved Forest, Wild Life Sanctuary within a radius of 1Km.
8.8	Any Interstate Border, Protected areas under the Wild Life (Protection) Act, 1972, Critically Polluted Areas as Identified by Central Pollution Control Board and Notified Eco sensitive areas	:	There are No inter State border within a radius of 10Kms.
8.9	Any Other Structures	:	Nil

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9.0 Employment Potential & Welfare Measures:

9.1 Employment Potential (Management & Supervisory personal)

The proposed organization chart



1.	Skilled	Mines Manager	1 No.
		Foreman / Mate	2 No.
		Operator	12 No.
		Mechanic	1 No.
2.	Semi–skilled	Driver	8 No.
3.	Unskilled	Labours	15Nos
		Total =	39Nos

Allowing 10% absentee, the no. of men of roll will be around 35.

The above man power is adequate to meet out the production schedule and the machinery strength envisaged in the mining plan and to comply the statutory provisions of Mines Safety Regulations.

- **It is been ensured that, child labours under 18 years of age will not be engaged for quarrying operation.**
- **Necessary life insurance policies will be taken by the applicant to all the employees up to the end of the lease period.**

9.2		Welfare Measures		
	a.	Drinking Water	:	Packaged drinking water is available from the nearby approved water vendors in Seeniyapuram village which is about 520m on north side of the area.

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	b.	Sanitary facilities	:	Semi-permanent latrines (Conservancy type) shall be maintained at convenient places for use of labours as per the provisions of Rule (36) of the Mines Rules, 1955 separately for males and females. Washing facilities shall also be arranged as per rule (36) of the Mines Rules, 1955.
	c.	First Aid Facility	:	First aid kits are kept in Mines office room, in case of such eventualities the victim will be given first aid immediately at the site and injured person will be taken to the hospital. Hospital is available at distance of 6.2Km (SE) in Virudhunagar the competent and Statutory foreman/ permit manager will be in charge of first aid.
	d.	Labour Health	:	As per Mines Rule, Periodic medical examination related to occupational health safety will be conducted to all the workers in applicant's own cost.
	e.	Precautionary safety measures to the Labourers:		
		Safety provisions like helmet, goggles, safety shoes, Dust mask, Ear muffs etc., have to be provided as per the circulars and amendments made for Mine labours under the guidance of DGMS being a mechanized operation. Necessary training will be conducted once in a year to all the employees with the help of qualified and experienced officers to train about the safe and systematic quarrying operation.		







PART – B

10.0 Environmental Management Plan:

10.1	Existing Land Use Pattern	:	1. The area is exhibits almost plain topography covered by Gravel formation. 2. Quarrying operation is proposed up to a depth of 50m (below ground level) for the proposed mining plan period. 3. Fluctuation of Water table in this area is in between 98m and 95m during a year. 4. This region receives the average annual rainfall of 800mm to 900mm. The surrounding area is practiced by the seasonal cultivation. The existing land use pattern is given as under. Table No-5

Sl. No.	Land Use	Present Area (Ha)	Area in use during the quarrying period (Ha)
1.	Quarrying Pit	Nil	6.14.00
2.	Infrastructure	Nil	0.02.00
3.	Roads	Nil	0.04.00
4.	Green Belt	Nil	1.17.80
5.	Unutilized	7.37.80	Nil
	Total =	**7.37.80**	**7.37.80**

10.2	Water Regime	:	Water table in this area is noticed at a depth of 98m and presently, in the proposed mining plan only 50m (below ground level) and 85m depth has been envisaged as workable depth for safe & economic quarrying for the entire lease period. hence, it will not affect the ground water depletion of this area.
10.3	Flora and Fauna	:	Except acacia bushes, no other valuable trees are noticed in the applied area. Further, neither flora of botanical interest nor fauna of zoological interest is noticed in this area.
10.4	Climatic conditions	:	Generally subtropical climatic condition prevails throughout the year and there is no sharp variation in climate. This District receives rain both in south west and north east monsoon. The average rainfall is about 800mm to 900mm and the temperature ranges from 18°C during winter and to a maximum of 42°C during the summer.

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<table>
<tr><td>10.5</td><td>Human Settlement</td><td>:</td><td>The nearest habitations with the population is given as under.
Table No-6<table><tr><th>S. No</th><th>Name of the Village</th><th>Approximate distance & Direction from lease applied area</th><th>Approximate population</th></tr><tr><td>1.</td><td>Seenivapuram</td><td>520m - N</td><td>200</td></tr><tr><td>2.</td><td>Kunthalapatti</td><td>1.3km - NW</td><td>500</td></tr><tr><td>3.</td><td>Chandragiripuram</td><td>1.9km - SE</td><td>350</td></tr><tr><td>4.</td><td>Moolippatti</td><td>3.5km - SW</td><td>1000</td></tr></table></td></tr>
<tr><td>10.6</td><td>Plan for Air, Dust Suppression</td><td>:</td><td>Air or dust expected to be generated from drilling process, hauling roads, places of excavation etc., will be suppressed by periodical wetting of land by water spraying. Wet drilling and dust extractor arrangements will be provided to drilling units so as to control raise of dust from the site of drilling. Operators, those exposed directly to such conditions will be provide such protective equipment like mask, ear plug, helmet, gloze etc., as per the Mines Act.</td></tr>
<tr><td>10.7</td><td>Plan for Noise Control</td><td>:</td><td>Quarrying of Rough Stone will be carried out by drilling and blasting by using low power explosives, and hence, noise will be very minimum. However, periodical noise level monitoring will be carried out to check the noise level in and around the quarry site. Nowhere the noise level should exceed the permissible limit of 80db during the quarry working hours.</td></tr>
<tr><td>10.8</td><td>Environmental Impact Assessment Statement Describing Impact on mining on the next Five years</td><td>:</td><td>The mining plan proposed is for a small production of Rough stone without involving deep hole drilling and heavy blasting. Such limited mining activity is not likely to cause any impact adversely on environment as far as pollution of air, water and noise is concerned, anyhow environmental impact studies will be conducted as per EIA notification issued by MOEF.</td></tr>
</table>



10.9	Proposal for Waste Management	:	There is no waste anticipated in this rough stone quarry operation.
10.10	Proposal of Reclamation of Land affected during mining activities and at the end of mining.	:	In the proposed mining plan 50m (below ground level) and 85m depth has been envisaged as workable depth for safe & economic mining during the lease period. Hence, after quarry reaches ultimate pit limit (for this lease period) of 85m depth, fencing will be constructed around the quarried pits to prevent inherent entry of the public and cattle.
10.11	Program for Afforestation	:	The 7.5m and 10m safety distance along the lease boundary has been identified to be utilized for afforestation Appropriate native species of Neem/Pungan trees will be planted in the first year. Nearly 11780Sqm area is proposed to use under afforestation by planting 1,414nos of Neem/Pungan trees during first year with an anticipated survival rate of 80%. The Quarry landuse, layout and afforestation plan is shown in Plate No.VI.
10.12	Proposed Financial Estimate / Budget for (EMP) Environment Management		
	A. Fixed Asset Cost: 1. Land Cost (600000/1Ha)= 2. First aid room and accessories 3. Labour Shed 4. Sanitary Facility **Total=**		 Rs. 44,26,800 Rs.1,00,000 Rs.1,00,000 Rs.1,00,000 **Rs. 47,26,800/-**
	B. Operational Cost: 1. Machineries 2. Fencing cost **Total**	 : : :	 Rs. 1,00,00,000- Rs. 4,00,000 **Rs.1,04,00,000/-**



	C.EMP Cost:	:	Budget Provision for the entire quarrying period. Air Quality Sampling = Rs. 40,000/- Water Quality Sampling = Rs. 40,000/- Noise Monitoring = Rs. 20,000/- Ground vibration test = Rs. 20,000/-
	Expenditure 1. Drinking water facility 2. Sanitary Arrangements 3. Safety kids 4. Water sprinkling 5. Afforestation **Total=**		Rs.1,50,000/- Rs. 50,000/- Rs. 50,000/- Rs. 2,00,000/- Rs. 2,20,000/- **Rs. 7,90,000/-**
	Total Project Cost (A+B+C)	:	**Rs. 1,59,16,800/-**
	CSR Cost(2% of Total Project Cost)	:	**Rs. 3,18,336/-**

11.0 Mine Closure Plan:

11.1	Steps proposed for phased restoration, reclamation of already mined out area.	:	There is no proposal for back filling, reclamation and rehabilitation. The quarried pits after the end of the life of lease will be fenced to prevent inherent entry of public and cattles.
11.2	Measures to be under taken on mine closure as per Act & Rules	:	Measures will be taken as per the Acts and Rules. The quarried pit will be fenced by using Barbed wire fencing to prevent inherent entry of public and cattle.
11.3	Mitigation measures to be undertaken for safety and restoration/ reclamation of the already mined out area	:	Mitigation measures: Drilling will be carried out by wet drilling mode to control the dust propagation into the air. Blasting will be carried out on limited scale. Mist Water spraying on haul road is proposed to prevent the dust propagation into the air.

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

12.0 Any Other Details Intend to Furnish by the Applicant:

(i) Permission will be obtained from the District Mines Office to extract the Rough Stone from the Boundary barriers and for slopes.

(ii) Care and precautionary measures will be taken for the safety of workers as per Rules and Acts.

(iii) The applicant will endeavor every attempt to quarry the Rough Stone economically without any wastage and to improve the environment and ecology.

(iv) The Mining Plan is prepared by incorporating the conditions stipulated in the precise area communication issued and relevant mining laws in force.

(v) Any violation pointed out by the inspecting authorities shall be rectified as per the guidelines of the Department.

Prepared by

C.Natarajan, M.Sc.,M.Phil.,
Qualified Person

C.NATARAJAN M.Sc.,M.Phil.,
Qualified Person

Place : Salem
Date : 08.09.2025

This Mining is approved based on guidelines/ instructions issued in the CGM, Letter No.3868/LC/2012 dated 19-11-2012 and incorperation of the particulars specified in the letter Roc.No.....

Dated.....of the Deputy Director of Geology and Mining, Virudhunagar and subject to further Fulfillment of the conditions laid down under rule 41,42 of Tamil Nadu Minor Mineral Concession Rules 1959

28/12/25

Assistant Director of Geology & Mining
Virudhunagar

This Mining Plan is approved Subject to the conditions / Stipulation indicated in the Mining Plan Approval

Letter Roc. No. Dated

ANNEXURE I

புவியியல் மற்றும் சுரங்கத்துறை

MINING PLAN APPROVED
Assistant Director
Geology and Mining
Virudhunagar District

ந.க.எண்:25VNR0402851

உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை,
மாவட்ட ஆட்சியர் அலுவலக வளாகம்,
விருதுநகர்.

நாள்: . 09.2025.

குறிப்பாணை

பொருள்: கனிமங்களும் குவாரிகளும் - விருதுநகர் மாவட்டம் மற்றும் வட்டம் - சீனியாபுரம் கிராமம் - பட்டா புல எண். 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50மொத்தம் 7.37.80 ஹெக்டேர்ஸ் - 10 (பத்து) வருடங்களுக்கு உடைகல் மற்றும் கிராவல் குவாரி உரிமம் வழங்கல் - உகந்த பரப்பு (Precise Area) தேர்வு செய்யப்பட்டது - சுரங்கத்திட்டம் மற்றும் மாநில அளவிலான சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்ப்பிக்க கோருவது - தொடர்பாக.

பார்வை:

1. திருபாண்டுரங்கன்,த/பெ.கோவிந்தராஜ்,க.எண்.13/3, 7/25, எல்கெப்பட்டி பாவாலி பஞ்சாயத்து, சீனியாபுரம் கிராமம், விருதுநகர் மாவட்டம் இணைய வழி விண்ணப்பம் நாள்:30.04.2025.
2. இவ்வலுவலக கடிதம் எண் ந.க. 25VNR0402851, நாள்: 30.06.2024 (வருவாய் கோட்டாட்சியர், சாத்தூர் அவர்களுக்கு முகவரியிட்டது).
3. சாத்தூர், வருவாய் கோட்டாட்சியர் கடித எண் மூ.மு.அ2/2566/2025, நாள்: 11.08.2025.
4. உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை அவர்களின் புலத்தணிக்கை அறிக்கை நாள்: 27.08.2025
5. 1959 -ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 41 மற்றும் 42.
6. அரசாணை எண்.169 தொழில் (எம்.எம்.சி.1) துறை, நாள்: 04.08.2020.
7. தொடர்புடைய ஆவணங்கள்.

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ஆணை:

விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம் புல எண். 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 விஸ்தீரணம் 7.37.80 ஹெக்டேர் பரப்பில் 10 (பத்து) ஆண்டுகளுக்கு உடைகல் மற்றும் கிராவல் குவாரி குத்தகை உரிமம் வழங்கக்கோரி விருதுநகர் மாவட்டம் மற்றும் வட்டம், பாவாலி பஞ்சாயத்து, சீனியாபுரம் கிராமம், எல்கெப்பட்டி, க.எண்.13/3,7/25 என்ற முகவரியில் வசித்து வரும் திருபாண்டுரங்கன் என்பவர் பார்வை 1-ல் காணும் விண்ணப்பத்தினை உரிய ஆவணங்களுடன் சமர்பித்துள்ளார்.

சாத்தூர், வருவாய் கோட்டாட்சியர் மற்றும் புவியியல் மற்றும் சுரங்கத்துறை, உதவி இயக்குநரின் அறிக்கையில் மனுதாரர் குவாரி உரிமம் வழங்கக் கோரிய புலம் விருதுநகர் மாவட்டம் மற்றும் வட்டம், புல எண். 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 பரப்பு 07.37.80 ஹெக்டேர்ஸ் பட்டா நிலம் கோவிந்தராஜ் மகன் பாண்டுரங்கன் என்பவர் பெயரில் கிராமக்கணக்கில் தாக்கலாகியுள்ளது. இவ்வாறாக மேற்கண்ட புலங்களுக்கு விண்ணப்பதாரர் முழு உரிமையுடையவராகிறார்.

வ. எண்	புல எண்	பரப்பு (ஹெக)	பட்டா எண் / பட்டாதாரர் பெயர்
1	14/1 (P)	0.16.60	554 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
2	14/2	0.19.50	
3	14/5	0.20.00	
4	23/1 (P)	0.49.90	
5	23/6	0.39.00	
6	14/4A	0.71.00	455 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
7	19/8	0.40.50	
8	23/4A (P)	0.06.00	
9	23/7	0.37.00	
10	14/4B	0.37.50	319 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
11	19/7	0.17.00	
12	24/1 (P)	0.17.00	
13	24/5 (P)	0.23.80	
14	19/9	0.40.50	574 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
15	14/3	0.40.50	597 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
16	19/3	0.16.00	
17	19/2	0.29.00	507 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
18	19/6	0.16.50	
19	19/1A	0.37.50	601 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)
20	19/1B	0.28.00	
21	19/4	0.11.00	
22	19/5	0.70.50	
23	24/6	0.48.50	606 - கோவிந்தராஜ் மகன் பாண்டுரங்கன் (பெண்டகன் புது மெட்லஸ்காக)

நிலத்தின் தன்மை - குவாரி குத்தகை உரிமம் வழங்கக் கோரிய புலங்கள் அனைத்தும் விவசாயப் பணிகள் ஏதுமில்லாத தரிசு நிலங்களாக உள்ளது எனவும்,

நிலஅமைப்பு - குவாரி குத்தகை உரிமம் வழங்கக் கோரிய புலங்களுக்கு 300 மீட்டர் சுற்றளவிற்குள் கிராம நத்தம், குடியிருப்புகள் இல்லை. 50 மீட்டர் சுற்றளவில் வனக்காடுகள், தேசிய மாநில நெடுஞ்சாலைகள், இரயில் இருப்புப் பாதைகள், பள்ளிகள், புராதனச் சின்னங்கள், வழிபாட்டுத் தலங்கள், உயர் மற்றும் தாழ் மின்னழுத்தகம்பிகள், நீர்நிலை ஆதாரங்கள், வனக்காடுகள், அருங்காட்சியகத்துறையினரால் பாதுகாக்கப்பட்ட பகுதியாக அறிவிப்பு செய்யப்பட்ட நிலங்கள் ஏதுமில்லை எனவும்,

பிரஸ்தாப புலங்களின் எல்லைகள் வரையறுக்கப்பட்டு எல்லைகற்கள் நடப்பட்டுள்ளது. குவாரி அமைக்க உரிமம் கோரிய புலங்கள் தடையானைப் புத்தகத்தில் பதிவுகள் இல்லை. நீதிமன்றத்தில் வழக்குகள் ஏதுமில்லை. அரசின் நிலஎடுப்பு ஆணைக்கு உட்பட்ட நிலங்கள் இல்லை. மேற்படி நிலங்களில் அரசுக்கு செலுத்த வேண்டிய நிலவரிப் பாக்கி இல்லை. மேற்படி நிறுவனத்திற்கு சொந்தமான புல எண். 13/9 நிலத்திற்கு மேற்கே ஓடையும், 19/10 மற்றும் 14/8 புலங்களுக்கு கிழக்கே ஓடையும் அமைந்துள்ளது. ஆக்கிரமிப்புகள் ஏதுமில்லை எனவும்,

ஆட்சேபணைவிபரம் - தி/ள்.பெண்டகன் புளு மெட்டல்ஸ் நிறுவனத்தினர் சீனியாபுரம் கிராமத்தில் உடைகல் மற்றும் கிராவல் குவாரி உரிமம் அமைக்க அனுமதி வழங்கக் கோரிய புலங்கள் தொடர்பாக "அ1" விளம்பரம் செய்யப்பட்டதில் பொதுமக்களிடமிருந்து ஆட்சேபனைகள் ஏதும் வரப்பெறவில்லை. மேற்படி நிலங்களுக்கு அருகிலுள்ள புஞ்சை நிலங்களுக்கு பாதிப்புகள் ஏதுமில்லை எனவும்,

அணுகுபாதை - குவாரி குத்தகை உரிமம் வழங்கக் கோரிய புலங்களுக்குச் செல்ல விருதுநகர்-அழகாபுரி வழியாக கனரக வாகனங்கள் செல்வதற்கு போதிய பாதை வசதி உள்ளது எனவும்,

சாத்தூர், வருவாய் கோட்டாட்சியர் அறிக்கையில் மனுதாரர் குவாரி உரிமம் வழங்கக் கோரிய புலம் விருதுநகர் மாவட்டம் மற்றும் வட்டம்,விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம், புல எண்கள் 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 பரப்பு 07.37.80 பத்து (10) வருடங்களுக்கு உடைகல் மற்றும் கிராவல் மண் வெட்டியெடுக்க தி/ள். பெண்டகன் புளு மெட்டல்ஸ் நிறுவனத்தின் உரிமையாளர் திரு.பாண்டுரங்கள் என்பவருக்கு தமிழ்நாடு சிறுகனிம் விதிகளின்படி அனுமதி வழங்கப் பரிந்துரை செய்கிறேன் என தெரிவித்துள்ளார்.

விண்ணப்பிக்கப்பட்ட புலங்கள் புஞ்சை வகைப்பாடுடைய தரிசு நிலங்களாகும். புலங்களின் மேற்பரப்பு சமதளமாகவும், விவசாய பணிகள் ஏதுமின்றி தரிசாக உள்ளது. புலங்களின் மேற்பரப்பில் காணப்படும் மண், சிதைந்த பாறைகளை (Weathered Rock), தொடர்ந்து சார்னகைட் (Charnockite) எனப்படும் கடின பாறைகள் (Hard rock) உள்ளது அருகில் உள்ள குவாரியில் ஆய்வு செய்ததில் தெரியவருகிறது. கடின பாறைகளில் காணப்படும் வேறுபட்ட நிறங்கள் (Different in colours), இணைப்புகள் (Joints), பிளவுகள், கீர்ல்கள் (Cracks) வெடிப்புகள் மற்றும் மாறுபட்ட அளவு கொண்ட கனிமங்கள் காரணமாக இப்பாறைகளில் மெருகேற்றக் கூடிய வண்ண கற்களை (Polished Granite /



Blocks) உற்பத்தி செய்ய இயலாது. இவ்வகை பாறைகளில் இருந்து கட்டிடப்பணிகள் மற்றும் சாலை / இரயில்வே பணிகளுக்கு தேவைப்படும் கற்கள், ஜல்லிகள் மற்றும் எம்-சாண்ட் ஆகியவற்றை உற்பத்தி செய்ய இயலும்.

விண்ணப்பிக்கப்பட்ட புலங்களை சுற்றிலும் 300 மீட்டர் சுற்றளவில் குடியிருப்புகள், பள்ளிகள், கோயில்கள், மசூதிகள், சுடுகாடு ஏதும் இல்லை. 50 மீட்டர் சுற்றளவில் தேசிய / மாநில நெடுஞ்சாலைகள், ஆறுகள், கட்டிடங்கள், உயர் /தாழ்வழுத்த மின்கம்பிகள் இல்லை. உயர்வகை மரங்கள் ஏதுவும் இல்லை. வனத்துறையால் பாதுகாக்கப்பட்ட பகுதியாக அறிவிக்கப்பட்ட சரணாலையங்கள், தேசிய பூங்காக்கள் சுற்றுச்சுழல் உணர் திறன் மிக்க பகுதிகள் (ECO-SENSITIVE ZONE), 1 கி.மீட்டர் சுற்றளவில் காடுகள், 500 மீட்டர் சுற்றளவில் அருங்காட்சியக துறையின் மூலம் பாதுகாக்கப்பட்ட பகுதிகளாக அறிவிக்கப்பட்ட இடங்கள் மற்றும் வரலாற்று சின்னங்கள் எதும் இல்லை. புலங்களுக்கு சென்று வர பாதை வசதி உள்ளது.

மேற்படி, நிலங்களில் 10 வருடங்களுக்கு உடைகல் மற்றும் கிராவல் குவாரி அமையவுள்ள இடத்தின் சொந்தமான புல எண். 13/9 நிலத்திற்கு மேற்கே ஓடையும், 19/10 மற்றும் 14/8 புலங்களுக்கு கிழக்கே ஓடையும் அமைந்துள்ளது. மேற்படி நிலங்களில் 10 வருடங்களுக்கு உடைகல் மற்றும் கிராவல் குவாரி அமைய உள்ள இடத்திற்கு முறையான பாதைத (விருதுநகரிலிருந்து — வத்திராயிருப்பு, அழகாபுரி, ஸ்ரீவில்லிபுத்தூர் செல்லும் நெடுஞ்சாலையின் வழியாக புதிதாக அமையவுள்ள குவாரிக்கு செல்ல அணுகு பாதை வசதி உள்ளது.

எனவே, புவியியல் மற்றும் சுரங்கத்துறை, உதவி இயக்குநரின் அறிக்கையில் மனுதாரர் குவாரி உரிமம் வழங்கக் கோரிய விண்ணப்பதாரர் திரு.பாண்டுரங்கன் என்பவரின் கோரிக்கையினை ஏற்று விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம், பட்டா புல எண. 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50 மொத்தம் 7.37.80 ஹெக்டேரில் உடைகல் மற்றும் கிராவல் குவாரி உரிமம் பத்தாண்டுகளுக்கு (10) தமிழ்நாடு சிறுகனிம சலுகை விதிகள் விதிஎண்.19 மற்றும் 20-ன் படி பின்வரும் நிபந்தனைகளுக்குட்பட்டு வழங்க பரிந்துரை செய்கிறேன்.

நிபந்தனைகள்:

1. அருகிலுள்ள பட்டா நிலங்களுக்கு 7.5 மீ பாதுகாப்பு இடைவெளி விடுத்து குவாரி செய்தல் வேண்டும்.
2. புல எண். 13/9 நிலத்திற்கு மேற்கே உள்ள ஓடைக்கும், 19/10 மற்றும் 14/8 புலங்களுக்கு கிழக்கே உள்ள ஓடைக்கும் பாதிப்பு ஏற்படுத்தாதவாறு 10 மீ பாதுகாப்பு இடைவெளி விடுத்து குவாரி பணிகள் செய்தல் வேண்டும்.
3. பொதுமக்கள் / விவசாய நிலங்களுக்கு பாதிப்பு ஏற்படாத வகையில் தகுதி வாய்ந்த அங்கீகரிக்கப்பட்ட நபர்கள் மூலம் வெடிமருந்துகள் சேமிக்கப்பட்டு குவாரியில் வெடித்தல் வேண்டும். குவாரியில் குறைந்த சக்தி கொண்ட வெடி மருந்துகளை பயன்படுத்தல் வேண்டும்.
4. சுரங்கத்திட்டம் மற்றும் சுற்றுச்சூழல் தடையில்லாச் சான்று குத்தகை உரிமம் வழங்குவதற்கு முன் சமர்ப்பிக்க வேண்டும்.

5. குவாரியில் வேலை செய்யும் தொழிலாளர்கள் தொழிலாளர் நலத்துறையிடம் மற்றும் காப்பீடு திட்டத்தில் பதிவு செய்து தொழிலாளர் நலன் பேணபட வேண்டும்.
6. குழந்தை தொழிலாளர்களை குவாரி பணியில் அமர்த்தக் கூடாது.
7. கனிமங்களை வாகனங்களில் கொண்டு செல்லும் போது பாதசாரிகள், பொது மக்கள் மற்றும் பிற வாகனங்கள் பாதிக்காதவண்ணம் தார்பாய்கள் கொண்டு மூடி எடுத்துச் செல்ல வேண்டும்.

எனவே, துறை அலுவலர்களின் பரிந்துரையினை ஏற்றும் நிபந்தனைகளுக்கு உட்பட்டும், விருதுநகர் மாவட்டம் மற்றும் வட்டம், சீனியாபுரம் கிராமம், பட்டா புல எண்: 14/1(P) (0.16.60), 14/2 (0.19.50), 14/3 (0.45.50), 14/4A (0.71.00), 14/48(0.37.50), 14/5(P) (0.20.00), 19/1A (0.37.50), 19/18 (0.28.00), 19/2 (0.29.00), 19/3 (0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6 (0.16.50), 19/7 (0.17.00), 19/8 (0.40.50), 19/9(0.40.50), 23/1(P) (0.49.90), 23/4A (P) (0.06.00), 23/6 (0.39.00), 23/7 (0.37.00), 24/1 (P) (0.17.00), 24/5(P) (0.23.80) மற்றும் 24/6(0.48.50) மொத்த பரப்பு 7.37.80 ஹெக்டேரில் 1959 -ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள் விதி எண்: 19 (1) மற்றும் 20 -ன் படி பத்து (10) வருடகாலத்திற்கு உடைகல் மற்றும் கிராவல் குவாரி உரிமம் வழங்க தகுதி வாய்ந்த நிலப்பரப்பாக (Precise Area) கருதப்படுகிறது.

தமிழ்நாடு சிறுகனிம சலுகை விதிகள்-1959 விதி எண்:41-ன்படி குவாரி பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்கத் திட்டத்தினை (Mining Plan) 90 தினங்களுக்குள்ளும் விதி எண்:42-ன்படி மாநில அளவிலான சுற்றுசூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் (State Level Environmental Impact Assessment Authority) இசைவினைப் பெற்று சமர்ப்பிக்குமாறும் மனுதாரர் திருபாண்டுரங்கன் என்பவர் கேட்டுக் கொள்ளப்படுகிறார்.

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

உதவி இயக்குநர்,
புவியியல் மற்றும் சுரங்கத்துறை,
விருதுநகர்.

பெறுநர்
திரு.பாண்டுரங்கன் , த/பெ.கோவிந்தராஜ்,
க.எண்.13/3,7/25, எல்கெப்பட்டி,
பாவாலி பஞ்சாயத்து,
சீனியாபுரம் கிராமம்,
விருதுநகர் மாவட்டம்.

நகல்
உறுப்பினர் செயலர்,
மாநில சுற்றுசூழல் தாக்க மதிப்பீட்டு ஆணையம் (SEIAA),
சென்னை.

ANNEXURE II

District : Virudhunagar

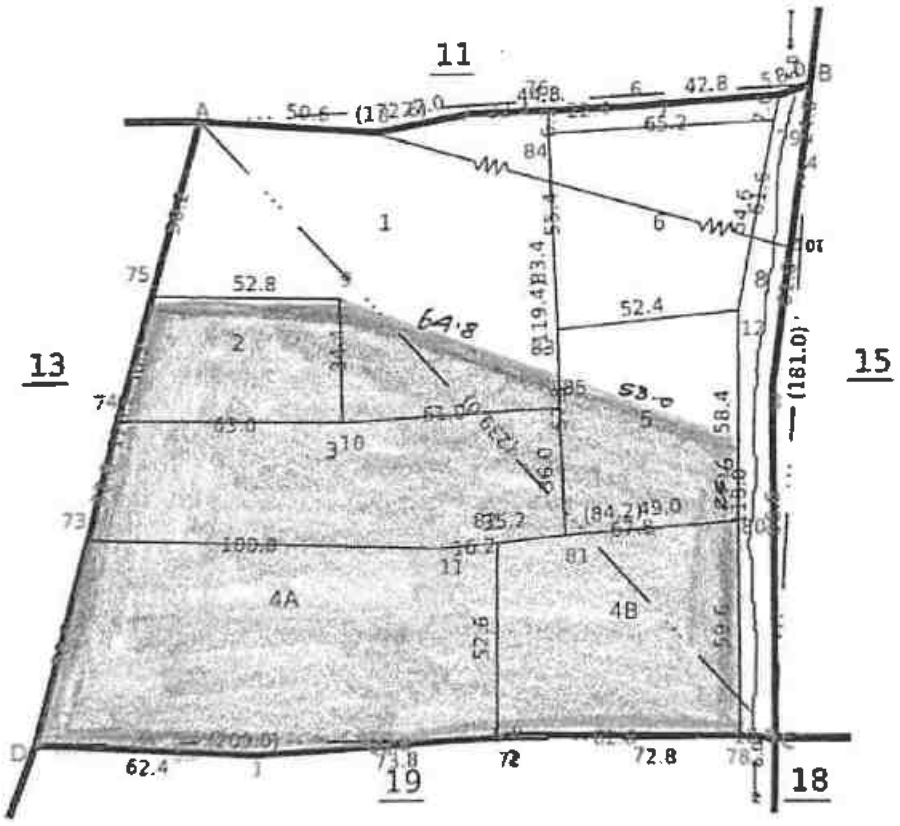
Taluk : Virudhunagar

Village : Seeniyapuram [5]

Survey No : 14

Area : PLAN APPROVED 25.50

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District



LEASE APPLIED AREA

Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

Signed By Tahsildar
Name of approver : tahvi
Date of Approval : 22-06-2018

Date of Issue: 28-04-2025 12:00:55

District : Virudhunagar

Taluk : Virudhunagar

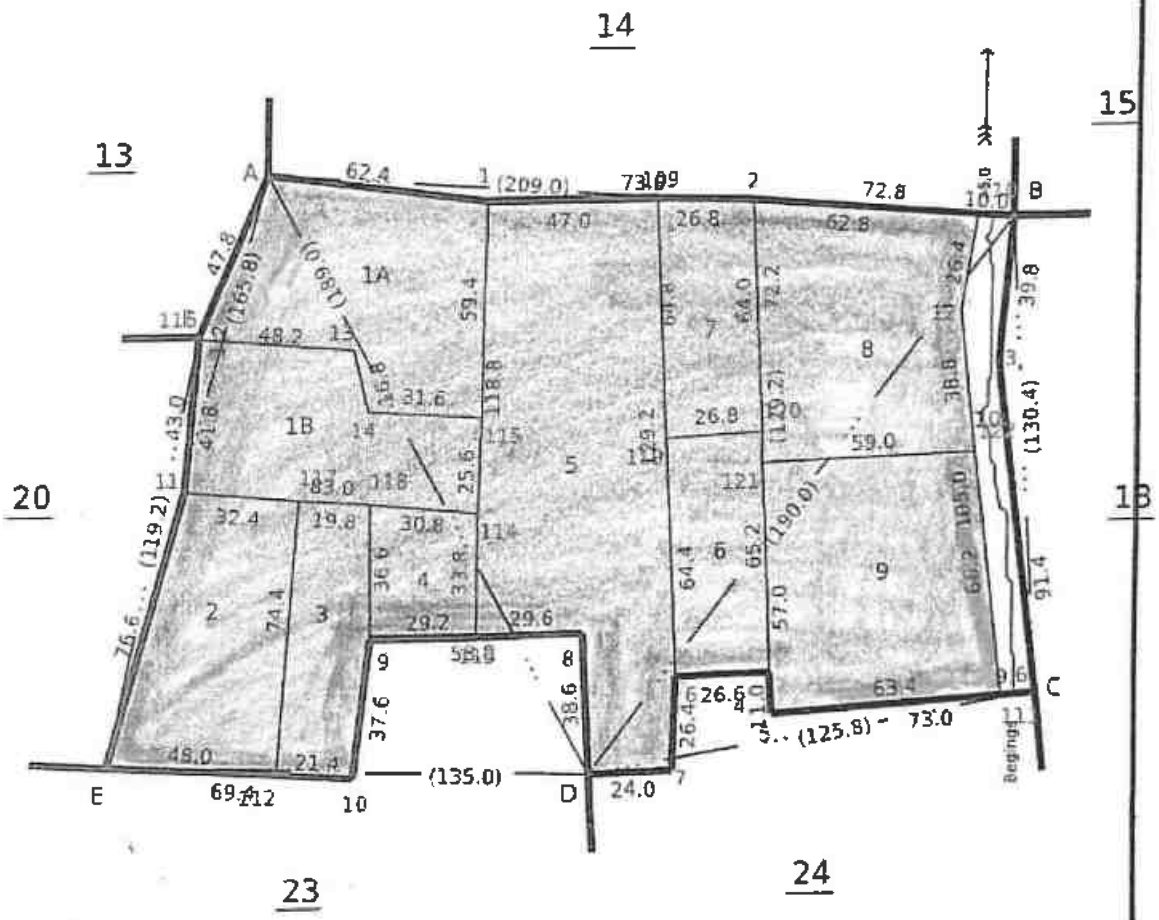
Village : Seeniyapuram [5]

Survey No : 19

Area : Hect 03 Are 20.00

Scale : 1 : 2000

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District



LEASE APPLIED AREA

Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

Signed By Tahsildar
Name of approver : tahvi
Date of Approval : 22-06-2018

Date of Issue: 28-04-2025 12:04:30

Survey and Settlement Department, Government of TamilNadu

260 fv.2

District : Virudhunagar

Taluk : Virudhunagar

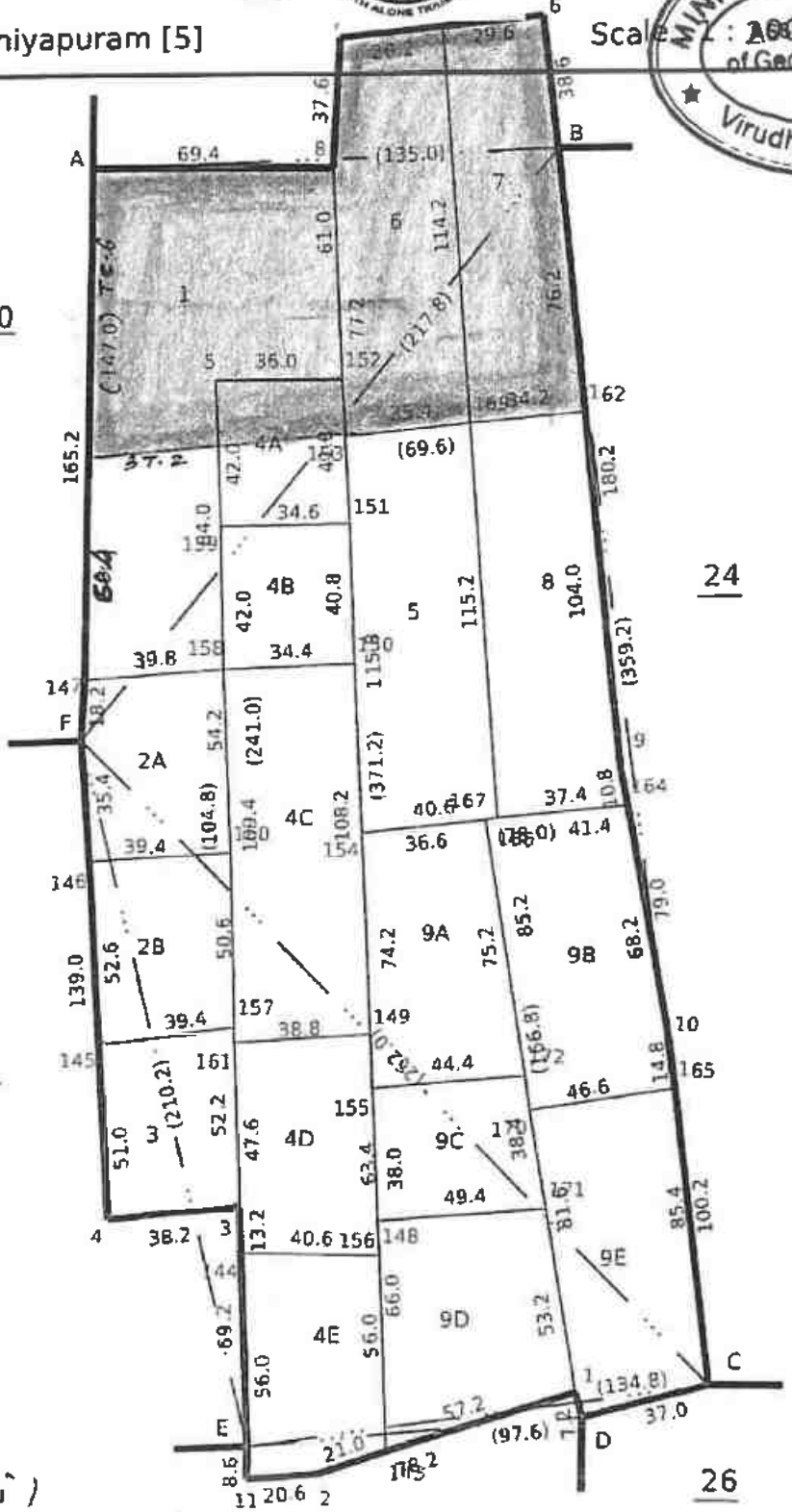
Village : Seeniyapuram [5]

Survey No : 23

Area : Hect (5) Ares 68.00

Scale 1 : 2000

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District



LEASE APPLIED AREA

Village Administrative Officer
Seeniyapuram Village
Virudhunagar Taluk

Signed By Tahsildar
Name of approver : tahvi
Date of Approval : 22-06-2018

Date of Issue : 10-03-2025 12:06:18

Survey and Settlement Department, Government of TamilNadu

260 lv.2

District : Virudhunagar

Taluk : Virudhunagar

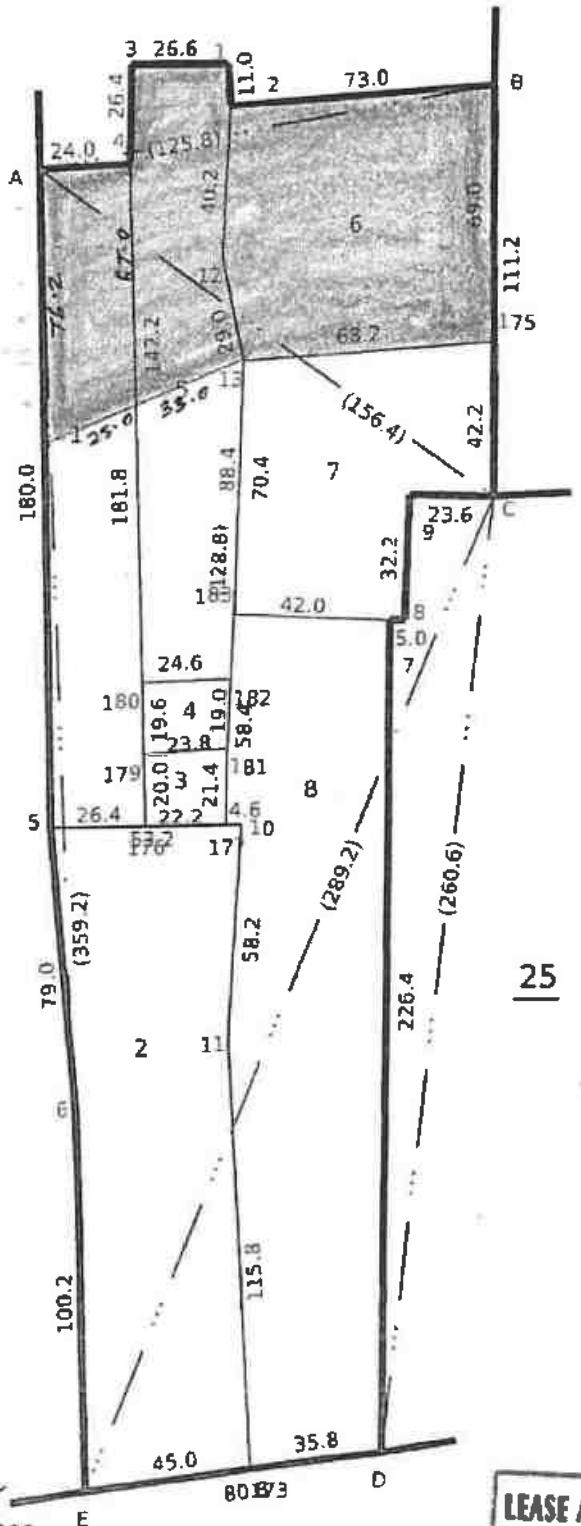
Village : Seeniyapuram [5]

Survey No : 24

Area : H... 03 Ares 67.50

Scale : 1 :2000

MINING PLAN APPROVED
Assistant Director
Geology and Mining
Virudhunagar District



LEASE APPLIED AREA

Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

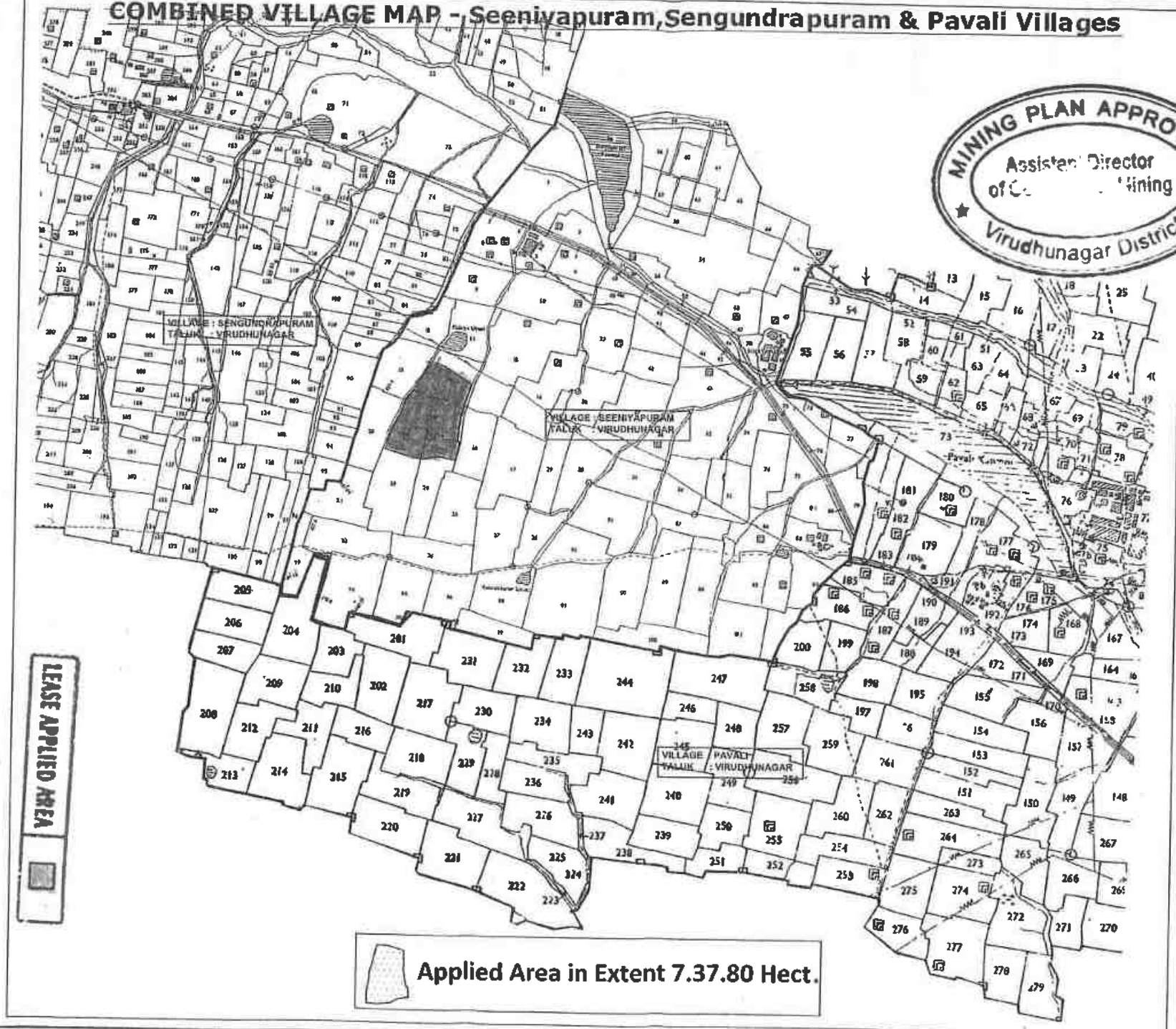
Signed By Tahsildar
Name of approver : tahvi
Date of Approval : 22-06-2018

Date of Issue: 28-04-2025 12:08:03

260 fv.2

Survey and Settlement Department, Government of TamilNadu

COMBINED VILLAGE MAP - Seeniyapuram,Sengundrapuram & Pavali Villages



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Assistant Director of Mining
Virudhunagar District

N
W E
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VILLAGE - Seeniyapuram.

AREA DETAILS :

SF.No.	Applied Extent in Hects.
14/1(P)	0.16.60
14/2	0.19.50
14/3	0.45.50
14/4A	0.71.00
14/4B	0.37.50
14/5(P)	0.20.80
19/1A	0.37.50
19/1B	0.28.00
19/2	0.29.00
19/3	0.16.00
19/4	0.11.00
19/5	0.70.50
19/6	0.16.50
19/7	0.17.00
19/8	0.40.50
19/9	0.40.50
23/1(P)	0.49.90
23/4A(P)	0.06.00
23/6	0.39.00
23/7	0.37.00
24/1(P)	0.17.00
24/5(P)	0.23.80
24/6	0.48.50
TOTAL	7.37.80

ANNEXURE IV

Scale : 1 : 10,000

ANNEXURE IV

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Assistant Director of Geology and Mining
Virudhunagar District

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : விருதுநகர்

நகர்/கிராமம் : சீனியாபுரம்

மாவட்டம் : விருதுநகர்

பட்டா எண் : 318

உரிமையாளர்கள் பெயர்

கோவிந்தராஜ் மகன் கோ.பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
11	7	0 - 18.00	0.49	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
11	9B2	0 - 18.00	0.75	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	4A	0 - 28.00	0.81	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	4B	0 - 16.00	0.40	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	5	0 - 14.50	0.40	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	7	0 - 33.50	0.99	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
13	3	0 - 92.00	2.55	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
13	5	0 - 45.50	1.25	--	--	--	--	2023/0103/26/203225 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 19/07/2023 05:58:00:PM
14	4B	0 - 37.50	1.55	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
19	7	0 - 17.00	0.71	--	--	--	--	2023/0103/26/203225 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 19/07/2023 05:58:00:PM
24	4	0 - 5.00	0.20	--	--	--	--	2023/0103/26/203225 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 19/07/2023 05:58:00:PM
9	3B	0 - 11.00	0.46	--	--	--	--	2023/0103/26/213234 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 27/10/2023 11:19:48:AM
9	4	0 - 11.50	0.47	--	--	--	--	2023/0103/26/213234 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 27/10/2023 11:19:48:AM

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://[illegible] என்ற இணைய தளத்தில் 26/05/005/00319/40543 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

2. இச் தகவல்கள் 30-04-2025 அன்று 02:24:37 PM நேரத்தில் அச்சடிக்கப்பட்டது.

3. செல்போனி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கலாம்.

MINING PLAN APPROVED
Assistant Director
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Virudhunagar District

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

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Assistant Director
of Geology and Mining
Virudhunagar District

ாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

ருவாய் இராமம் : சேனியாபுரம்

பட்டா எண் : 455

உரிமையாளர்கள் பெயர்

கோவிந்தராஜ்	மகன்	PENTAGON BLUE METALS க்காக பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
14	4A	0 - 71.00	2.98	--	--	--	--	2020/0103/26/094745 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 27/10/2020 01:11:05:PM
19	8	0 - 40.50	1.69	--	--	--	--	2020/0103/26/094745 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 27/10/2020 01:11:05:PM
23	2A	0 - 20.50	0.86	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	2B	0 - 20.00	0.83	--	--	--	--	2020/0103/26/0[illegible]36 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	3	0 - 19.50	0.81	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4A	0 - 14.00	0.58	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4B	0 - 14.00	0.58	--	--	--	--	2020/0103/26/0[illegible]36 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4C	0 - 44.00	1.86	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4D	0 - 25.00	1.04	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4E	0 - 25.00	1.04	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM

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23	5	0 - 43.50	1.83	--	--	--		2020/0103/26/094745 -- ------ Digitally signed:Seeniselvam F Zonal Deputy Tahsilda 27/10/2020 01:11:05:PM
23	7	0 - 37.00	1.55	--	--			2020/0103/26/094745 -- ------ Digitally signed:Seeniselvam F Zonal Deputy Tahsilda 27/10/2020 01:11:05:PM
		3 - 74.00	15.65					

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/00455/50504** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:10:25 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

வருவாய் கிராமம் : சின்னியாபுரம்

பட்டா எண் : 507

உரிமையாளர்கள் பெயர்

கோ. பாண்டுரங்கன் ... பெண்டகன் புளு மெட்டல்ஸ்க்காக

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
11	3	0 - 14.50	0.40	--	--			2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
13	4	0 - 21.00	0.58	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
13	6	0 - 21.00	0.58	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusar an K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
14	1	0 - 70.50	2.97	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
14	2	0 - 19.50	0.81	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:I
14	5	0 - 28.50	1.18	--	--	--	--	2023/0103/26/195739 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 17/05/2023 07:58:55:AM
18	1A	0 - 29.00	1.21	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
19	2	0 - 29.50	1.23	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM

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Assistant Director of Geology and Mining
Virudhunagar District

19	6	0 - 16.50	0.69	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
20	5	0 - 66.50	2.77	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
20	7	0 - 32.50	1.35	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
20	9	0 - 18.00	0.76	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
21	3	0 - 27.50	1.15	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
22	1A	0 - 22.50	0.94	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
23	1	0 - 75.50	3.14	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
23	6	0 - 39.00	1.62	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
23	9A	0 - 31.00	1.29	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM

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Virudhunagar District

23	9B	0 - 34.50	1.45	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan I Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
23	9C	0 - 18.00	0.72	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan I Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
23	9D	0 - 29.00	1.20	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan I Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
24	2	0 - 79.50	3.31	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan I Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
24	3	0 - 5.00	0.20	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
9	3A	0 - 11.50	0.49	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
94	3	0 - 95.50	3.99	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan I Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
97	1A	0 - 41.25	1.75	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan I Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
		8 - 76.75	35.78					

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Virudhunagar District

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/00507/60522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:06:39 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

வட்டம் : விருதுநகர்

வருவாய் கிராமம் : சேனியாபுரம்

வட்டம் : விருதுநகர்

பட்டா எண் : 528

உரிமையாளர்கள் பெயர்

கோலிந்தராஜ்

மகன்

கோ. பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
24	5	0 - 47.00	1.96	--	--	--	--	2023/0103/26/213240 Digitally signed:radhakrishnan Zonal Deputy Tahsildar 27/10/2023 11:21:23:AM
		0 - 47.00	1.96					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00528/60535 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:31:33 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கலாம்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

வட்டம் : விருதுநகர்

நவாய் இராமம் : சேனியாபுரம்

வட்டம் : விருதுநகர்

பட்டா எண் : 554

உரிமையாளர்கள் பெயர்

பெண்டகன் புரூ மெட்டல்ஸ்க்காக

கோ. பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மறுவை		குறிப்புரைகள்
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
15	3B	1 - 4.50	4.12	--	--	--	--	2024/0103/26/239423 - ------ Digitally signed:radhakrishnan Zonal Deputy Tahsildar 08/06/2024 07:10:39:AM
24	1	0 - 45.50	1.69	--	--	--	--	2025/0103/26/279346 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 24/03/2025 07:12:32:PM
26	3B	0 - 15.00	0.62	--	--	--	--	2025/0103/26/271628 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
26	3C	0 - 27.50	1.15	--	--	--	--	2025/0103/26/271628 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
90	2B	0 - 28.00	1.18	--	--	--	--	2025/0103/26/271628 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
91	3	0 - 58.00	2.42	--	--	--	--	2025/0103/26/271628 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
91	6	0 - 19.50	0.81	--	--	--	--	2025/0103/26/271628 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
98	5A	0 - 19.00	0.79	--	--	--	--	2025/0103/26/271628 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
		3 - 17.00	12.98					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00554/60594 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:29:22 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. ஸ்மார்ட்போன் கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபர்ங்கள் : இ. எண் 10(1) பிரிவு

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

மாவட்டம் : விருதுநகர்

நவாய் இராமம் : சேனியாபுரம்

லட்டம் : லிருதுநகர்

பட்டா எண் : 574

உரிமையாளர்கள் பெயர்

கோ. பாண்டுரங்கன் ... பென்டகன் புளு மெட்டல்ஸ்க்காக

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
19	3	0 - 40.50	1.69	--	--	--	--	2024/0103/26/250511 Digitally signed:radhakrishnan Zonal Deputy Tahsildr 20/08/2024 05:15:50:PM
		0 - 40.50	1.69					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் யின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00574/60595 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:27:16 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. மைப்பேரி கேமராலின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

வருவாய் கிராமம் : சினியாபுரம்

பட்டா எண் : 597

உரிமையாளர்கள் பெயர்

பென்டகன் புளு மெட்டல்ஸ்க்காக ... கோ. பாண்டுரங்கன்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

19	3	0 - 16.00	0.68	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
20	6	0 - 29.00	1.22	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
20	8	0 - 76.50	3.21	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
21	4B2	0 - 60.50	2.54	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
22	1B	0 - 23.00	0.95	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
22	2B	0 - 58.50	2.45	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
23	9E	0 - 37.00	1.56	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
26	1A	0 - 58.00	2.42	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

29	6	0 - 58.50	2.43	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
38	5	0 - 50.00	2.08	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
8	5C	0 - 26.00	1.10	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2[illegible] 07:09:03:PM
87	2	0 - 31.50	1.32	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
91	7	0 - 30.50	1.27	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
92	2	0 - 22.50	0.95	--	--	--	--	2025/0103/26/[illegible]8863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
93	1	0 - 51.00	2.13	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
		9 - 49.00	38.84					

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

தறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/00597/60521** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:09:05 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

குவாய் கிராமம் : சினியாபுரம்

பட்டா எண் : 601

உரிமையாளர்கள் பெயர்

பென்டகன் புளு மெட்டல்ஸ்க்காக ... கோ. பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
13	7	0 - 19.50	0.54	--	--	--	--	2025/0103/26/281993 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 08/04/2025 12:03:11:PM
19	1A	0 - 37.50	1.58	--	--	--	--	2025/0103/26/285547 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 30/04/2025 01:05:57:PM
19	1B	0 - 28.00	1.16	--	--	--	--	2025/0103/26/285547 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 30/04/2025 01:05:57:PM
19	4	0 - 11.00	0.46	--	--	--	--	2025/0103/26/285547 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 30/04/2025 01:05:57:PM
19	5	0 - 70.50	2.94	--	--	--	--	2025/0103/26/283710 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 21/04/2025 04:36:25:PM
22	3	0 - 8.50	0.35	--	--	--	--	2025/0103/26/281993 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 08/04/2025 12:03:11:PM
30	5B	1 - 43.75	6.00	--	--	--	--	2025/0105/26/447837 -2025/26/05/0000475 ------ Digitally signed:Rajakumar S Tahsildar 10/04/2025 08:36:14:PM
		3 - 18.75	13.03					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் தளத்தில் 26/05/005/00601/70567 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும். https://eservices.tn.gov.in என்ற இணைய

2. இத் தகவல்கள் 30-04-2025 அன்று 02:23:08 PM நேரத்தில் அச்சடிக்கப்பட்டது.

3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : விருதுநகர்

வருவாய் கிராமம் : சேனியாபுரம்

லட்டம் : விருதுநகர்

பட்டா எண் : 606

உரிமையாளர்கள் பெயர்

பென்டகன் புளு மெட்டல்ஸ்க்காக

கோ. பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்பு
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
24	6	0 - 48.50	2.03	--	--	--	--	2025/0101/26/ ----- Digital signed:RAJALA Head Quartan Tahsild 30/04/2(01:17:46
		0 - 48.50	2.03					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் தகவல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. மேற்கண்ட தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00606/70512 என்ற குறிப்பு எண்ணை உள்ளிட்டு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:33:34 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

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Assistant Director of Geology and Mining
Virudhunagar District

ANNEXURE V

கிராமக் கணக்கு

1437 ஆம் பசலியில் விருதுநகர் மாவட்டம் விருதுநகர்

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முதல் போகம்
Assistant Director
of Geology and Mining
Virudhunagar District

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.					கைப்பற்று தாரருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாரருடைய பெயர்.	சாகுபடியாளரின் பெயர்.					
நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு.	தீர்வை.	ஒரு போகம் அல்லது இரு போகம்.		நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது அல்லது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிரான / அனுபோக பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விழுக்காடு.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
14	1	0.70.5	2.9		507 அனந்தன் மகன் அபிட்டல்சாமி			புஞ்சை			
	2	0.19.50	0.81		507			புஞ்சை			
	3	0.45.50	1.89		597 - இரா. பாண்டுரெங்கன்			புஞ்சை			
	4A	0.71.0	2.95		455 - அனந்தன் மகன் அபிட்டல்சாமி			புஞ்சை			
	4B	0.37.50	1.55		319 - இரா. பாண்டுரெங்கன்			புஞ்சை			
	5	0.28.50	1.18		507 - அனந்தன் மகன் அபிட்டல்சாமி			புஞ்சை			
19	1A	0.37.5	1.55		601 - இரா. சாமன்துரைங்கன்			புஞ்சை			
	1B	0.28.0	1.16					புஞ்சை			
	2	0.29.50	1.23		507 - அனந்தன் மகன் அபிட்டல்சாமி			புஞ்சை			1/2 சாணல்
	3	0.16.0	0.68		597 இரா. சாமன் துரைங்கன்			புஞ்சை			
	4	0.11.0	0.46		601 - இரா. சாமன்துரைங்கன்						

30/4/25.

Village Administrative Officer

380/30-B F. III-A-10-23,00,000 Cps.-GBP-Mdu.-7-2018

சீனியாபுரம்
கிராமக் கணக்கு

1437 ஆம் பசலியில் ... மாவட்டம் ... வட்டம்

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.					சாகுபடியாளரின் பெயர்.		முதல் போகம்			
நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு.	தீர்வை.	ஒரு போகம் அல்லது இரு போகம்.	கைப்பற்று தாரருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாரருடைய பெயர்.	நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது	பயிரின் பெயர்.	பயிரான / தரிசு வகை பாண பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விழுக்காடு.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
19	5	0.70.5	2.94		601 தேவ.சுயம்புலிங்கம்			தரிசு			
	6	0.14.5	0.64		507-அருள்மிகு புது அபிஷேகம்			தரிசு			
	7	0.17.0	0.71		319-தேவ.சுயம்புலிங்கம்			தரிசு			
	8	0.40.5	1.69		455-அருள்மிகு புது அபிஷேகம்			தரிசு			
	9	0.40.5	1.69		574 — "	"		தரிசு			
23	1	0.75.5	3.14		507-அருள்மிகு புது அபிஷேகம்			தரிசு			
	4	0.14.0	0.58		455 — "	"		தரிசு			
	6	0.39.0	1.62		507 — "	"		தரிசு			
	7	0.37.0	1.55		455 — "	"		தரிசு			

30/4/25

Village Administrative Officer
Seeniyapuram Village
Virudhunagar Taluk

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Assistant Director
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1/37 ஆம் பசலியில் 2017-18ம் ஆண்டு கிராமக் கணக்கு

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.

நில அளவை எண். (1)	உட்பிரிவு எண். (2)	பரப்பு. (3)	தீர்வை (4)	ஒரு போகம் அல்லது இரு போகம். (5)	கைப்பற்று தாரருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாரருடைய பெயர். (6)	நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா. (7)	எந்த மாதத்தில் பயிர் செய்யப்பட்டது. எந்த மாதத்தில் அறுவடை செய்யப்பட்டது. (8)	பயிரின் பெயர். (9)	பயிரான / அறுவடை யான பரப்பு. (10)	உண்மையான பாய்ச்சல் ஆதாரம். (11)	விளைச்சல் அளவு விபரக்காடு. (12)
24	1	0.45.0	1.89		557 கோ. சரண் நெல்லின்			தரிசு			
	5	0.47.0	1.96		528 கோ. சரண் நெல்லின்			தரிசு			
	6	0.48.50	2.03		606 - கோ. சரண் நெல்லின்			தரிசு			

/சொன்னபடி/

30/4/25

Village Administrative Officer,
Seeniyapuram Village
udhunagar Taluk

PLANNING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar

380/30-R.F. III-A-10-23,00,000 Cps,-GBP-Mdu.-7-2018.

அ-பதிவேடு விவரங்கள் - ஊரகம்

ANNEXURE VI

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சின்னியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	14	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	1	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	14-1	11. தீர்வை (ரூ - ஹெ)	1.17
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 70.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.97
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	507
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.பெண்டகன் புரூ மெட்டல்ஸ்க்காக

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/1/20522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**14**	9. மண் வகைப்பாடு	-
2. உட்பிரிவு எண்	**2**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**14-2**	11. தீர்வை (ரூ - ஹெ)	
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0-19.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**0.81**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**507**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.பெண்டகன் புரூ மெட்டல்ஸ்க்காக**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/2/20522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

இராமம் : சேனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**14**	9. மண் வயனமும் ரகமும்	-
2. உட்பிரிவு எண்	**3**	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	**14-3**	11. நீர்வை (ரூ - ஹெ)	4.17
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 45.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.89**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**597**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/3/20521** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஜரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

1. புல எண்	14	9. மண் வயனமும் ரகமும்	-
2. உட்பிரிவு எண்	4A	10. மண் தரம்	-
3. பழைய புல உட்பிரிவு எண்	14-4	11. தீர்வை (ரூ - பை)	4.17
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 71.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.98
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	455
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.PENTAGON BLUE METALS க்காக பாண்டுரங்கன்

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/4A/20504** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சினியாபுரம்

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

1. புல எண்	**14**	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	**4B**	10. மண் தரம்	
3. பழைய புல உட்பிரிவு எண்	**14-4**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 37.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.55**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**319**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ.பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/4B/20543** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

ANNEXURE-4

From
Dr.S.Suhatharahima, M.Sc.,Ph.D.,
Assistant Director,
Geology and Mining,
Virudhunagar.

To
Thiru.G.Pandurangan,
S/o.Govindaraj,
Door No.13/3,7/25,
Elgaipatti, Pavali panchayat,
Seeniyapuram village,
Virudhunagar District.

Roc.No: 25VNR0402851, Dated:03.03.2026.

Sir,

Sub: Mines and Minerals - Minor Mineral – Virudhunagar Taluk and district - Seeniapuram Village – Patta Land - S.F.Nos: 14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00), 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50)- over an Extent of 7.37.80 Hectares – Quarry lease application preferred by Thiru.K.Bharathiraja, S/o.Thiru.Krishnan, for quarrying Rough Stone and Gravel – Details of 500 metre radius - sent - Regarding.

Ref:
1. Quarry lease application received from Thiru.G.Pandurangan, S/o.Govindaraj dated:30.04.2025.
2. The Assistant Director, Geology and Mining, Virudhunagar Rc.No.25VNR0402851, Dated: 04.09.2025.
3. Thiru.G.Pandurangan, S/o.Govindaraj letter dated: 12.01.2026.

******

Thiru.G.Pandurangan, S/o.Govindaraj has preferred an application for the grant of quarrying lease to quarry Rough Stone and Gravel over an extent of 7.37.80 Hectares of Patta Lands in S.F.Nos: 14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00), 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50) of Seeniapuram

Village, Virudhunagar Taluk and District for a period of 10 (Ten) Years Under Rule 19 of Tamil Nadu Minor Mineral Concession Rules 1959.

2) The application was examined and consented to grant lease to quarrying Rough Stone and Gravel over an extent of 7.37.80 Hectares of Patta Lands in S.F.Nos: 14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00), 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50) for a period of 10 (Ten) years subject to produce Mining Plan for approval and to obtain Environment Clearance from SEIAA in the reference 2nd cited.

3) The applicant has submitted the Mining Plan, prepared as per the guidelines issued by the Commissioner of Geology and Mining and as per the Rules and Acts for a period of Ten years. The Geological reserves, Mineable reserves and yearwise production are discussed in Table 1, 2 & 3 of the mining plan. The Geological reserves available within the area is estimated as 1,62,23,900 MT of Roughstone and 7,37,450 MT of Gravel. The mineable reserves is estimated as 55,93,500 MT of Roughstone and 6,13,700 MT of Gravel upto a depth of 85.0 m from the ground level.

4) The applicant Thiru.G.Pandurangan, S\o.Govindharaj in the reference 3rd cited has requested to furnish details of quarries situated within 500 m radial distance from the applied area.

5) As per his request the details of quarry situated within 500 meter radius from the proposed area for obtaining Environmental Clearance as detailed below:

Details of quarry situated within 500 meters radius from the applied area

S. No	Quarry detail	Taluk & Village	S.F. No.& Extent (Hect)	Proceedings No. & Lease Period
I	**Existing Quarries:**			
1.	Thiru.S.Puliraj, S/o.Sankarraj, 4/32, Chandragiripuram, Pavali, Virudhunagar	Seeniyapuram village/ Virudhunagar Taluk	94/2B Extent -0.74.00 hectares	KV1/1008/2024 Lease period- 27.06.2025 to 26.06.2030.
2.	Thiru.G.Pandurangan S/o. Govindharaj 4/888, Balaji Nagar, Soolakkarai, Aruppukottai Taluk.	Sengundra puram / Virudhunagar Taluk	79/2A(P) 79/2B(P) 81/1(P) 81/2(P) 83/1 83/2(P) 84/1(P) 85(P) Extent-2.51.00 hectares	KV1/533/2020 30.11.2022 Lease period - 07.11.2022 to 06.11.2027
3.	Thiru.G.Pandurangan S/o. Govindharaj 4/888, Balaji Nagar, Soolakkarai, Aruppukottai Taluk.	Sengundra puram / Virudhunagar Taluk	84/1(P) (0.04.00), 85(P) (0.30.00), 86/1 (0.30.00), 86/2 (0.32.5), 87/1 (0.25.5), 87/2 (0.40.5), 88 (0.62.00), 109/2 (0.14.00), 109/3A (0.13.5), 109/3B (0.13.5), 110/1B (0.19.00), 110/2B (P) (0.19.50), 110/2C(P) (0.21.5) Extent- 3.25.50 hectares	KV1/623/2024 Lease period – 26.11.2025 to 25.11.2035
4.	Thiru.S.Ramasamy S/o, Sesathiri 4/887A, Balaji Nagar, Soolakarai Village, Aruppukottai Taluk	Sengundra puram / Virudhunagar Taluk	94/1, 94/2, 94/3 Extent-1.13.50 hectares	KV1/1174/2022 06.06.2023 Lease period- 08.06.2023 to 07.06.2028
II	**Abandoned Quarry :**			
1.	Thiru.S.Govindaraj S/o, Chesathiri 4/888, Sri Balaji Nagar Soolakarai, Virudhunagar Taluk.	Seeniyapuram village/ Virudhunagar Taluk	11/1,11/2 12/6,9/7,9/9 Extent-2.37.50 hectares	KV1/541/2018 Dated:15.01.2019 Lease period- 29.01.2019 to 28.01.2024

2.	Tmt. R.Subbulakshmi, No: 4/887A, Balaji Nagar, Sulakkarai – 626 003, Virudhunagar District.	Seeniyapuram village/ Virudhunagar Taluk	25/2 ,25/5 26/1C Extent- 2.12.50 hectares	KV1/35293/2016 , dated: 12.01.2018 Lease period- 02.02.2018 to 01.02.2023
III	**Present Proposed Quarry :**			
1.	Thiru.G.Pandurangan, S/o.Govindaraj, Door No.13/3,7/25, Elgaipatti, Pavali panchayat, Seeniyapuram village, Virudhunagar District.	Seeniyapuram village/ Virudhunagar Taluk	14/1(P)(0.16.60), 14/2(0.19.50), 14/3(0.45.50), 14/4A(0.71.00), 14/4B(0.37.50), 14/5(P)(0.20.00), 19/1A(0.37.50), 19/1B(0.28.00), 19/2(0.29.00), 19/3(0.16.00), 19/4(0.11.00), 19/5(0.70.50), 19/6(0.16.50), 19/7(0.17.00), 19/8(0.40.50), 19/9(0.40.50), 23/1(P)(0.49.90), 23/4A(P)(0.06.00 23/6(0.39.00), 23/7(0.37.00), 24/1(P)(0.17.00), 24/5(P)(0.23.80) and 24/6)(0.48.50) Extent-7.37.80 hectares	25VNR0402851

3/2/2018

Assistant Director,
Geology and Mining,
Virudhunagar.

Copy to :

The Member Secretary,
State Level Environmental Impact
Assessment Authority,
State Expert Appraisal Committee
at SEAC Conference Hall 9th Floor, Metros (CMRL building),
Nandanam, Chennai-600035.

ANNEXURE-5

அருகுநாகை மாவட்டம் அருகுநாகை மாட்டம்
அருமைக்குளம்(பு) சீனியாபுரம் கிராம நிர்வாக
அலுவலர் அவர்களுக்கு நான்,

அருகுநாகை மாவட்டம் அருகுநாகை மாட்டம் ஆயுதம்
(பல்கை) கிராமம் : 13/3,7/25 என்கையிற்று சீனியாபுரம்
கிராமம் கோவிலங்குளம் மகன் நிரை : பாண்டியனுடைய
அன்பரையை அவர்களுடைய சீனியாபுரம் கிராமத்தில்
உள்ளனவர்கள் : 14/3, 14/5, 19/2, 19/5, 19/8, 23/4A
24/1, 24/6, 14/1, 14/4A, 19/1A, 19/3, 19/6, 19/9
23/6, 24/5. ல் உள்ள அரசு நிலம் : 7.37.00
ஹெக்டர் நிலம் தனியாருக்கு உரியது. இந்நிலத்தில்
வசிப்பவர்கள் நிரந்தரமான கட்டிடங்கள் மற்றும் குடிசைகள்
மட்டுமே அமைத்து வசித்து வருகின்றனர். வசிப்பவர்களிடம்
கணக்கெடுப்பு செய்ததில் 500 வீடுகள் இருப்பதாகவும். கிராம நத்தம், மற்றும் அனுமதிக்கப்பட்ட
வகைப்பாடுகளில் உள்ளன. 50 வீடுகள் குடியிருப்பவர்கள்
உயர் மின் அழுத்த பாதைகள், தொழிற்சாலைகள்,
குடியிருப்புகள், மேலும் வேலைவாய்ப்பு, நிரந்தரமான இருப்பிடம்
இல்லாதவர்கள் போன்ற காரணங்களால் குடியிருப்புகள்
இல்லை. (இச்சான்று வீட்டுமனைப்பட்டாவிற்காக
மட்டும்) வழங்கப்படுகிறது.

23/3/2026
Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

ANNEXURE-6

ANNEXURE II

District : Virudhunagar

Taluk : Virudhunagar

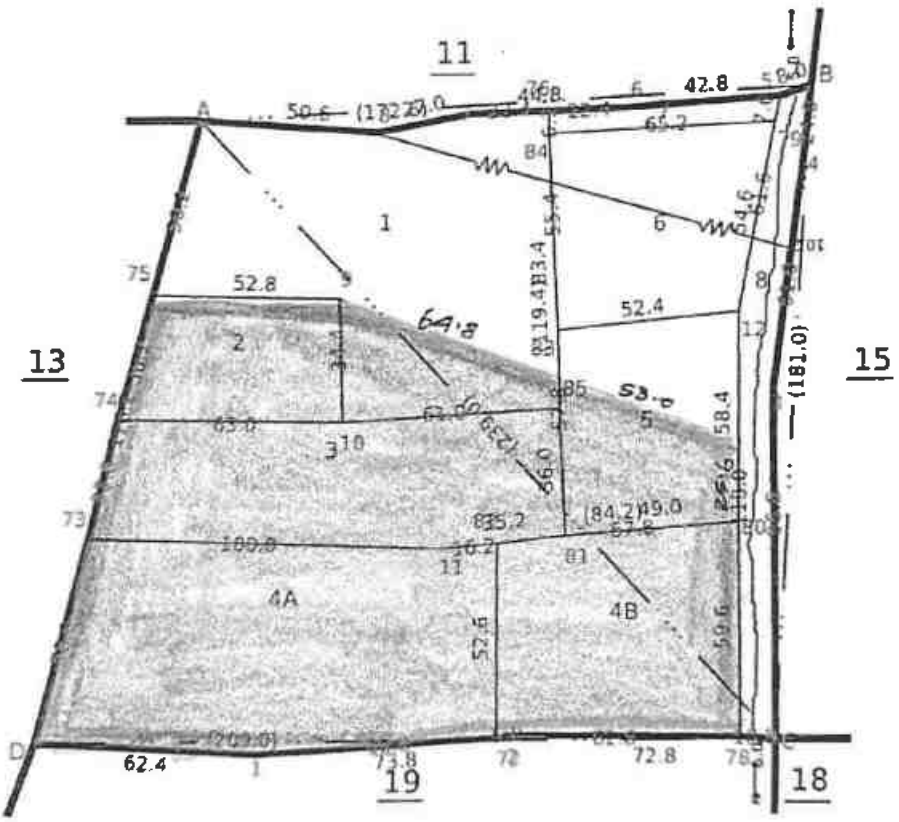
Village : Seeniyapuram [5]

Survey No : 14

Area : PLAN APPROVED 25.50

Scale : 1:2000

MINING Assistant Director of Geology and Mining Virudhunagar District



LEASE APPLIED AREA

Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

Signed By Tahsildar
Name of approver : tahv
Date of Approval : 22-06-2018

Date of Issue: 28-04-2025 12:00:55

District : Virudhunagar

Taluk : Virudhunagar

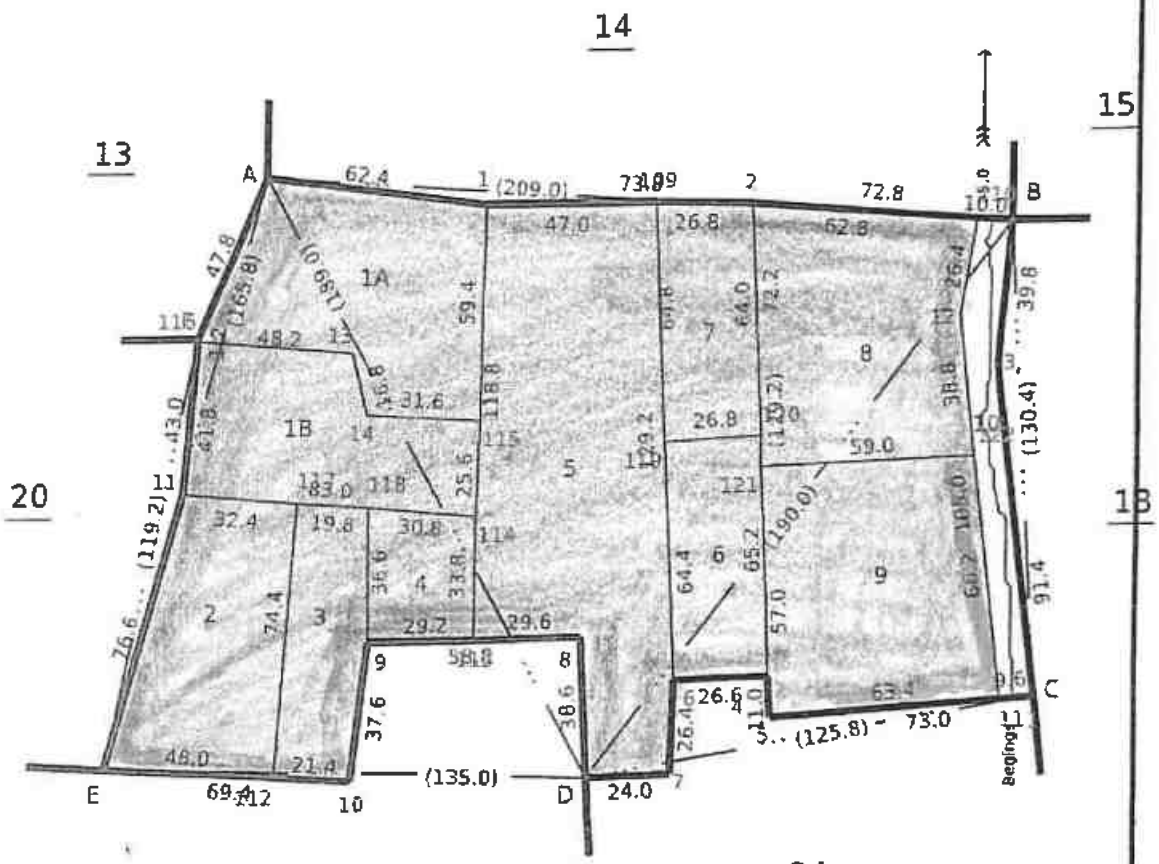
Village : Seeniyapuram [5]

Survey No : 19

Area : Hect 13.Ares 20.00

Scale : 1 : 2000

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District



LEASE APPLIED AREA

Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

Signed By Tahsildar
Name of approver : tahv
Date of Approval : 22-06-2018

Date of Issue: 28-04-2025 12:04:30

Survey and Settlement Department, Government of TamilNadu

260 fv.2

District : Virudhunagar

Taluk : Virudhunagar

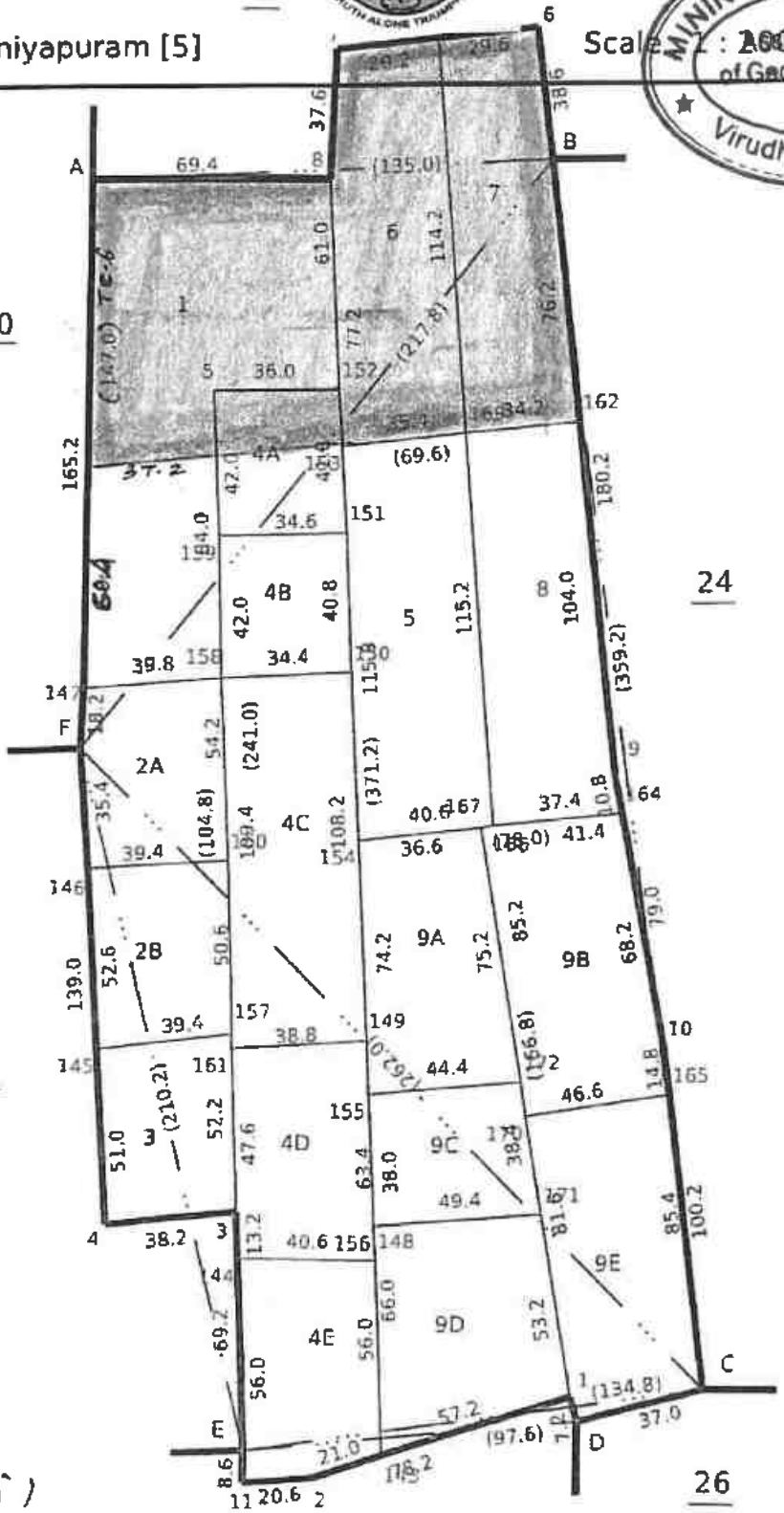
Village : Seeniyapuram [5]

Survey No : 23

Area : Hect 05 Ares 68.00

Scale 1 : 2000

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District



LEASE APPLIED AREA

Signed By Tahsildar

Name of approver : tahvi

Date of Approval : 22-06-2018

Village Administrative Officer

Seeniyapuram Village

Virudhunagar Taluk

Date of Issue : 28-03-2023 12:06:18

Survey and Settlement Department, Government of TamilNadu

260 fv 2

District : Virudhunagar

Taluk : Virudhunagar

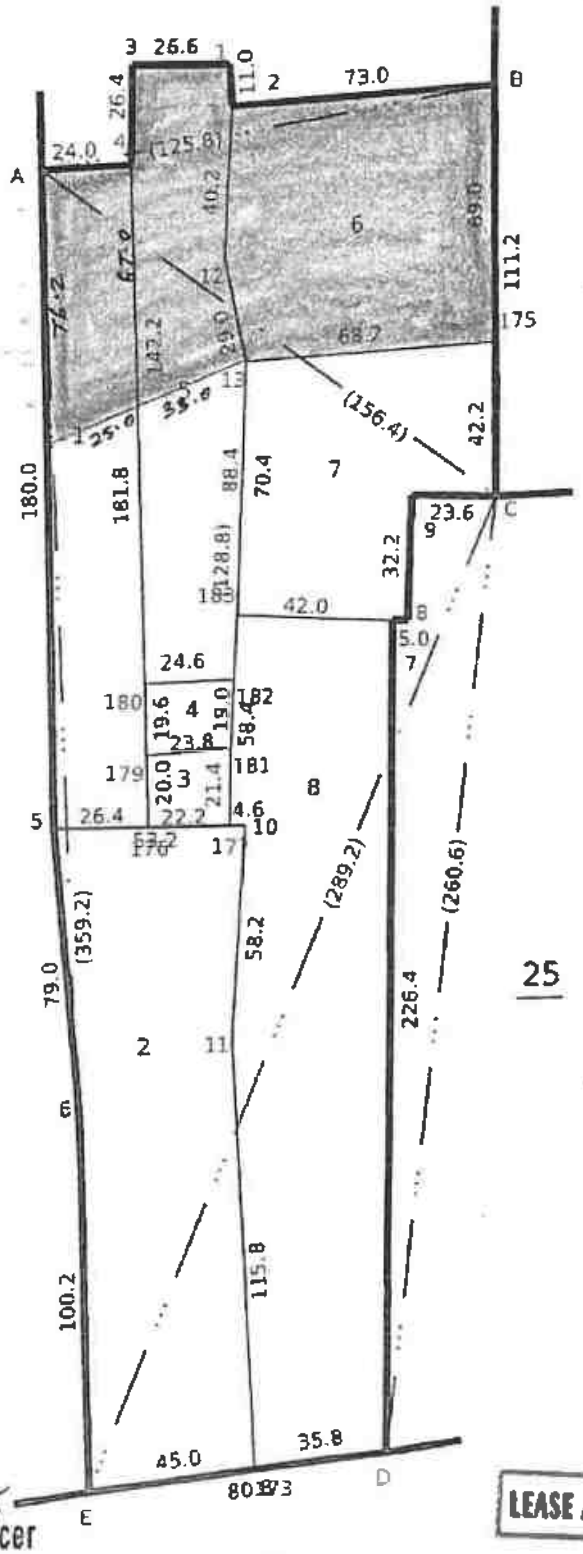
Village : Seeniyapuram [5]

Survey No : 24

Area : 1.1.03 Ares 67.50

Scale : 1:2000

MINING PLAN APPROVED
Assistant Director
Geology and Mining
Virudhunagar District



LEASE APPLIED AREA

Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

Signed By Tahsildar
Name of approver : tahvi
Date of Approval : 22-06-2018

Date of Issue: 28-04-2025 12:08:03

260 fv.2

Survey and Settlement Department, Government of TamilNadu

COMBINED VILLAGE MAP - Seeniyapuram, Sengundrapuram & Pavali Villages



MINING PLAN APPROVED
Assistant Director of Mining
Virudhunagar District

N
W
E
S

VILLAGE - Seeniyapuram.

AREA DETAILS :

SF.No.	Applied Extent in Hects.
14/1(P)	0.16.60
14/2	0.19.50
14/3	0.45.50
14/4A	0.71.00
14/4B	0.37.50
14/5(P)	0.20.00
19/1A	0.37.50
19/1B	0.28.00
19/2	0.29.00
19/3	0.16.00
19/4	0.11.00
19/5	0.70.50
19/6	0.16.50
19/7	0.17.00
19/8	0.40.50
19/9	0.40.50
23/1(P)	0.49.90
23/4A(P)	0.06.00
23/6	0.39.00
23/7	0.37.00
24/1(P)	0.17.00
24/5(P)	0.23.80
24/6	0.48.50
TOTAL	7.37.80

ANNEXURE III

Scale : 1 : 10,000

ANNEXURE IV

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

வட்டம் : விருதுநகர்

நவாய் கிராமம் : சீனியாபுரம்

வட்டம் : விருதுநகர்

பட்டா எண் : 319

உரிமையாளர்கள் பெயர்

கோவிந்தராஜ் மகன் கோ.பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
11	7	0 - 18.00	0.49	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
11	9B2	0 - 18.00	0.75	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	4A	0 - 28.00	0.81	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	4B	0 - 16.00	0.40	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	5	0 - 14.50	0.40	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
12	7	0 - 33.50	0.93	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
13	3	0 - 92.00	2.55	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
13	5	0 - 45.50	1.25	--	--	--	--	2023/0103/26/203225 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 19/07/2023 05:58:00:PM
14	4B	0 - 37.50	1.55	--	--	--	--	TPT1840/08--- ---- Digitally signed:SYED IBRAHIM SHA M Tahsildar 17/04/2017 01:03:26:PM
19	7	0 - 17.00	0.71	--	--	--	--	2023/0103/26/203225 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 19/07/2023 05:58:00:PM
24	4	0 - 5.00	0.20	--	--	--	--	2023/0103/26/203225 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 19/07/2023 05:58:00:PM
9	3B	0 - 11.00	0.46	--	--	--	--	2023/0103/26/213234 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 27/10/2023 11:19:48:AM
9	4	0 - 11.50	0.47	--	--	--	--	2023/0103/26/213234 - ---- Digitally signed:radhakrishnan Zonal Deputy Tahsilda 27/10/2023 11:19:48:AM

தறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://[illegible] இணைய தளத்தில் 26/05/005/00319/40543 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

2. இத் தகவல்கள் 30-04-2025 அன்று 02:24:37 PM நேரத்தில் அச்சடிக்கப்பட்டது.

3. கைபேசி கேமராவின்2D barcode ஸ்கேப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கலாம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

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Assistant Director
of Geology and Mining
Virudhunagar District

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

வருவாய் கிராமம் : சேனியாபுரம்

பட்டா எண் : 455

உரிமையாளர்கள் பெயர்

கோவிந்தராஜ்	மகன்	PENTAGON BLUE METALS க்காக பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
14	4A	0 - 71.00	2.98	--	--	--	--	2020/0103/26/094745 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 27/10/2020 01:11:05:PM
19	B	0 - 40.50	1.69	--	--	--	--	2020/0103/26/094745 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 27/10/2020 01:11:05:PM
23	2A	0 - 20.50	0.86	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	2B	0 - 20.00	0.83	--	--	--	--	2020/0103/26/0' 36 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	3	0 - 19.50	0.81	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4A	0 - 14.00	0.58	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4B	0 - 14.00	0.58	--	--	--	--	2020/0103/26/09 136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4C	0 - 44.00	1.86	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4D	0 - 25.00	1.04	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM
23	4E	0 - 25.00	1.04	--	--	--	--	2020/0103/26/091136 -- ------ Digitally signed:Seeniselvam R Zonal Deputy Tahsildar 14/09/2020 04:03:53:PM

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23	5	0 - 43.50	1.83	--	--	--		2020/0103/26/094745 -- ------- Digitally signed:Seeniselvam F Zonal Deputy Tahsilda 27/10/2020 01:11:05:PM
23	7	0 - 37.00	1.55	--	--			2020/0103/26/094745 -- ------- Digitally signed:Seeniselvam F Zonal Deputy Tahsilda 27/10/2020 01:11:05:PM
		3 - 74.00	15.65					

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குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/00455/50504** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:10:25 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : விருதுநகர் வட்டம் : விருதுநகர்

வருவாய் கிராமம் : சினியாபுரம் பட்டா எண் : 507

உரிமையாளர்கள் பெயர்

கோ. பாண்டுரங்கன் ... பெண்டகன் புளு மெட்டல்ஸ்க்காக

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Virudhunagar District

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
11	3	0 - 14.50	0.40	--	--			2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
13	4	0 - 21.00	0.58	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
13	6	0 - 21.00	0.58	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusar an K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
14	1	0 - 70.50	2.97	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
14	2	0 - 19.50	0.81	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:I
14	5	0 - 28.50	1.18	--	--	--	--	2023/0103/26/195739 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 17/05/2023 07:58:55:AM
18	1A	0 - 29.00	1.21	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan I Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
19	2	0 - 29.50	1.23	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM

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19	6	0 - 16.50	0.69	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
20	5	0 - 66.50	2.77	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
20	7	0 - 32.50	1.35	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
20	9	0 - 18.00	0.76	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
21	3	0 - 27.50	1.15	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
22	1A	0 - 22.50	0.94	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
23	1	0 - 75.50	3.14	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
23	6	0 - 39.00	1.62	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
23	9A	0 - 31.00	1.29	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM

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Assistant Director of Geology and Mining
Virudhunagar District

23	9B	0 - 34.50	1.45	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
23	9C	0 - 18.00	0.72	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
23	9D	0 - 29.00	1.20	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
24	2	0 - 79.50	3.31	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
24	3	0 - 5.00	0.20	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
9	3A	0 - 11.50	0.49	--	--	--	--	2023/0103/26/191432 -- ------ Digitally signed:Muthusangaran K Zonal Deputy Tahsildar 02/05/2023 03:16:18:PM
94	3	0 - 95.50	3.99	--	--	--	--	2024/0103/26/248909 -- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
97	1A	0 - 41.25	1.75	--	--	--	--	2024/0103/26/248909 --- ------ Digitally signed:radhakrishnan t Zonal Deputy Tahsildar 15/08/2024 08:49:43:PM
		8 - 76.75	35.78					

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Virudhunagar District

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/00507/60522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:06:39 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

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Virudhunagar District

வட்டம் : விருதுநகர்

குவாய் இராமம் : சனியாபுரம்

வட்டம் : விருதுநகர்

பட்டா எண் : 528

உரிமையாளர்கள் பெயர்

கோவிந்தராஜ்

மகன்

கோ. பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		தன்செய்				குறிப்புரைகள்
		பரப்பு ஹெக் - ஏர்	நீர்வை ரு - பை	பரப்பு ஹெக் - ஏர்	நீர்வை ரு - பை	பரப்பு ஹெக் - ஏர்	நீர்வை ரு - பை	
24	5	0 - 47.00	1.96	--	--	--	--	2023/0103/26/213240 Digitally signed:radhakrishnan Zonal Deputy Tahsildar 27/10/2023 11:21:23:AM
		0 - 47.00	1.96					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00528/60535 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:31:33 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

வட்டம் : விருதுநகர்

தவாய் கிராமம் : சினியாபுரம்

வட்டம் : விருதுநகர்

பட்டா எண் : 554

உரிமையாளர்கள் பெயர்

பென்டகன் புளு மெட்டல்ஸ்க்காக ... கோ. பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
15	3B	1 - 4.50	4.12	--	--	--	--	2024/0103/26/239423 - ------ Digitally signed:radhakrishnan Zonal Deputy Tahsildar 08/06/2024 07:10:39:AM
24	1	0 - 45.50	1.89	--	--	--	--	2025/0103/26/27934 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 24/03/2025 07:12:32:PM
26	3B	0 - 15.00	0.62	--	--	--	--	2025/0103/26/27162 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
26	3C	0 - 27.50	1.15	--	--	--	--	2025/0103/26/27162 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
90	2B	0 - 28.00	1.18	--	--	--	--	2025/0103/26/27162 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
91	3	0 - 58.00	2.42	--	--	--	--	2025/0103/26/27162 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
91	6	0 - 19.50	0.81	--	--	--	--	2025/0103/26/27162 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
98	5A	0 - 19.00	0.79	--	--	--	--	2025/0103/26/27162 - ------ Digitally signed:RAJALAKSHMI Head Quarters Deput Tahsildar 28/01/2025 03:39:28:PM
		3 - 17.00	12.98					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00554/60594 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளலாம்.

2. இத் தகவல்கள் 30-04-2025 அன்று 02:29:22 PM நேரத்தில் அச்சமடக்கப்பட்டது.

3. ஸ்மார்ட்போன் கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

வட்டம் : விருதுநகர்

தவாய் இராமம் : சேனியாபுரம்

வட்டம் : விருதுநகர்

பட்டா எண் : 574

உரிமையாளர்கள் பெயர்

கோ. பாண்டுரங்கன் ... பென்டகன் புஞ மெட்டல்ஸ்க்காக

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
19	9	0 - 40.50	1.69	--	--	--	--	2024/0103/26/250511 Digitally signed:radhakrishnan Zonal Deputy Tahsildar 20/08/2024 05:15:50:PM
		0 - 40.50	1.69					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மீன் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00574/50595 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இந்த தகவல்கள் 30-04-2025 அன்று 02:27:16 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 20(1) பிரிவு

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

ாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

ருவாய் கிராமம் : சேனியாபுரம்

பட்டா எண் : 597

உரிமையாளர்கள் பெயர்

பென்டகன் புளு மெட்டல்ஸ்க்காக ... கோ. பாண்டுரங்கன்

19	3	0 - 16.00	0.68	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
20	6	0 - 29.00	1.22	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
20	8	0 - 76.50	3.21	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
21	4B2	0 - 60.50	2.54	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
22	1B	0 - 23.00	0.95	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
22	2B	0 - 58.50	2.45	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
23	9E	0 - 37.00	1.56	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
26	1A	0 - 58.00	2.42	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM

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Assistant Director of Geology and Mining
Virudhunagar District

29	6	0 - 58.50	2.43	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
38	5	0 - 50.00	2.08	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
8	SC	0 - 26.00	1.10	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2 07:09:03:PM
87	2	0 - 31.50	1.32	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
91	7	0 - 30.50	1.27	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
92	2	0 - 22.50	0.95	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
93	1	0 - 51.00	2.13	--	--	--	--	2025/0103/26/278863 -- ------ Digitally signed:RAJALAKSHIMI B Head Quarters Deputy Tahsildar 20/03/2025 07:09:03:PM
		9 - 49.00	38.84					

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Assistant Director of Geology and Mining
Virudhunagar District

தரிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/00597/60521** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:09:05 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

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Assistant Director of Geology and Mining
Virudhunagar District

ாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

ருவாய் இராமம் : சீனியாபுரம்

பட்டா எண் : 601

உரிமையாளர்கள் பெயர்

பென்டகன் புளு மெட்டல்ஸ்க்காக ... கோ. பாண்டுரங்கன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
13	7	0 - 19.50	0.54	--	--	--	--	2025/0103/26/281993 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 08/04/2025 12:03:11:PM
19	1A	0 - 37.50	1.58	--	--	--	--	2025/0103/26/285547 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 30/04/2025 01:05:57:PM
19	1B	0 - 28.00	1.16	--	--	--	--	2025/0103/26/285547 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 30/04/2025 01:05:57:PM
19	4	0 - 11.00	0.46	--	--	--	--	2025/0103/26/285547 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 30/04/2025 01:05:57:PM
19	5	0 - 70.50	2.94	--	--	--	--	2025/0103/26/283710 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 21/04/2025 04:36:25:PM
22	3	0 - 8.50	0.35	--	--	--	--	2025/0103/26/281993 - ------ Digitally signed:RAJALAKSHIMI Head Quarters Deputy Tahsildar 08/04/2025 12:03:11:PM
30	5B	1 - 43.75	6.00	--	--	--	--	2025/0105/26/447837 -2025/26/05/0000475 ------ Digitally signed:Rajakumar S Tahsildar 10/04/2025 08:36:14:PM
		3 - 18.75	13.03					

ிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் தளத்தில் 26/05/005/00601/70567 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும். https://eservices.tn.gov.in என்ற இணைய

2. இத் தகவல்கள் 30-04-2025 அன்று 02:23:08 PM நேரத்தில் அச்சடிக்கப்பட்டது.

3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடர் மேலாண்மைத்துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

வருவாய் கிராமம் : சேலியாபுரம்

பட்டா எண் : 606

உரிமையாளர்கள் பெயர்

பென்டகன் புளு மெட்டல்ஸ்க்காக

கோ. பாண்டிராஜன்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரை
		பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	பரப்பு ஹெக் - ஏர்	தீர்வை ரூ - பை	
24	6	0 - 48.50	2.03	--	--	--	--	2025.04.03 26/ Digitally signed by RAJALA Head Quarters Tahsildar 30/04/2025 01:17:46
		0 - 48.50	2.03					

குறிப்பு :

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் பட்டாவிலிருந்து பெறப்பட்டவை. இவற்றை நீங்கள் https://eservices.tn.gov.in என்ற இணைய தளத்தில் 26/05/005/00606/70512 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 30-04-2025 அன்று 02:33:34 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின்2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

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Virudhunagar District

ANNEXURE V

1437 ஆம் பசலியில் விருதுநகர் மாவட்டம் விருதுநகர் கிராமக் கணக்கு

MINING PLAN APPROVED
முதல் போகம்
Assistant Director
of Geology and Mining
Virudhunagar District

நில அளவை எண். (1)	உட்பிரிவு எண். (2)	நில வரித் திட்டத்தின்படி புலன்களின் விபரம். பரப்பு. (3)	தீர்வை. (4)	ஒரு போகம் அல்லது இரு போகம். (5)	கைப்பற்று தாரருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாரருடைய பெயர். (6)	சாகுபடியாளரின் பெயர். நிலத்தின் எந்த பகுதி யாலது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா. (7)	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது. (8)	பயிரின் பெயர். (9)	பயிராக / அறுவடையான பரப்பு. (10)	உண்மையான பாய்ச்சல் ஆதாரம். (11)	விளைச்சல் அளவு விழுக்காடு. (12)
14	1	0.70.50	2.54		507 அய்யன்டகன் புது அய்டல்ஸ்வாமி			புரசி			
	2	0.19.50	0.84		507			புரசி			
	3	0.45.50	1.89		597 - தேவ. பாண்டுரெங்கன்			புரசி			
	4A	0.71.0	2.98		455 - அய்யன்டகன் புது அய்டல்ஸ்வாமி			புரசி			
	4B	0.37.50	1.55		319 - தேவ. பாண்டுரெங்கன்			புரசி			
	5	0.28.50	1.18		507 - அய்யன்டகன் புது அய்டல்ஸ்வாமி			புரசி			
19	1A	0.37.5	1.58		1601 - தேவ. பாண்டுரெங்கன்			புரசி			
	1B	0.28.0	1.16					புரசி			
	2	0.29.50	1.23		507 - அய்யன்டகன் புது அய்டல்ஸ்வாமி			புரசி			
	3	0.16.0	0.68		597 தேவ. பாண்டுரெங்கன்			புரசி			
	4	0.11.0	0.46		601 - தேவ. பாண்டுரெங்கன்						

30/4/25.

Village Administrative Officer

380/30/B F. III-A-10-23,00,000 Cds.-GBP-Mdu.-7-2018

சீனியாபுரம்
கிராமக் கணக்கு

1434 ஆம் பசலியில் விருதுநகர் மாவட்டம் விருதுநகர் தாலுக்கா

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முதல் போகம்
Assistant Director
of Geology and Mining
Virudhunagar District

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.					சாகுபடியாளரின் பெயர்.					
நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு.	தீர்வை.	ஒரு போகம் அல்லது இரு போகம்.	கைப்பற்று தாரருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாரருடைய பெயர்.	நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது	பயிரின் பெயர்.	பயிரான / அறுவடையான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விபரம்.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
19	5	0.70.5	2.94		601 தேவ. சுவாமி நாயுடு			புஞ்சை			
	6	0.16.5	0.69		507 - அய்யாசாமி புது வீடுகட்டிக்கொண்டது			புஞ்சை			
	7	0.17.0	0.71		319 - சிவ. சுவாமி நாயுடு			புஞ்சை			
	8	0.40.5	1.69		455 - அய்யாசாமி புது வீடுகட்டிக்கொண்டது			புஞ்சை			
	9	0.40.5	1.69		574 — " "			புஞ்சை			
23	1	0.75.5	3.14		507 - அய்யாசாமி புது வீடுகட்டிக்கொண்டது			புஞ்சை			
	4/A	0.14.0	0.58		455 — " " "			புஞ்சை			
	6	0.39.0	1.62		507 — " " "			புஞ்சை			
	7	0.37.0	1.55		455 — " " "			புஞ்சை			

30/4/25

Village Administrative Officer
Seeniyapuram Village
Virudhunagar Taluk

380/30-R.F. III-A-10-23,00,000 Cps,-GBP-Mdu.-7-2018.

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Virudhunagar

1:7:24 ஆம் பசலியில் 2023/2024 ஆம் ஆண்டிற்கு கிராமம் தாலுக்கா மாவட்டம்

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.

நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு	தீர்வை.	ஒரு போகம் அல்லது இரு போகம்.	கைப்பற்று தாரருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாரருடைய பெயர்.	நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது அறுவடை மாதத்தில் செய்யப்பட்டது.	பயிரின் பெயர்.	பயிரான / அறுவடை யான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விபரக்காடு.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
24	1	0.45.50	1.84		557 தே.ராஜன் ராஜ்குமார்			தரிசு			
	5	0.47.0	1.96		528 தே.ராஜன் ராஜ்குமார்			தரிசு			
	6	0.48.50	2.03		606- தே.ராஜன் ராஜ்குமார்			தரிசு			

/சான்றளிக்கப்படுகிறது/

30/4/25

Village Administrative Officer
Seeniyapuram Village
udhunagar Taluk

அ-பதிவேடு விவரங்கள் - ஊரகம்

ANNEXURE VI

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சேனியாபுரம்

MINING PLAN APPROVED
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Virudhunagar District

1. புல எண்	14	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	1	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	14-1	11. தீர்வை (ரூ - ஹெ)	4.17
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 70.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.97
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	507
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.பெண்டகன் புஞ் மெட்டல்ஸ்க்காக

குறிப்பு:

1	மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/1/20522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சின்னியாபுரம்

MINING PLAN APPROVED
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of Geology and Mining
Virudhunagar District

1. புல எண்	**14**	9. மண் வயனும்/கழு	4-25
2. உட்பிரிவு எண்	**2**	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	**14-2**	11. தீர்வை (ரூ - பை)	0-17
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0-19.50
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**0.81**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**507**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.பெண்டகன் புரூ மெட்டல்ஸ்க்காக**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/2/20522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
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of Geology and Mining
Virudhunagar District

1. புல எண்	**14**	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	**3**	10. மண் தரம்	
3. பழைய புல உட்பிரிவு எண்	**14-3**	11. தீர்வை (ரூ - பை)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 45.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.89**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**597**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/3/20521** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**14**	9. மண் வயனமும் ரகமும்	**4 - 2**
2. உட்பிரிவு எண்	**4A**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**14-4**	11. தீர்வை (ரூ - பை)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 71.00**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**2.98**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**455**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.PENTAGON BLUE METALS க்காக பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/4A/20504** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

MINING PLAN APPROVED
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Virudhunagar District

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

1. புல எண்	**14**	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	**4B**	10. மண் தரம்	
3. பழைய புல உட்பிரிவு எண்	**14-4**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 37.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.55**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**319**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ.பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/4B/20543** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**23**	9. மண் வயனமும் ரகமும்	**4 - 2**
2. உட்பிரிவு எண்	**1**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**23-1**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 75.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**3.14**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**507**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.பெண்டகன் புரூ மெட்டல்ஸ்க்காக**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/23/1/30522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

1. புல எண்	**23**	9. மண் வயனமும் ரகமும்	**4 - 2**
2. உட்பிரிவு எண்	**6**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**23-6**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 39.00**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.62**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**507**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.பெண்டகன் புளூ மெட்டல்ஸ்க்காக**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/23/6/30522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

1. புல எண்	**23**	9. மண் வயனமும் ரகமும்	**4 - 2**
2. உட்பிரிவு எண்	**7**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**23-7**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 37.00**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.55**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**455**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.PENTAGON BLUE METALS க்காக பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/23/7/30504** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**24**	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	**1**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**24-1**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 45.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.89**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**554**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலி ந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/24/1/30594** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சேனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**23**	9. மண் வயனமும் ரகமும்	**2**
2. உட்பிரிவு எண்	**4A**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**23-4**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 14.00**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**0.58**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**455**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.PENTAGON BLUE METALS க்காக பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/23/4A/30504** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

1. புல எண்	**24**	9. மண் வயனமும் ரகமும்	**4 - 2**
2. உட்பிரிவு எண்	**5**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**24-5**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 47.00**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.96**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**528**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/24/5/30535** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

இராமம் : சீனியாபுரம்

1. புல எண்	**19**	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	**6**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**19-6**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 16.50**
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	**0.69**
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	**507**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.பெண்டகன் புரூ மெட்டல்ஸ்க்காக**

குறிப்பு:

1	மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/6/20522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

இராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**19**	9. மண் வயனமும் ரகமும்	**4 2**
2. உட்பிரிவு எண்	**7**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**19-7**	11. தீர்வை (ரூ - பை)	**1.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 17.00**
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	**0.71**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**319**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ.பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/7/20543** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	19	9. மண் வயனமும் ராமும்	4 - 2
2. உட்பிரிவு எண்	8	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	19/8	11. தீர்வை (ரூ - ஹெ)	0 - 17
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 10.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.69
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	455
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.PENTAGON BLUE METALS க்காக பாண்டுரங்கன்

குறிப்பு:

1. மேற்காண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/8/20504** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	19	9. மண் வயனமும் (களிமண்)	4 - 2
2. உட்பிரிவு எண்	9	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	19-9	11. தீர்வை (ரூ - பை)	
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 40.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.69
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	574
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.பென்டகன் புளு மெட்டல்ஸ்க்காக

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலி ந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/9/20596** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**24**	9. மண் வயனமும் ரகமும்	**4 - 2**
2. உட்பிரிவு எண்	**6**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**24-6**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 48.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**2.03**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**606**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/24/6/30512** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	19	9. மண் வயனமும் ரகமும்	4 - 2
2. உட்பிரிவு எண்	5	10. மண் தரம்	
3. பழைய புல உட்பிரிவு எண்	19-5	11. தீர்வை (ரூ - ஹெ)	4.17
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 70.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.94
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	601
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.கோ. பாண்டுரங்கன்

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/5/20567** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

MINING PLAN APPROVED
Assistant Director of Geology and Mining
Virudhunagar District

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

1. புல எண்	**14**	9. மண் வகைமை துணை	-
2. உட்பிரிவு எண்	**5**	10. மண் தரம்	-
3. பழைய புல உட்பிரிவு எண்	**14-5**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 28.50**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.18**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**507**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.பெண்டகன் புளு மெட்டல்ஸ்க்காக**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலி நந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/14/5/20522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**19**	9. மண் வயனமும் ரகமும்	4 - 2
2. உட்பிரிவு எண்	**1A**	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	**19-1**	11. தீர்வை (ரூ - பை)	[illegible]
4. பகுதி	**P**	12. பரப்பு (ஹெக்டேர் - ஏர்)	0- 37.50
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**1.58**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**601**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/1A/20567** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து **உறுதி** செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	19	9. மண் வயனும் ரகமும்	
2. உட்பிரிவு எண்	1B	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	19-1	11. தீர்வை (ரூ - பை)	1.17
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0-28.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.16
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	601
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.கோ. பாண்டுரங்கன்

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/1B/20567** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சினியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	19	9. மண் வயனாகும்	
2. உட்பிரிவு எண்	2	10. மண் தரம்	2
3. பழைய புல உட்பிரிவு எண்	19-2	11. தீர்வை (ரூ - பை)	4.17
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0.90
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1,23
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	507
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.பெண்டகன் புஞ் மெட்டல்ஸ்க்காக

குறிப்பு:

1 மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/2/20522** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்



மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சின்னாபுரம்

1. புல எண்	**19**	9. மண் வயனமும் ரகமும்	
2. உட்பிரிவு எண்	**3**	10. மண் தரம்	
3. பழைய புல உட்பிரிவு எண்	**19-3**	11. தீர்வை (ரூ - ஹெ)	**4.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	**0 - 16.00**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**0.68**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**597**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/3/20521** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : விருதுநகர்

வட்டம் : விருதுநகர்

கிராமம் : சீனியாபுரம்

MINING PLAN APPROVED
Assistant Director
of Geology and Mining
Virudhunagar District

1. புல எண்	**19**	9. மண் வயனமுமாரகமும	
2. உட்பிரிவு எண்	**4**	10. மண் தரம்	**2**
3. பழைய புல உட்பிரிவு எண்	**19-4**	11. தீர்வை (ரூ - [illegible]	**4.17**
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - [illegible]	**0.1840**
5. அரசு / ரயத்துவாரி	**ரயத்துவாரி**	13. மொத்த தீர்வை (ரூ - பை)	**0.46**
6. நிலத்தின் வகை	**புஞ்சை**	14. பட்டா எண்	**601**
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	**1.கோ. பாண்டுரங்கன்**

குறிப்பு:

1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் **https://eservices.tn.gov.in** என்ற இணைய தளத்தில் **26/05/005/19/4/20567** என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

ANNEXURE-7

Shrient Analytical and Research Labs Pvt. Ltd

416/15, Dhargas Road, West Tambaram, Chennai- 600045
Phone Number +91 82208 36377 Email: - **info@shrientanalytical.com**
www.shrientanalytical.com

TEST REPORT

Report No.	SARL/2026/1043	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1043	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	03.03.2026	Test Completed on	13.03.2026
Temperature	34°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	74.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	34.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

END OF THE REPORT

Please Contact:
For any Technical Issues & Complaints: technical@shrientanalytical.com

Terms and conditions:

(1) The test items will not be retained for more than 15 days from the date of issue of test report. (2) The results relate only to the items tested (3) The test report shall not be reproduced except in full without the written approval of the laboratory (4) Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4. (5) The correctness of the information related to sample(s) in the Test Request Form/Customer letterhead/Email is the customer's responsibility. The laboratory reports the said information in the test report and is not liable for the same.

Shrient Analytical and Research Labs Pvt. Ltd

416/15, Dhargas Road, West Tambaram, Chennai- 600045
Phone Number +91 82208 36377 Email: - **info@shrientanalytical.com**
www.shrientanalytical.com

TEST REPORT

Report No.	SARL/2026/1044	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1044	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	03.03.2026	Test Completed on	13.03.2026
Temperature	34°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	63.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified



Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1045	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1045	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	04.03.2026	Test Completed on	13.03.2026
Temperature	33°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	72.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	35.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1046	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1046	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	04.03.2026	Test Completed on	13.03.2026
Temperature	33°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	58.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1047	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1047	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	05.03.2026	Test Completed on	13.03.2026
Temperature	34°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	61.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1048	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1048	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	05.03.2026	Test Completed on	13.03.2026
Temperature	34°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	64.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1049	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1049	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	06.03.2026	Test Completed on	13.03.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	65.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1050	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1050	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	06.03.2026	Test Completed on	13.03.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	69.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1051	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1051	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	07.03.2026	Test Completed on	13.03.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1052	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1052	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	07.03.2026	Test Completed on	13.03.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	58.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1053	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1053	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	07.03.2026	Test Completed on	13.03.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1054	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1054	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	08.03.2026	Test Completed on	13.03.2026
Temperature	34°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1055	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1055	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	08.03.2026	Test Completed on	13.03.2026
Temperature	34°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1056	Report Date.	13.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1056	Sample Received on	09.03.2026
Sample Collected by	LABORATORY	Test Commenced on	09.03.2026
Sample Collected on	08.03.2026	Test Completed on	13.03.2026
Temperature	34°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	53.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1133	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1133	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	10.03.2026	Test Completed on	20.03.2026
Temperature	33°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	53.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1134	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1134	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	10.03.2026	Test Completed on	20.03.2026
Temperature	33°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1135	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1135	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	10.03.2026	Test Completed on	20.03.2026
Temperature	33°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1136	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1136	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	11.03.2026	Test Completed on	20.03.2026
Temperature	32°C	Relative Humidity	41%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	47.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1137	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1137	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	11.03.2026	Test Completed on	20.03.2026
Temperature	32°C	Relative Humidity	41%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1138	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1138	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	11.03.2026	Test Completed on	20.03.2026
Temperature	32°C	Relative Humidity	41%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	48.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

.

For Shrient Analytical and Research Labs Pvt. Ltd

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Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45.

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1139	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1139	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	12.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	71.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	14.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1140	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1140	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	12.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1141	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1141	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	13.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	67.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1142	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1142	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	13.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	63.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1143	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1143	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	14.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	66.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1144	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1144	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	14.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1145	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1145	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	15.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	73.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	34.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1146	Report Date.	20.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1146	Sample Received on	16.03.2026
Sample Collected by	LABORATORY	Test Commenced on	16.03.2026
Sample Collected on	15.03.2026	Test Completed on	20.03.2026
Temperature	35°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1223	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guidelines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1223	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	17.03.2026	Test Completed on	27.03.2026
Temperature	35°C	Relative Humidity	33%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	60.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1224	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1224	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	17.03.2026	Test Completed on	27.03.2026
Temperature	35°C	Relative Humidity	33%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	51.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1225	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1225	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	18.03.2026	Test Completed on	27.03.2026
Temperature	35°C	Relative Humidity	36%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	66.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1226	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1226	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	18.03.2026	Test Completed on	27.03.2026
Temperature	35°C	Relative Humidity	36%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1227	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1227	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	19.03.2026	Test Completed on	27.03.2026
Temperature	35°C	Relative Humidity	35%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1228	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1228	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	19.03.2026	Test Completed on	27.03.2026
Temperature	35°C	Relative Humidity	35%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	70.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1229	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1229	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	20.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	38%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	62.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1230	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1230	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	20.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	38%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	66.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1231	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1231	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	21.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	44.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	20.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1232	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1232	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	21.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	49.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1233	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1233	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	21.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	45.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	20.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1234	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1234	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	22.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	48.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1235	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1235	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	22.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1236	Report Date.	27.03.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1236	Sample Received on	23.03.2026
Sample Collected by	LABORATORY	Test Commenced on	23.03.2026
Sample Collected on	22.03.2026	Test Completed on	27.03.2026
Temperature	34°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	49.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1313	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1313	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	24.03.2026	Test Completed on	03.04.2026
Temperature	35°C	Relative Humidity	32%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	45.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1314	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1314	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	24.03.2026	Test Completed on	03.04.2026
Temperature	35°C	Relative Humidity	32%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1315	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1315	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	24.03.2026	Test Completed on	03.04.2026
Temperature	35°C	Relative Humidity	32%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	47.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1316	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1316	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	25.03.2026	Test Completed on	03.04.2026
Temperature	36°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	48.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1317	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1317	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	25.03.2026	Test Completed on	03.04.2026
Temperature	36°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1318	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1318	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	25.03.2026	Test Completed on	03.04.2026
Temperature	36°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	49.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1319	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1319	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	26.03.2026	Test Completed on	03.04.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1320	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1320	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	26.03.2026	Test Completed on	03.04.2026
Temperature	35°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1321	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1321	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	27.03.2026	Test Completed on	03.04.2026
Temperature	35°C	Relative Humidity	25%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	60.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1322	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1322	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	27.03.2026	Test Completed on	03.04.2026
Temperature	35°C	Relative Humidity	25%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	63.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1323	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1323	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	28.03.2026	Test Completed on	03.04.2026
Temperature	37°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	62.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1324	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1324	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	28.03.2026	Test Completed on	03.04.2026
Temperature	37°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	64.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1325	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1325	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	29.03.2026	Test Completed on	03.04.2026
Temperature	37°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	67.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1326	Report Date.	03.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1326	Sample Received on	30.03.2026
Sample Collected by	LABORATORY	Test Commenced on	30.03.2026
Sample Collected on	29.03.2026	Test Completed on	03.04.2026
Temperature	37°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	59.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1403	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1403	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	31.03.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	76.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	35.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1404	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1404	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	31.03.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	67.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Shrient Analytical & Research Labs Pvt. Ltd ★ Chennai - 45

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1405	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1405	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	01.04.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	70.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1406	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1406	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	01.04.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	60.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1407	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1407	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	02.04.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	70.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1408	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1408	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	02.04.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	71.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1409	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1409	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	03.04.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	61.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1410	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1410	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	03.04.2026	Test Completed on	10.04.2026
Temperature	36°C	Relative Humidity	29%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	65.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1411	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1411	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	04.04.2026	Test Completed on	10.04.2026
Temperature	37°C	Relative Humidity	33%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1412	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1412	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	04.04.2026	Test Completed on	10.04.2026
Temperature	37°C	Relative Humidity	33%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	49.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1413	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1413	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	04.04.2026	Test Completed on	10.04.2026
Temperature	37°C	Relative Humidity	33%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1414	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1414	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	05.04.2026	Test Completed on	10.04.2026
Temperature	39°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1415	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1415	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	05.04.2026	Test Completed on	10.04.2026
Temperature	39°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	53.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1416	Report Date.	10.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1416	Sample Received on	06.04.2026
Sample Collected by	LABORATORY	Test Commenced on	06.04.2026
Sample Collected on	05.04.2026	Test Completed on	10.04.2026
Temperature	39°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	53.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1493	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1493	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	07.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	53.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1494	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1494	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	07.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	51.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1495	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1495	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	07.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1496	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1496	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	08.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	40%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	49.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Phone Number +91 82208 36377 Email: - **info@shrientanalytical.com**
www.shrientanalytical.com

TEST REPORT

Report No.	SARL/2026/1497	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1497	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	08.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	40%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1498	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1498	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	08.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	40%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	50.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1499	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1499	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	09.04.2026	Test Completed on	17.04.2026
Temperature	37°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1500	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1500	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	09.04.2026	Test Completed on	17.04.2026
Temperature	37°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	58.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1501	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1501	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	10.04.2026	Test Completed on	17.04.2026
Temperature	38°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	63.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1502	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1502	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	10.04.2026	Test Completed on	17.04.2026
Temperature	38°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	62.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1503	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1503	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	11.04.2026	Test Completed on	17.04.2026
Temperature	38°C	Relative Humidity	31%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	70.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	37.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	16.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1504	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1504	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	11.04.2026	Test Completed on	17.04.2026
Temperature	38°C	Relative Humidity	31%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	62.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1505	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1505	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	12.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	72.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	34.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1506	Report Date.	17.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1506	Sample Received on	13.04.2026
Sample Collected by	LABORATORY	Test Commenced on	13.04.2026
Sample Collected on	12.04.2026	Test Completed on	17.04.2026
Temperature	36°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1583	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1583	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	14.04.2026	Test Completed on	24.04.2026
Temperature	38°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	63.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1584	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1584	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	14.04.2026	Test Completed on	24.04.2026
Temperature	38°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1585	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1585	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	15.04.2026	Test Completed on	24.04.2026
Temperature	39°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	68.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1586	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1586	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	15.04.2026	Test Completed on	24.04.2026
Temperature	39°C	Relative Humidity	24%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	61.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	29.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1587	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1587	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	16.04.2026	Test Completed on	24.04.2026
Temperature	38°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	58.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1588	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1588	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	16.04.2026	Test Completed on	24.04.2026
Temperature	38°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	72.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1589	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1589	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	17.04.2026	Test Completed on	24.04.2026
Temperature	37°C	Relative Humidity	27%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	68.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1590	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1590	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	17.04.2026	Test Completed on	24.04.2026
Temperature	37°C	Relative Humidity	27%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	68.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1591	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1591	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	18.04.2026	Test Completed on	24.04.2026
Temperature	38°C	Relative Humidity	23%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	44.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	20.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1592	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1592	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	18.04.2026	Test Completed on	24.04.2026
Temperature	38°C	Relative Humidity	23%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	50.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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J. GNANAPRAKASAM
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TEST REPORT

Report No.	SARL/2026/1593	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1593	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	18.04.2026	Test Completed on	24.04.2026
Temperature	38°C	Relative Humidity	23%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	46.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	20.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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J. GNANAPRAKASAM
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TEST REPORT

Report No.	SARL/2026/1594	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1594	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	19.04.2026	Test Completed on	24.04.2026
Temperature	39°C	Relative Humidity	25%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1595	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1595	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	19.04.2026	Test Completed on	24.04.2026
Temperature	39°C	Relative Humidity	25%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	53.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1596	Report Date.	24.04.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1596	Sample Received on	20.04.2026
Sample Collected by	LABORATORY	Test Commenced on	20.04.2026
Sample Collected on	19.04.2026	Test Completed on	24.04.2026
Temperature	39°C	Relative Humidity	25%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	53.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1673	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1673	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	21.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	46.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1674	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1674	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	21.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	59.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1675	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1675	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	21.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1676	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1676	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	22.04.2026	Test Completed on	01.05.2026
Temperature	39°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	54.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1677	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1677	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	22.04.2026	Test Completed on	01.05.2026
Temperature	39°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1678	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1678	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	22.04.2026	Test Completed on	01.05.2026
Temperature	39°C	Relative Humidity	26%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1679	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1679	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	23.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	27%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1680	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1680	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	23.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	27%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	74.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	34.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	14.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1681	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1681	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	24.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	27%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	64.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
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TEST REPORT

Report No.	SARL/2026/1682	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1682	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	24.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	23%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	70.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1683	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1683	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	25.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	60.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1684	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1684	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	25.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1685	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1685	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	26.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	64.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1686	Report Date.	01.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1686	Sample Received on	27.04.2026
Sample Collected by	LABORATORY	Test Commenced on	27.04.2026
Sample Collected on	26.04.2026	Test Completed on	01.05.2026
Temperature	38°C	Relative Humidity	28%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45.

Authorized Signatory
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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1763	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1763	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	28.04.2026	Test Completed on	08.05.2026
Temperature	39°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	74.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	36.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	15.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1764	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1764	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	28.04.2026	Test Completed on	08.05.2026
Temperature	39°C	Relative Humidity	30%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	65.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/1765	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1765	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	29.04.2026	Test Completed on	08.05.2026
Temperature	36°C	Relative Humidity	41%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	72.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1766	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1766	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	29.04.2026	Test Completed on	08.05.2026
Temperature	36°C	Relative Humidity	41%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	61.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.1	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1767	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1767	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	30.04.2026	Test Completed on	08.05.2026
Temperature	38°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	71.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	14.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1768	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1768	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	30.04.2026	Test Completed on	08.05.2026
Temperature	38°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	71.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1769	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1769	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	01.05.2026	Test Completed on	08.05.2026
Temperature	39°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	66.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1770	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1770	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	01.05.2026	Test Completed on	08.05.2026
Temperature	39°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	67.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1771	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1771	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	02.05.2026	Test Completed on	08.05.2026
Temperature	38°C	Relative Humidity	32%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	50.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1772	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1772	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	02.05.2026	Test Completed on	08.05.2026
Temperature	38°C	Relative Humidity	32%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	49.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1773	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1773	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	02.05.2026	Test Completed on	08.05.2026
Temperature	38°C	Relative Humidity	32%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	51.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1774	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1774	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	03.05.2026	Test Completed on	08.05.2026
Temperature	38°C	Relative Humidity	35%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	46.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1775	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1775	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	03.05.2026	Test Completed on	08.05.2026
Temperature	38°C	Relative Humidity	35%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1776	Report Date.	08.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1776	Sample Received on	04.05.2026
Sample Collected by	LABORATORY	Test Commenced on	04.05.2026
Sample Collected on	03.05.2026	Test Completed on	08.05.2026
Temperature	35°C	Relative Humidity	35%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	47.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1853	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1853	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	05.05.2026	Test Completed on	15.05.2026
Temperature	36°C	Relative Humidity	39%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1854	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1854	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	05.05.2026	Test Completed on	15.05.2026
Temperature	36°C	Relative Humidity	35%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	51.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1855	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1855	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	05.05.2026	Test Completed on	15.05.2026
Temperature	36°C	Relative Humidity	39%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1856	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1856	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	06.05.2026	Test Completed on	15.05.2026
Temperature	35°C	Relative Humidity	43%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	50.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1857	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1857	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	06.05.2026	Test Completed on	15.05.2026
Temperature	35°C	Relative Humidity	43%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1858	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1858	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	06.05.2026	Test Completed on	15.05.2026
Temperature	35°C	Relative Humidity	43%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	51.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.1	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1859	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1859	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	07.05.2026	Test Completed on	15.05.2026
Temperature	35°C	Relative Humidity	42%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	58.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.6	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1860	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1860	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	07.05.2026	Test Completed on	15.05.2026
Temperature	35°C	Relative Humidity	42%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	59.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1861	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1861	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	08.05.2026	Test Completed on	15.05.2026
Temperature	34°C	Relative Humidity	47%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	67.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	31.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1862	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1862	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	08.05.2026	Test Completed on	15.05.2026
Temperature	34°C	Relative Humidity	47%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	61.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1863	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1863	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	09.05.2026	Test Completed on	15.05.2026
Temperature	29°C	Relative Humidity	67%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	61.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1864	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1864	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	09.05.2026	Test Completed on	15.05.2026
Temperature	29°C	Relative Humidity	67%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	63.8	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1865	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1865	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	10.05.2026	Test Completed on	15.05.2026
Temperature	31°C	Relative Humidity	59%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	65.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45.

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1866	Report Date.	15.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1866	Sample Received on	11.05.2026
Sample Collected by	LABORATORY	Test Commenced on	11.05.2026
Sample Collected on	10.05.2026	Test Completed on	15.05.2026
Temperature	31°C	Relative Humidity	59%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	58.7	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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For Shrient Analytical and Research Labs Pvt. Ltd

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TEST REPORT

Report No.	SARL/2026/1943	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1943	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	12.05.2026	Test Completed on	22.05.2026
Temperature	36°C	Relative Humidity	40%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	75.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	35.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1944	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1944	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	12.05.2026	Test Completed on	22.05.2026
Temperature	36°C	Relative Humidity	40%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	24.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1945	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1945	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	13.05.2026	Test Completed on	22.05.2026
Temperature	35°C	Relative Humidity	40%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	69.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1946	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1946	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	13.05.2026	Test Completed on	22.05.2026
Temperature	35°C	Relative Humidity	40%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1947	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1947	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	14.05.2026	Test Completed on	22.05.2026
Temperature	36°C	Relative Humidity	38%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1948	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1948	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	14.05.2026	Test Completed on	22.05.2026
Temperature	36°C	Relative Humidity	38%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	73.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	34.2	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1949	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1949	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	15.05.2026	Test Completed on	22.05.2026
Temperature	33°C	Relative Humidity	36%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	59.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1950	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1950	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	15.05.2026	Test Completed on	22.05.2026
Temperature	33°C	Relative Humidity	36%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	69.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/1951	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1951	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	16.05.2026	Test Completed on	22.05.2026
Temperature	33°C	Relative Humidity	46%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	45.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	20.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.4	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1952	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1952	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	16.05.2026	Test Completed on	22.05.2026
Temperature	33°C	Relative Humidity	46%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	50.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1953	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1953	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	16.05.2026	Test Completed on	22.05.2026
Temperature	33°C	Relative Humidity	46%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	46.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	21.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	5.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	8.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1954	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1954	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	17.05.2026	Test Completed on	22.05.2026
Temperature	37°C	Relative Humidity	36%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	49.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1955	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1955	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	17.05.2026	Test Completed on	22.05.2026
Temperature	37°C	Relative Humidity	36%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/1956	Report Date.	22.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-1956	Sample Received on	18.05.2026
Sample Collected by	LABORATORY	Test Commenced on	18.05.2026
Sample Collected on	17.05.2026	Test Completed on	22.05.2026
Temperature	37°C	Relative Humidity	36%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	50.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	22.8	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.8	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL(DL-1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2033	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2033	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	19.05.2026	Test Completed on	29.05.2026
Temperature	36°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2034	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2034	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	19.05.2026	Test Completed on	29.05.2026
Temperature	36°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	27.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.3	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2035	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2035	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	19.05.2026	Test Completed on	29.05.2026
Temperature	36°C	Relative Humidity	37%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	56.6	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/2036	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A5- Vadamalaikurichi
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2036	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	20.05.2026	Test Completed on	29.05.2026
Temperature	38°C	Relative Humidity	61%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	51.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.5	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	9.7	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/2037	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A6-Kumaralingapuram
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2037	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	20.05.2026	Test Completed on	29.05.2026
Temperature	38°C	Relative Humidity	61%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	55.0	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	25.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.7	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2038	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A7-Amathur
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2038	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	20.05.2026	Test Completed on	29.05.2026
Temperature	38°C	Relative Humidity	61%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	52.4	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	23.9	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2039	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2039	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	21.05.2026	Test Completed on	29.05.2026
Temperature	38°C	Relative Humidity	39%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	69.3	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	32.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.0	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	13.6	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2040	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2040	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	21.05.2026	Test Completed on	29.05.2026
Temperature	38°C	Relative Humidity	39%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	57.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	26.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.2	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.0	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2041	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A3-Virudhunagar
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2041	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	22.05.2026	Test Completed on	29.05.2026
Temperature	37°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	64.9	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.5	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.3	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2042	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A4-M.Puthupatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2042	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	22.05.2026	Test Completed on	29.05.2026
Temperature	37°C	Relative Humidity	34%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	60.5	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.3	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.4	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2043	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2043	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	23.05.2026	Test Completed on	29.05.2026
Temperature	39°C	Relative Humidity	38%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	73.2	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	36.4	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	8.6	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	14.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2044	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2044	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	23.05.2026	Test Completed on	29.05.2026
Temperature	39°C	Relative Humidity	38%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	65.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	30.7	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	11.9	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/2045	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A1- Within Mine Lease area
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2045	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Temperature	38°C	Relative Humidity	33%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	71.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	33.1	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	7.8	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	12.2	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2046	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	AMBIENT AIR QUALITY
Sampling Procedure	IS – 5182 (Part – 14: 2000 & Part – V: Reaffirmed - 2003), CPCB Guide lines

Sample Location	A2-Moolipatti
Positioned height of Sampler	1.5 M above Ground Level

Customer Reference	By Mail	Sampling Duration	24 hrs
Sample Reference No	SARL/A/CHE-2046	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Temperature	38°C	Relative Humidity	33%
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results	*Limits
1	Particulate Matter less than 10micron size (PM_{10})	IS:5182: Part 23:2006	$\mu g/m^3$	60.1	100
2	Particulate Matter less than 2.5micron size ($PM_{2.5}$)	IS 5182 (Part 24):2019	$\mu g/m^3$	28.0	60
3	Sulphur dioxide (SO_2)	IS:5182: Part 02:2001	$\mu g/m^3$	6.9	80
4	Nitrogen Dioxide (NO_2)	IS:5182: Part 06:2006	$\mu g/m^3$	10.5	80
5	Carbon monoxide (CO)	SARL/IOP/013 (Issue No:01, Issue Date – 01.03.2023)	mg/m^3	BDL (D.L – 1.1)	-

Remarks: Limits: *National Ambient air quality standards from CPCB. BDL- Below detectable limit. DL –Detectable limit

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TEST REPORT

Report No.	SARL/2026/2135

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	W1-Within Mine Lease area

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/W/CHE-2135	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result	*Limits Permissible
A.	**Physical parameters**				
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	<1.0	5.0
3	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.86	6.50-8.50
4	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	739.6	-
B.	**Chemical parameters**				
5	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	448	2000
6	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	209	600
7	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	56.8	200
8	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	16.0	100
9	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	142	-
10	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	66.7	-
11	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	199	600
12	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	134	1000

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TEST REPORT

Report No.	SARL/2026/2135

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result	*Limits
					Permissible
13	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)	1.0
14	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	71.1	400
15	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	BDL (D.L - 0.01)	0.3
16	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	2.61	45
17	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	0.18	1.5
18	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL (D.L - 0.05)	0.3

Remarks: *Drinking Water Specifications as per IS – 10500:2012. BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/2136

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	W2-Moolipatti

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/W/CHE-2136	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result	*Limits Permissible
A.	**Physical parameters**				
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	<1.0	5.0
3	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.48	6.50-8.50
4	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	588.3	-
B.	**Chemical parameters**				
5	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	355	2000
6	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	237	600
7	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	60.4	200
8	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	20.8	100
9	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	151	-
10	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	86.5	-
11	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	187	600
12	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	79.3	1000

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TEST REPORT

Report No.	SARL/2026/2136

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result	*Limits
					Permissible
13	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)	1.0
14	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	34.7	400
15	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	BDL (D.L - 0.01)	0.3
16	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	3.90	45
17	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	0.17	1.5
18	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL (D.L - 0.05)	0.3

Remarks: *Drinking Water Specifications as per IS – 10500:2012. BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/2137

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	W3-Virudhunagar

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/W/CHE-2137	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result	*Limits Permissible
A.	**Physical parameters**				
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	<1.0	5.0
3	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.94	6.50-8.50
4	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	1808.4	-
B.	**Chemical parameters**				
5	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	1090	2000
6	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	439	600
7	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	117	200
8	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	35.2	100
9	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	292	-
10	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	147	-
11	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	297	600
12	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	495	1000

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TEST REPORT

Report No.	SARL/2026/2137

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result	*Limits
					Permissible
13	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)	1.0
14	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	234	400
15	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	0.05325	0.3
16	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	2.08	45
17	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	0.37	1.5
18	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL (D.L - 0.05)	0.3

Remarks: *Drinking Water Specifications as per IS – 10500:2012. BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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TEST REPORT

Report No.	SARL/2026/2138

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	W4-M.Puthupatti

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/W/CHE-2138	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result	*Limits Permissible
A.	**Physical parameters**				
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	<1.0	5.0
3	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.09	6.50-8.50
4	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	1328.1	-
B.	**Chemical parameters**				
5	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	802	2000
6	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	328	600
7	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	83.2	200
8	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	28.8	100
9	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	208	-
10	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	120	-
11	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	325	600
12	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	349	1000

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TEST REPORT

Report No.	SARL/2026/2138

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result	*Limits
					Permissible
13	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)	1.0
14	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	122	400
15	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	0.0639	0.3
16	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	2.68	45
17	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	0.40	1.5
18	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL (D.L - 0.05)	0.3

Remarks: *Drinking Water Specifications as per IS – 10500:2012. BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

END OF THE REPORT

Please Contact:
For any Technical Issues & Complaints: vimalnath@shrientanalytical.com

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TEST REPORT

Report No.	SARL/2026/2139

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	W5- Vadamalaikurichi

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/W/CHE-2139	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result	*Limits Permissible
A.	**Physical parameters**				
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	<1.0	5.0
3	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.54	6.50-8.50
4	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	680.4	-
B.	**Chemical parameters**				
5	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	410	2000
6	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	346	600
7	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	93.6	200
8	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	26.9	100
9	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	234	-
10	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	112	-
11	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	230	600
12	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	111	1000

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TEST REPORT

Report No.	SARL/2026/2139

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result	*Limits
					Permissible
13	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)	1.0
14	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	28.6	400
15	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	BDL (D.L - 0.01)	0.3
16	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	BDL (D.L - 1.0)	45
17	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	0.23	1.5
18	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL (D.L - 0.05)	0.3

Remarks: *Drinking Water Specifications as per IS – 10500:2012. BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/2140

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	W6-Kumaralingapuram

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/W/CHE-2140	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result	*Limits Permissible
A.	**Physical parameters**				
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	<1.0	5.0
3	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.92	6.50-8.50
4	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	694.2	-
B.	**Chemical parameters**				
5	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	420	2000
6	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	243	600
7	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	58.4	200
8	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	23.2	100
9	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	146	-
10	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	96.8	-
11	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	189	600
12	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	77.0	1000

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TEST REPORT

Report No.	SARL/2026/2140

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result	*Limits
					Permissible
13	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)	1.0
14	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	37.1	400
15	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	BDL (D.L - 0.01)	0.3
16	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	2.96	45
17	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	0.28	1.5
18	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL (D.L - 0.05)	0.3

Remarks: *Drinking Water Specifications as per IS – 10500:2012. BDL – Below Detectable limit (DL - Detectable limit).

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J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/2141

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	W7-Amathur

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/W/CHE-2141	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result	*Limits Permissible
A.	**Physical parameters**				
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	<1.0	5.0
3	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.32	6.50-8.50
4	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	767.4	-
B.	**Chemical parameters**				
5	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	464	2000
6	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	267	600
7	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	64.8	200
8	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	25.3	100
9	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	162	-
10	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	105.3	-
11	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	209	600
12	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	85.7	1000

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TEST REPORT

Report No.	SARL/2026/2141

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result	*Limits
					Permissible
13	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)	1.0
14	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	43.1	400
15	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	BDL (D.L - 0.01)	0.3
16	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	3.43	45
17	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	0.31	1.5
18	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL (D.L - 0.05)	0.3

Remarks: *Drinking Water Specifications as per IS – 10500:2012. BDL – Below Detectable limit (DL - Detectable limit).

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TEST REPORT

Report No.	SARL/2026/2142	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	SOIL
Sample Mark	S1-Within Mine Lease area

Customer Reference	By Mail	Sampling Procedure	EPA/600/R-92/128
Sample Reference No	SARL/SO/CHE-2142	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results
1	pH at 25 °C	IS 2720: Part 26: 1987	-	7.9
2	Electrical Conductivity	IS 14767: 2000	µmhos/cm	44.6
3	Dry matter content	IS 15106: 2002	%	96.67
4	Water Content	IS 15106: 2002	%	3.33
5	Organic Matter	IS 2720: Part 22: 1972	%	1.44
6	Nitrogen and Nitrogenous compounds	IS 14684: 1999	mg/kg	158
7	Soil Texture	Methods Manual - Soil testing in India - P. No-67: 2011	%	SandyLoam
8	Grain Size Distribution i. Sand	Methods Manual - Soil testing in India - P. No-67: 2011	%	54.80
	ii. Silt	Methods Manual - Soil testing in India - P. No-67: 2011	%	37.04
	iii. Clay	Methods Manual - Soil testing in India - P. No-67: 2011	%	8.15
9	Phosphorus as P	IS 10158: 1982	mg/kg	1.75
10	Sodium as Na	USEPA 3050 B: 1996	mg/kg	437
11	Potassium as K	USEPA 3050 B: 1996	mg/kg	706
12	Total soluble sulphates	IS 2720: Part 27: 1977	%	BDL (D.L.0.02)
13	Porosity	SARL/SOP/SO/001 (Issue No:01, Issue Date – 01.03.2023): 2023	%	15.9
14	Water holding capacity	Methods Manual - Soil testing in India - P. No-76: 2011	Inches/foot	42.6

BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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Technical Manager

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TEST REPORT

Report No.	SARL/2026/2143

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	SOIL
Sample Mark	S2-Moolipatti

Customer Reference	By Mail	Sampling Procedure	EPA/600/R-92/128
Sample Reference No	SARL/SO/CHE-2143	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results
1	pH at 25 °C	IS 2720: Part 26: 1987	-	7.6
2	Electrical Conductivity	IS 14767: 2000	µmhos/cm	124.1
3	Dry matter content	IS 15106: 2002	%	96.58
4	Water Content	IS 15106: 2002	%	3.42
5	Organic Matter	IS 2720: Part 22: 1972	%	1.36
6	Nitrogen and Nitrogenous compounds	IS 14684: 1999	mg/kg	175
7	Soil Texture	Methods Manual - Soil testing in India - P. No-67: 2011	%	Clay Loam
8	Grain Size Distribution i. Sand	Methods Manual - Soil testing in India - P. No-67: 2011	%	14.98
	ii. Silt	Methods Manual - Soil testing in India - P. No-67: 2011	%	25.38
	iii. Clay	Methods Manual - Soil testing in India - P. No-67: 2011	%	59.64
9	Phosphorus as P	IS 10158: 1982	mg/kg	1.31
10	Sodium as Na	USEPA 3050 B: 1996	mg/kg	360
11	Potassium as K	USEPA 3050 B: 1996	mg/kg	685
12	Total soluble sulphates	IS 2720: Part 27: 1977	%	BDL (D.L.0.02)
13	Porosity	SARL/SOP/SO/001 (Issue No:01, Issue Date – 01.03.2023): 2023	%	15.0
14	Water holding capacity	Methods Manual - Soil testing in India - P. No-76: 2011	Inches/foot	42.6

BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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TEST REPORT

Report No.	SARL/2026/2144

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	SOIL
Sample Mark	S3-Virudhunagar

Customer Reference	By Mail	Sampling Procedure	EPA/600/R-92/128
Sample Reference No	SARL/SO/CHE-2144	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results
1	pH at 25 °C	IS 2720: Part 26: 1987	-	6.8
2	Electrical Conductivity	IS 14767: 2000	µmhos/cm	25.6
3	Dry matter content	IS 15106: 2002	%	97.03
4	Water Content	IS 15106: 2002	%	2.97
5	Organic Matter	IS 2720: Part 22: 1972	%	1.05
6	Nitrogen and Nitrogenous compounds	IS 14684: 1999	mg/kg	163
7	Soil Texture	Methods Manual - Soil testing in India - P. No-67: 2011	%	Sandy Clay Loam
8	Grain Size Distribution i. Sand	Methods Manual - Soil testing in India - P. No-67: 2011	%	51.18
	ii. Silt	Methods Manual - Soil testing in India - P. No-67: 2011	%	29.95
	iii. Clay	Methods Manual - Soil testing in India - P. No-67: 2011	%	18.87
9	Phosphorus as P	IS 10158: 1982	mg/kg	2.56
10	Sodium as Na	USEPA 3050 B: 1996	mg/kg	403
11	Potassium as K	USEPA 3050 B: 1996	mg/kg	837
12	Total soluble sulphates	IS 2720: Part 27: 1977	%	BDL (D.L.0.02)
13	Porosity	SARL/SOP/SO/001 (Issue No:01, Issue Date – 01.03.2023): 2023	%	15.4
14	Water holding capacity	Methods Manual - Soil testing in India - P. No-76: 2011	Inches/foot	45.8

BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

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TEST REPORT

Report No.	SARL/2026/2145	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	SOIL
Sample Mark	S4-M.Puthupatti

Customer Reference	By Mail	Sampling Procedure	EPA/600/R-92/128
Sample Reference No	SARL/SO/CHE-2145	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results
1	pH at 25 °C	IS 2720: Part 26: 1987	-	7.4
2	Electrical Conductivity	IS 14767: 2000	µmhos/cm	84.1
3	Dry matter content	IS 15106: 2002	%	97.35
4	Water Content	IS 15106: 2002	%	2.65
5	Organic Matter	IS 2720: Part 22: 1972	%	1.30
6	Nitrogen and Nitrogenous compounds	IS 14684: 1999	mg/kg	158
7	Soil Texture	Methods Manual - Soil testing in India - P. No-67: 2011	%	Clay Loam
8	Grain Size Distribution i. Sand	Methods Manual - Soil testing in India - P. No-67: 2011	%	13.49
	ii. Silt	Methods Manual - Soil testing in India - P. No-67: 2011	%	27.86
	iii. Clay	Methods Manual - Soil testing in India - P. No-67: 2011	%	58.65
9	Phosphorus as P	IS 10158: 1982	mg/kg	1.81
10	Sodium as Na	USEPA 3050 B: 1996	mg/kg	364
11	Potassium as K	USEPA 3050 B: 1996	mg/kg	740
12	Total soluble sulphates	IS 2720: Part 27: 1977	%	BDL (D.L.0.02)
13	Porosity	SARL/SOP/SO/001 (Issue No:01, Issue Date – 01.03.2023): 2023	%	13.9
14	Water holding capacity	Methods Manual - Soil testing in India - P. No-76: 2011	Inches/foot	40.5

BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

END OF THE REPORT

Please Contact:
For any Technical Issues & Complaints: vimalnath@shrientanalytical.com

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TEST REPORT

Report No.	SARL/2026/2146

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	SOIL
Sample Mark	S5- Vadamalaikurichi

Customer Reference	By Mail	Sampling Procedure	EPA/600/R-92/128
Sample Reference No	SARL/SO/CHE-2146	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results
1	pH at 25 °C	IS 2720: Part 26: 1987	-	7.6
2	Electrical Conductivity	IS 14767: 2000	µmhos/cm	99.4
3	Dry matter content	IS 15106: 2002	%	94.76
4	Water Content	IS 15106: 2002	%	5.24
5	Organic Matter	IS 2720: Part 22: 1972	%	2.67
6	Nitrogen and Nitrogenous compounds	IS 14684: 1999	mg/kg	302
7	Soil Texture	Methods Manual - Soil testing in India - P. No-67: 2011	%	Silt Loam
8	Grain Size Distribution i. Sand	Methods Manual - Soil testing in India - P. No-67: 2011	%	18.06
	ii. Silt	Methods Manual - Soil testing in India - P. No-67: 2011	%	54.29
	iii. Clay	Methods Manual - Soil testing in India - P. No-67: 2011	%	27.64
9	Phosphorus as P	IS 10158: 1982	mg/kg	0.98
10	Sodium as Na	USEPA 3050 B: 1996	mg/kg	703
11	Potassium as K	USEPA 3050 B: 1996	mg/kg	1242
12	Total soluble sulphates	IS 2720: Part 27: 1977	%	BDL (D.L.0.02)
13	Porosity	SARL/SOP/SO/001 (Issue No:01, Issue Date – 01.03.2023): 2023	%	13.1
14	Water holding capacity	Methods Manual - Soil testing in India - P. No-76: 2011	Inches/foot	41.5

BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

END OF THE REPORT

Please Contact:
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TEST REPORT

Report No.	SARL/2026/2147	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	SOIL
Sample Mark	S6-Kumaralingapuram

Customer Reference	By Mail	Sampling Procedure	EPA/600/R-92/128
Sample Reference No	SARL/SO/CHE-2147	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results
1	pH at 25 °C	IS 2720: Part 26: 1987	-	7.2
2	Electrical Conductivity	IS 14767: 2000	µmhos/cm	101.0
3	Dry matter content	IS 15106: 2002	%	95.21
4	Water Content	IS 15106: 2002	%	4.79
5	Organic Matter	IS 2720: Part 22: 1972	%	1.19
6	Nitrogen and Nitrogenous compounds	IS 14684: 1999	mg/kg	171
7	Soil Texture	Methods Manual - Soil testing in India - P. No-67: 2011	%	Loam
8	Grain Size Distribution i. Sand	Methods Manual - Soil testing in India - P. No-67: 2011	%	45.09
	ii. Silt	Methods Manual - Soil testing in India - P. No-67: 2011	%	15.62
	iii. Clay	Methods Manual - Soil testing in India - P. No-67: 2011	%	39.28
9	Phosphorus as P	IS 10158: 1982	mg/kg	0.77
10	Sodium as Na	USEPA 3050 B: 1996	mg/kg	641
11	Potassium as K	USEPA 3050 B: 1996	mg/kg	984
12	Total soluble sulphates	IS 2720: Part 27: 1977	%	BDL (D.L.0.02)
13	Porosity	SARL/SOP/SO/001 (Issue No:01, Issue Date – 01.03.2023): 2023	%	18.4
14	Water holding capacity	Methods Manual - Soil testing in India - P. No-76: 2011	Inches/foot	44.7

BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

END OF THE REPORT

Please Contact:
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TEST REPORT

Report No.	SARL/2026/2148	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	SOIL
Sample Mark	S7-Amathur

Customer Reference	By Mail	Sampling Procedure	EPA/600/R-92/128
Sample Reference No	SARL/SO/CHE-2148	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

S. No.	Parameters	Protocol	Unit	Results
1	pH at 25 °C	IS 2720: Part 26: 1987	-	7.7
2	Electrical Conductivity	IS 14767: 2000	µmhos/cm	128.4
3	Dry matter content	IS 15106: 2002	%	95.04
4	Water Content	IS 15106: 2002	%	4.96
5	Organic Matter	IS 2720: Part 22: 1972	%	1.45
6	Nitrogen and Nitrogenous compounds	IS 14684: 1999	mg/kg	179
7	Soil Texture	Methods Manual - Soil testing in India - P. No-67: 2011	%	Clay Loam
8	Grain Size Distribution i. Sand	Methods Manual - Soil testing in India - P. No-67: 2011	%	15.57
	ii. Silt	Methods Manual - Soil testing in India - P. No-67: 2011	%	25.20
	iii. Clay	Methods Manual - Soil testing in India - P. No-67: 2011	%	59.23
9	Phosphorus as P	IS 10158: 1982	mg/kg	1.41
10	Sodium as Na	USEPA 3050 B: 1996	mg/kg	368
11	Potassium as K	USEPA 3050 B: 1996	mg/kg	687
12	Total soluble sulphates	IS 2720: Part 27: 1977	%	BDL (D.L.0.02)
13	Porosity	SARL/SOP/SO/001 (Issue No:01, Issue Date – 01.03.2023): 2023	%	15.4
14	Water holding capacity	Methods Manual - Soil testing in India - P. No-76: 2011	Inches/foot	40.5

BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

END OF THE REPORT

Please Contact:
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TEST REPORT

Report No.	SARL/2026/2149	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	SW1-Kousiga River (upstream)

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/SW/CHE-2149	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result
A.	**Physical parameters**			
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	8.5
3	Temperature	APHA 24th Edition 2550 B: 2023	ºC	28
4	pH at 25 ˚C	APHA 24th Edition 4500 – H+ B: 2023	-	7.84
5	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	1436
B.	**Chemical parameters**			
6	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	0.18
7	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	447
8	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	83.5
9	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	141
10	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	209
11	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	239
12	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	374
13	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	199

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TEST REPORT

Report No.	SARL/2026/2149	Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result
14	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)
15	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	134
16	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	71.1
17	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	2.86
18	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	2.61
19	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL(D.L-0.05)
20	Chemical Oxygen Demand	APHA 24th Edition 5220 B: 2023	mg/L	BDL (D.L – 4.0)
21	Biochemical Oxygen Demand 3 Days at 27°c	IS 3025 (Part 44): 1993	mg/L	BDL (D.L – 2.0)
22	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	6.4
23	Dissolved Oxygen	IS 3025 (Part 38): 1989	mg/L	6.6

Remarks: BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45.

Authorized Signatory
S. BALAMURUGAN
Asst.Technical Manager

*****END OF THE REPORT*****

Please Contact:
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TEST REPORT

Report No.	SARL/2026/2150	Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	WATER
Sample Mark	SW2-Kousiga River (Downstream)

Customer Reference	By Mail	Sampling Procedure	IS 17614: Part 14: 2021
Sample Reference No	SARL/SW/CHE-2150	Sample Received on	25.05.2026
Sample Collected by	LABORATORY	Test Commenced on	25.05.2026
Sample Collected on	24.05.2026	Test Completed on	29.05.2026
Sample Condition	Fit for Analysis		

Sl. No.	Parameters	Protocol	Unit	Result
A.	**Physical parameters**			
1	Odour	IS 3025 (Part 5): 2018	-	Agreeable
2	Turbidity	APHA 24th Edition 2130 B: 2023	NTU	13.2
3	Temperature	APHA 24th Edition 2550 B: 2023	°C	28.9
4	pH at 25 °C	APHA 24th Edition 4500 – H+ B: 2023	-	7.82
5	Electrical Conductivity	APHA 24th Edition 2510 B: 2023	(µS/cm)	1284
B.	**Chemical parameters**			
6	Total Dissolved Solids	APHA 24th Edition 2540-C: 2023	mg/L	0.17
7	Total hardness (as CaCO3)	APHA 24th Edition 2340 C: 2023	mg/L	354
8	Calcium (as Ca)	IS 3025 (Part 40): 1991	mg/L	95.0
9	Magnesium (as Mg)	IS 3025 (Part 46): 1994	mg/L	150
10	Calcium Hardness (as CaCO3)	APHA 24th Edition 3500 Ca B: 2023	mg/L	237
11	Magnesium Hardness (as CaCO3)	APHA 24th Edition 3500 Mg B: 2023	mg/L	116
12	Total alkalinity (as CaCO3)	APHA 24th Edition 2320 B: 2023	mg/L	368
13	Chloride (as Cl)	APHA 24th Edition 4500 Cl- B: 2023	mg/L	187

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TEST REPORT

Report No.	SARL/2026/2150

Report Date.	29.05.2026

Sl. No.	Parameters	Protocol	Unit	Result
14	Free Residual chlorine	APHA 24th Edition 4500 Cl- B: 2023	mg/L	BDL (D.L - 0.2)
15	Sulphate as (SO42-)	APHA 24th Edition 4500 SO42- E: 2023	mg/L	79.3
16	Iron (as Fe)	APHA 24th Edition 3500 Fe B: 2023	mg/L	34.7
17	Nitrate (as NO3)	IS 3025 (Part 34): 1988	mg/L	4.03
18	Fluoride (as F)	APHA 24th Edition 4500 F- D: 2023	mg/L	3.90
19	Manganese (as Mn)	APHA 24th Edition 3500 Mn B: 2023	mg/L	BDL(D.L-0.05)
20	Chemical Oxygen Demand	APHA 24th Edition 5220 B: 2023	mg/L	BDL (D.L – 4.0)
21	Biochemical Oxygen Demand 3 Days at 27°c	IS 3025 (Part 44): 1993	mg/L	BDL (D.L – 2.0)
22	Total Suspended Solids	APHA 24th Edition 2540 D: 2023	mg/L	12.8
23	Dissolved Oxygen	IS 3025 (Part 38): 1989	mg/L	6.7

Remarks: BDL – Below Detectable limit (DL - Detectable limit).

For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45.

Authorized Signatory
S. BALAMURUGAN
Asst.Technical Manager

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TEST REPORT

Report No.	SARL/2026/2151

Report Date.	29.05.2026

Customer Name & Address	Rough stone and Gravel Quarry of Thiru.G.Pandurangan, extent of 7.37.80Ha Seeniyapuram Village,Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
Sample Description	NOISE LEVEL DATA

Customer Reference	By Mail	Sampling Method	SARL/IOP/023
Sample Reference No	SARL/N/CHE-2151	Date of Monitoring	24.05.2026
Sample Collected by	LABORATORY		

Time in hrs	N1	N2	N3	N4	N5	N6	N7
06.00	49.3	48.5	53.9	49.3	48.4	48.9	49.6
07.00	53.5	56.9	51.9	51.4	56.2	57.6	54.2
08.00	55.9	51.0	50.4	50.6	46.0	50.1	52.7
09.00	56.2	50.1	50.3	55.4	49.8	48.7	51.2
10.00	52.9	50.5	49.4	50.5	47.0	49.2	49.5
11.00	52.3	48.0	50.5	52.4	44.1	45.8	49.9
12.00	51.5	47.0	46.8	46.4	45.8	41.1	47.2
13.00	47.3	50.8	47.2	54.8	45.5	46.4	47.8
14.00	50.4	55.7	47.3	47.1	50.5	46.0	49.5
15.00	56.8	49.2	49.7	58.1	53.3	46.1	50.2
16.00	54.1	52.4	54.6	53.0	43.3	46.9	51.1
17.00	58.7	51.1	52.5	53.4	41.1	49.1	52.3
18.00	53.8	51.2	52.1	51.7	47.4	46.9	52.3
19.00	47.9	53.4	53.5	51.0	54.3	44.8	52.8
20.00	42.7	49.2	48.7	45.8	49.8	43.1	44.1
21.00	39.2	47.1	49.0	42.8	48.1	39.7	45.5
22.00	42.9	53.6	50.8	38.3	45.5	39.3	44.2
23.00	42.7	41.4	43.3	37.2	44.3	42.1	42.5
24.00	39.8	42.0	43.2	36.7	40.9	39.2	42.8
01.00	40.2	38.7	40.5	38.7	40.3	38.0	38.9
02.00	39.2	41.1	42.2	36.1	39.2	41.2	40.5
03.00	43.2	41.0	40.0	37.4	41.6	41.7	42.2
04.00	43.1	39.4	41.0	41.7	40.2	39.2	42.6
05.00	39.2	39.8	43.7	45.2	42.0	37.8	42.9

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TEST REPORT

Report No.	SARL/2026/2151

Report Date.	29.05.2026

	N1	N2	N3	N4	N5	N6	N7
DAY EQUIVALENT	**51.4**	**50.7**	**50.5**	**50.9**	**48.1**	**46.9**	**50.1**
NIGHT EQUIVALENT	**41.3**	**42.1**	**43.1**	**38.9**	**41.7**	**39.8**	**42.1**
DAY & NIGHT EQUIVALENT	**46.3**	**46.3**	**46.9**	**44.8**	**44.9**	**43.3**	**46.0**

Remarks:

LOCATIONS:

N1-N1-Within Mine Lease Area
N2-Moolipatti
N3-Virudhunagar
N4-M. Puthupatti
N5- Vadamalaikurichi
N6-Kumaralingapuram
N7-Amathur

For Shrient Analytical and Research Labs Pvt. Ltd

Verified

Shrient Analytical & Research Labs Pvt. Ltd. Chennai - 45

Authorized Signatory
J. GNANAPRAKASAM
Technical Manager

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Please Contact:
For any Technical Issues & Complaints: vimalnath@shrientanalytical.com

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ANNEXURE-8

National Accreditation Board for Testing and Calibration Laboratories

NABL

CERTIFICATE OF ACCREDITATION

SHRIENT ANALYTICAL & RESEARCH LABS PRIVATE LIMITED

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

416/15, DHARGAS ROAD, PERUNGALATHUR, WEST TAMBARAM, CHENNAI, KANCHIPURAM, TAMIL NADU, INDIA

in the field of

TESTING

Certificate Number: TC-12339

Issue Date: 30/09/2025 **Valid Until:** 29/09/2029

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of thislaboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: SHRIENT ANALYTICAL AND RESEARCH LABS PRIVATE LIMITED

Signed for and on behalf of NABL

Anuja Anand
Director

Chakravarthy T. Kannan
Chief Executive Officer

ANNEXURE-9

பாவாலி
06.03.2026

அனுப்பு நர்
தலைமை ஆசிரியர்,
அரசு உயர்நிலைப்பள்ளி,
பாவாலி 626 103
விருதுநகர்

பெறுநர்

திரு G. பாண்டுரங்கன்,
S கோவிந்தராஜ்,
13 / 3 7/25 , எல்கைப்பட்டி பாவாலி பஞ்சாயத்து,
சீனியாபுரம் கிராமம்,
விருதுநகர் மாவட்டம்.

ஐயா,

வணக்கம் .அரசு உயர்நிலைப் பள்ளி பாவாலி 14.12.2011 முதல் உயர்நிலைப் பள்ளியாக செயல்பட்டு வருகிறது . இப்பள்ளியானது விருதுநகர் மாவட்டம் பாவாலி என்ற கிராமத்தில் சர்வே எண்: 284 /48 ல் அமைந்துள்ளது. இப்பள்ளி மாணவர்கள் நலன் கருதியும் சமூக விரோதிகள் பள்ளியில் நடமாடுவதை தவிர்க்கும் பொருட்டு சுற்றுச்சுவர் தேவைப்படுகிறது. எனவே சுற்றுச்சுவர் அமைத்து தரவேண்டி அன்புடன் கேட்டுக் கொள்கிறேன்.

நன்றி.

தலைமை ஆசிரியர்
அரசு உயர்நிலைப்பள்ளி
பாவாலி - 626 103.
ாரிச்சுத்தம் (வழி) விருதுநகர் மாவட்

நாள்:06.03.2026
இடம்: பாவாலி.