

To,  
The Additional Principal Chief Conservator of Forest (C)  
Ministry of Environment, Forest & Climate Change,  
Regional Office (SZ),  
4<sup>th</sup> Floor, E&F Wing, Kendriya Sadan,  
Koramangala, Bengaluru - 560034

Date: 16<sup>th</sup> May 2022

Ref: GGIAL/MoEF&CC-EC/2022-2023/0990

**Sub: Submission of Half Yearly EC Compliance Report of 'Greenfield International Airport at Mopa, Goa' by GMR Goa International Airport Limited (GGIAL), for the period from October 2021 to March 2022.**

**Name of the Project: Greenfield International Airport at Mopa, Goa.**

**EC File No. : F.No.10-29/2011-IA.III dated 28<sup>th</sup> October 2015**

Ref: 1. Original EC vide letter No. F.No.10-29/2011-IA.III dated 28<sup>th</sup> October 2015  
2. Hon'ble Supreme Court of India's Order dated 16<sup>th</sup> January 2020  
3. Addendum to Original EC dated 13<sup>th</sup> March 2020

Dear Sir,

With reference to the subject & reference mentioned above, we are herewith submitting the Half Yearly Environmental Clearance (EC) Compliance Report of 'Greenfield International Airport at Mopa, Goa' by GMR Goa International Airport Limited (GGIAL), for the period from October 2021 to March 2022. This project is under development phase.

Soft copy of this signed covering letter along with said EC Compliance Report, environmental monitoring report and other annexures are being submitted as a single document in pdf to your good office by e-mail ([rosz.bng-mef@nic.in](mailto:rosz.bng-mef@nic.in)).

We request your good offices to kindly acknowledge receipt of the same.

Thanking you,

Yours Sincerely,

For GMR Goa International Airport Limited,



R V Sheshan

Chief Executive Officer

Enclosure: As above

Copy for kind information to:

1. The Director, MoEF&CC, GOI, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi – 110 003
2. The Member Secretary, CPCB, Parivesh Bhavan, East Arjun Nagar, New Delhi – 110 032
3. The Member Secretary, Goa State Pollution Control Board, Saligao, Goa - 403 511
4. The Director, Directorate of Civil Aviation, GoG, Secretariat, Porvorim, Goa – 403 521

**Corporate Office:**

New Udaan Bhawan, Opp. Terminal -3,  
Indira Gandhi International Airport,  
New Delhi - 110 037

# HALF YEARLY ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

(Period: October 2021 to March 2022)



## Environmental Clearance Compliance Status Report Of Greenfield International Airport at Mopa, Goa

With reference to  
MoEF&CC's EC Letter No: F.No.10-29/2011-IA.III dated 28.10.2015  
Addendum to EC Conditions dated 13.03.2020



**GMR GOA International Airport Limited**

Mopa, Pernem Taluka, District North Goa, Goa – 403 512



Point-wise compliance

No.	Reference No.	Conditions	Compliance
<b>Conditions of EC dated 28/10/2015</b>			
1.	4 (A) (i)	'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	Complied. Renewal of 'Consent to Establish' has been obtained from Goa State Pollution Control Board (GSPCB), vide Letter No. 12/2019-PCB/299315/R0002481 dated 29/01/2020 with validity for 3 years.  Project is under development phase. infrastructures are being developed to meet the compliance requirements.
2.	4 (A) (ii)	The Project Proponent shall ensure availability of adequate land at the junction of the Mopa Airport road and Mumbai /Goa NH-17 for traffic circulation/management and to provide for all the traffic interchanges and proposed clover leaf.	Noted. It is being addressed in collaboration with Govt. of Goa (GoG).
3.	4 (A) (iii)	The approach and exit roads to the Airport shall be approved from the NHA and should be according to IRC norms.	Noted. Ministry of Road Transport & Highways (MoRTH), Government of India (GoI) has notified the approach road connectivity to airport as a National Highway (NH) No. 166S, vide Gazette Notification dated 23-09-2020. The construction work has begun by MoRTH & being executed through State PWD, GoG.
4.	4 (A) (iv)	A perusal of the Topo sheet superimposed on the runway area indicates that the extreme end of the runway is covering the	Complied. The engineering design & drawings of the drainage system has



## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
		drainage area partly. The drainage area which is under the runway shall be channelized. The area between the parallel taxiway and runway shall be handled carefully to drain the water from the area in the outfall 2.	been approved by Water Resources Department, (WRD), GoG. Channelization of storm water in-between Runway and Parallel Taxiway is being carried out to drain the water in the outfall 2.
5.	4 (A) (v)	The PP shall submit the site clearance certificate from Directorate General of Civil Aviation (DGCA), before commencement of work at the project site.	Submitted and Complied. (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0688 dated 24 <sup>th</sup> May 2021).
6.	4 (A) (vi)	Sewage and other liquid effluent generated from the airport including from the existing terminal should be treated according to the norms laid down by the State Pollution Control Board. The treated sewage shall be recycled for flushing/ gardening. Proper dual plumbing shall be provided.	STP outlet standards prescribed by GSPCB in the CTE are being considered for the STP design, will be addressed and complied with during operational phase of airport. The treated sewage shall be recycled for flushing / gardening. Proper dual plumbing shall be provided.  The design of 625 KLD STP has been finalized and construction work is in progress.
7.	4 (A) (vii)	The solid waste generated shall be properly collected, segregated and disposed according to the provisions of Solid Waste (Management and Handling) Rules, 2000. The project proponent shall make provisions for drinking water at convenient places for	Noted. Compliance shall be ensured. Project is in construction phase and necessary infrastructure to ensure

No.	Reference No.	Conditions	Compliance
		passengers and also at the cafeterias as to reduce generation of solid wastes including PET bottles.	compliance with given conditions are being built.
8.	4 (A) (viii)	Installation and operation of DG sets shall comply with the guidelines of CPCB.	<p>Being Complied.</p> <p>As per the revised categorization of DG sets by CPCB, the stand alone DG sets having capacity less than 1000 KVA do not require 'consent to operate' by GSPCB. Project is in construction phase. Presently, DG Sets at construction site are of less than 1000 KVA capacity. These DG sets are provided with adequate stack height and acoustic enclosures.</p> <p>Stand by DG Sets 2000 KVA X 3 proposed for operation phase will comply to CPCB guidelines.</p>
9.	4 (A) (ix)	Parking provision shall be provided according to the National Building Code of India, 2005.	Noted. Compliance shall be ensured.
10.	4 (A) (x)	Water conservation fixtures shall be provided and water balance shall be maintained through verifiable metering for fresh raw water, recycled as well as rain water harvesting.	Noted. Compliance shall be ensured.



No.	Reference No.	Conditions	Compliance
11.	4 (A) (xi)	Necessary permission shall be obtained for drawing of ground water from competent authority prior to construction / operation of the project.	Complied. Permission has been obtained from the Water Resources Department (WRD), Goa.  (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0688 dated 24 <sup>th</sup> May 2021).
12.	4 (A) (xii)	The land use around the Airport complex shall be regulated through a plan to control unauthorized development which may create problems in the operation of Airport.	Mopa Airport Development Authority (MADA) is the designated regulatory body to control the unauthorized development around the Airport complex. GGIAL has communicated to MADA vide letter dated 24/02/2021 for land use regulation around airport complex.
13.	4 (A) (xiii)	The wastewater from hangers shall be tested for presence of heavy metals, if any, and shall be treated in STP. The treated wastewater shall be used for gardening/ flushing.	Noted. Compliance will be ensured during operational phase of airport. Currently, construction of STP is in progress.
14.	4 (A) (xiv)	Rain water harvesting shall be provided to recharge the ground water.	Noted. Compliance will be ensured. 'Rain water Harvesting Plan/Report' has been prepared. Infrastructure is being built.
15.	4 (A) (xv)	Energy conservation to the extent of at least 20% shall be incorporated including water conservation (reuse/recycle, rain water harvesting and water efficient fixtures) and other green	Noted. Compliance shall be ensured during operational phase.



No.	Reference No.	Conditions	Compliance
		building practices for various buildings proposed within the airport complex. The PP shall consider ECBC Guidelines 2009 to achieve energy-efficiency. The energy conservation measures shall be subject to periodic verification by the competent Energy Conservation/ Efficiency authority in the State.	
16.	4 (A) (xvi)	The project proponent shall prepare a detailed traffic management plan to take care of increased vehicular traffic which should also cover/clearly delineate widening/ increasing the existing roads and associated road infrastructure approving/ installation of road safety features/pedestrian facility/FOB/under passes etc. (that can be done by carrying out road safety audits). Measures shall be taken to prevent encroachment along/ within the Rows on connecting/ main arterial roads.	Noted. Compliance shall be ensured by GoG.
17.	4 (A) (xvii)	All the recommendations of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to RO, MoEF&CC along with half yearly compliance report.	Noted. Compliance shall be ensured.  Compliance to the mitigation measures in Matrix Format is attached as <b>Annexure - 1.</b>
18.	4 (A) (xviii)	The responses / commitments made during public hearing shall be complied with in letter and spirit.	Noted. Compliance shall be ensured.
19.	4 (A) (xix)	Project Proponent shall install noise level display system. Noise level shall be monitored regularly in all seasons (different meteorological conditions) within the compound as well as nearby habitations and it shall be ensured that the noise level is within the prescribed limits. During night time the noise levels measured at	Noted. Compliance shall be ensured.  Currently, project is in construction phase and ambient noise levels monitoring are being conducted by MoEF&CC approved and NABL



## Half Yearly EC Compliance Report (October 2021 to March 2022)

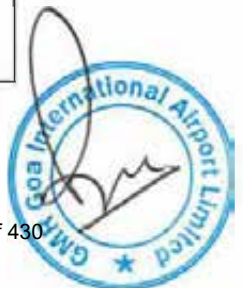
No.	Reference No.	Conditions	Compliance
		the boundary shall be restricted to the permissible levels to comply with the prevalent regulations.	accredited Environmental Laboratory. Noise level monitoring reports are enclosed as <b>Annexure-2</b> .
20.	4 (A) (xx)	The location of monitoring stations and monitoring of noise level during day and night shall be in accordance with the CPCB guidance document "Requirement and procedure for monitoring Ambient Noise Level due to aircraft" published on 25 <sup>th</sup> June, 2008.	Noted. Compliance shall be ensured during operational phase.
21.	4 (A) (xxi)	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Being Complied. Waste Management Plan is prepared and being implemented.
22.	4 (A) (xxii)	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the SPCB.	Being Complied. Hazardous waste is being given to SPCB authorized recyclers.
23.	4 (A) (xxiii)	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	Noted. EC had been obtained from MoEF&CC before starting the construction. The project is under construction phase.
24.	4 (A) (xxiv)	The project proponent will set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	Complied. Environmental Management Cell has been set up under the supervision of a Senior Executive designated as VP & Head – EHS & Sustainability.
25.	4 (A) (xxv)	<b>Corporate Environment Responsibility:</b> a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.	Complied. Environment Policy is in place.



No.	Reference No.	Conditions	Compliance
		b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions.	Complied.
		c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.	Complied.
		d) To have proper checks and balances, the company shall have a well laid down 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.	Complied.
<b>B.</b>	<b>GENERAL CONDITIONS:- EC dated 28/10/2015</b>		
26.	4 (B) (i)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care etc. The housing may be in the form of temporary structures to be removed after the completion of the project	Being Complied. Labor colony has been established within project site with all necessary infrastructure and facilities.
27.	4 (B) (ii)	A First Aid Room will be provided in the project both during construction and operation of the project.	Being Complied. First Aid Centre with medical staff has been provided.
28.	4 (B) (iii)	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	Being Complied. The excavated top soil was stored at designated locations within the site and currently the same is being utilized for the landscaping and horticulture purposes.

No.	Reference No.	Conditions	Compliance
29.	4 (B) (iv)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Being Complied. Entire quantity of excavated earth work is being used for filling & levelling within the site premises.
30.	4 (B) (v)	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards. The diesel required for operating DG sets shall be stored in underground tanks and if required clearance from Chief Controller of Explosives shall be taken.	Being Complied. Low Sulphur diesel is being used. Clearance from Chief Controller of Explosives has been obtained for storage of Diesel during construction phase.
31.	4 (B) (vi)	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Being Complied. Vehicles bringing construction materials are using National Highway (NH) and State Highway (SH) roads, to reach out to Mopa project site. There is no restriction imposed w.r.t. peak and non-peak hours for NH and SH roads by Central Govt. & State Govt. All construction vehicles carry Pollution Under Check (PUC) certificate. (Sample is enclosed in <b>Annexure-1</b> ).
32.	4 (B) (vii)	Fly ash usage shall be explored as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27 <sup>th</sup> August, 2003.	Being Complied. Fly ash is being used in Ready Mixed Concrete (RMC).
33.	4 (B) (viii)	Ready mixed concrete must be used in building construction.	Being Complied.

No.	Reference No.	Conditions	Compliance
			All the buildings/rigid pavements are being constructed with RMC only.
34.	4 (B) (ix)	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Being Complied. Considered in the engineering design, vetted by IIT Mumbai.
35.	4 (B) (x)	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Being Complied. Curing agents are being used. All concrete works are being done with pre-mixed concrete i.e. RMC only.
36.	4 (B) (xi)	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Compliance is being ensured. The buildings are incorporated with dual plumbing system.
37.	4 (B) (xii)	Use of glass may be reduced by up to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.	Compliance is being ensured. The glazing work in PTB and ATC tower buildings are being executed with double glass unit.
38.	4 (B) (xiii)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.	Compliance is ensured. Execution is being carried out as per ECBC/IGBC Guidelines with thermal insulation having required Solar Reflective Index (SRI). Passenger Terminal Building (PTB) has been accorded with Provisional Certificate - IGBC Platinum Standard from CII.
39.	4 (B) (xiv)	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air-	Compliance is ensured. Execution is done as per ECBC/IGBC Guidelines.



No.	Reference No.	Conditions	Compliance
		conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.	
40.	4 (B) (xv)	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	Noted. Compliance, as applicable for safe operation of airport, will be ensured.
41.	4 (B) (xvi)	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	Noted. Compliance will be ensured in consultation with GoG.
42.	4 (B) (xvii)	The construction of the structures shall be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and central rules and regulations.	Noted. Compliance is ensured. Construction License has been obtained from MADA.
43.	4 (B) (xviii)	The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.	Being Complied. Statutory approvals of approved quarries from where construction materials are being sourced are submitted, (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0688 dated 24 <sup>th</sup> May 2021).
44.	4 (B) (xix)	Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.	Being Complied. Details are submitted in <b>Annexure-1</b>
45.	4 (B) (xx)	Full support shall be extended to the officers of this Ministry/Regional Office by the project proponent during inspection of the project for monitoring purposes by furnishing full details and	Noted.



No.	Reference No.	Conditions	Compliance
		action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	
46.	4 (B) (xxi)	A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry regarding the implementation of the stipulated conditions.	Monitoring is being conducted by MoEF&CC approved and NABL accredited Environmental Laboratory. Monitoring reports of Ambient Air Quality (AAQ), Water and Noise levels conducted from October 2021 to March 2022 are enclosed in <b>Annexure – 2</b> .
47.	4 (B) (xxii)	Ministry of Environment, Forest & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing. ones, if necessary in the interest of environment and the same shall be complied with.	Noted.
48.	4 (B) (xxiii)	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.	Noted.
49.	4 (B) (xxiv)	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment, Forest & Climate Change.	Noted.
50.	4 (B) (xxv)	The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.	<ol style="list-style-type: none"> <li>1. Financial Closure for the project has been achieved on 7<sup>th</sup> July 2017.</li> <li>2. The approval of the project obtained from Director General of Civil Aviation (DGCA), GoI, New Delhi vide their letter no. AV.20024/17/00-AL dated 27<sup>th</sup> July 2017.</li> </ol>



## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
			<p>3. Land development work has already been started (Letter submitted to Regional office of MoEF&amp;CC vide letter no. GGIAL/MoEF&amp;CC/2018/0194 dated 26<sup>th</sup> February 2018).</p> <p>The above details have been further submitted to Regional Office, MoEF&amp;CC and MoEF&amp;CC, New Delhi vide our letter No. GGIAL/MoEF&amp;CC-EC/2020-21/0519 dated 13<sup>th</sup> August 2020.</p>
51.	4 (B) (xxvi)	A copy of the clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.	Complied.
52.	4 (B) (xxvii)	A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office / Tehsildar's office for 30 days.	Complied.
53.	4 (B) (xxviii)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.	Noted. Being complied. Environmental expenditures during Financial Year 2021-22 is enclosed as <b>Annexure – 3.</b>



No.	Reference No.	Conditions	Compliance
54.	5	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 2006, including the amendments and rules made thereafter.	Noted. Relevant environmental acts and rules are being complied with.
55.	6	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Being Complied. Necessary approvals from the concerned authorities are being obtained as applicable. List of various statutory clearances / permits /approvals related to Environment, obtained or applicable to the airport project are submitted (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0835 dated 18 <sup>th</sup> November 2021)
56.	7	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest & Climate Change at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> . The advertisement should be made within Seven days from the date of receipt of the	Complied.



### Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
		Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry.	
57.	8	This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No .460 of 2004 as may be applicable to this project.	Noted.
58.	9	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.	Being Complied.
59.	10	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted.
60.	11	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Compliance being ensured.
<b>Additional NGT Conditions vide NGT order dated 21/08/2018</b>			
	<b>A</b>	<b>Air Environment</b>	
61.	1	Total Suspended Particulate Matter (SPM), Respirable Particulate Matter (RPM) during construction phase. Un-burnt and Hydro	<b>Being Complied.</b>





No.	Reference No.	Conditions	Compliance
		<p>Carbons (HC), Lead (Pb), CO<sub>2</sub>, SO<sub>2</sub>, CO<sub>2</sub>, SOOT and Oxides of Nitrogen (NOx) during operation phase are going to be major pollutants in this kind of project. Besides, fugitive emissions of Volatile Organic Compounds (VOC) during fuel handling can be another issue for ambient air environment. The provision of only 6 (six) Air Quality Monitoring Stations is inadequate as sampling duration has been given as twice a week, 4 weeks in a season as per CPCB standards for NAAQM, 1994. It would be appropriate if the Project Proponent establishes real time online continuous Air Quality Monitoring Station also which is connected to CPCB server and capable of monitoring all relevant and critical parameters and mitigation measures taken.</p>	<p>Currently in the construction phase of the project, Environmental Quality Monitoring of Suspended Particulate Matter (SPM), PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx, CO are being conducted. The AAQ Monitoring report is enclosed as <b>Annexure-2</b>.</p> <p>Total VOC Monitoring being conducted within the Mopa Airport premises and the test report are enclosed in <b>Annexure-2</b>.</p> <p>Real time online Continuous Ambient Air Quality Monitoring Station (CAAQMS) has been installed at GSPCB approved location. The same is under commissioning and trial phase.</p>
62.	2	<p>Although all parameters w.r.t ambient air parameters have been found to be within limits for all 6 (six) locations monitored, we feel for the purpose of giving/depicting holistic picture with regard to ambient air in the area, at least 3 (three) more locations falling in the State of Maharashtra be also monitored and documented.</p>	<p>Complied. Report of AAQ monitoring conducted at additional 3 locations in the State of Maharashtra is enclosed as <b>Annexure - 2</b>.</p>
	<b>B</b>	<b>Water Environment</b>	
63.	1	<p>Only two number of Rain Water Harvesting pits have been provided which we feel are not adequate and there is a need to place other</p>	<p>Noted. Compliance shall be ensured. The rain water harvesting plan has been revised and also approved by Water</p>

## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
		pits at such locations so as to capture all the excess drainage for water re-charge.	Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10-02-2021.  (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0688 dated 24 <sup>th</sup> May 2021).
64.	2	More frequent Water Quality Monitoring i.e. once every month may be carried out by Project Proponent at bore wells and STP discharge plants instead of 4 (four) times in a year as proposed.	Being complied. Monitoring reports are enclosed in <b>Annexure-2.</b>
	<b>C</b>	<b>Noise Environment</b>	
65.	1	It has been proposed that ambient noise levels shall be monitored around the premises of airport, near DG sets and at main entrance/boundary of airport once a week at 7 (seven) locations which we feel are inadequate. Besides these, continuous monitoring of occupational noise exposure limits in such industrial environments would be appropriate with audible or visual alarm output capability.	Noted. Compliance shall be ensured  Project is in construction phase and Noise levels monitoring are being conducted by MoEF&CC approved Environmental Laboratory. Monitoring reports are enclosed in the <b>Annexure-2.</b>
66.	2	Integrated Noise Model (INM) be more frequently used and mitigation undertaken during the operational phase of project at regular intervals.	Noted. Compliance shall be ensured during operational phase.
67.	3	Although ambient noise levels have been found to be within limits at 9 (nine) locations monitored, we feel for the purpose of giving/depicting holistic picture with regard to ambient noise levels	Complied. Report of Noise levels monitoring conducted at additional 3

## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
		in the area, at least 3 (three) more locations falling in the State of Maharashtra be also monitored and documented.	locations in the State of Maharashtra is enclosed as <b>Annexure-2</b> .
	<b>D</b>	<b>Land Environment</b>	
68.	1	There is a potential for impact on soil quality due to project related spills and leaks of fuel and chemicals and uncontrolled disposal of wastes and waste water. Adequate care be taken to avoid spills and leaks of hazardous substances and all project related wastes. Littering on sites and beyond the sites needs to be adequately prevented and controlled.	Being Complied. Secondary containment of adequate capacity is constructed at bulk bitumen and LDO storage tanks.
69.	2	Debris and Muck Management Plan to be prepared and implemented so as to avoid spillage of muck and debris on the slopes.	Being Complied. Plan is prepared and being implemented.
70.	3	Soil conservation and stabilization measures needs to be undertaken by deploying both mechanical and bio-engineering methods.	Noted. Compliance ensured as per requirements.
71.	4	Remediation, restoration and compensation needs to be integral part of policy so as to provide adequate relief for any environmental or project related disasters.	Complied. Framework for remediation, restoration and compensation for any unlikely event of environmental or project related disasters has been prepared.
	<b>E</b>	<b>Biological Environment</b>	
72.	1	Efforts be made to transplant the trees to other locations in the same vicinity by using appropriate mechanical devices which are available these days.	Complied. Efforts have been made to translocate 500 nos. of trees within site premises.

No.	Reference No.	Conditions	Compliance
73.	2	Efforts be made to plant indigenous species which are tall in size rather than small saplings.	Noted. Compliance shall be ensured.
74.	3	Concerns have been raised by appellants with regard to plant species 'Dipcadi concanense' which has been claimed to be a threatened plant. This claim of the appellants has been negated by the respondent by producing a documentation of Botanical Survey of India, Western Regional Centre, Pune, Maharashtra titled as "A Note on Occurrence and Distribution of Dipcadi concanense". By invoking Precautionary Principle, we direct the Project Proponent to draw up a Conservancy by Plan/Scheme for 'Dipcadi concanense' in collaboration with Forest Department, State of Goa and Botanical Survey of India and ensure its implementation.	Complied.
	<b>F</b>	<b>Socio-economic Environment</b>	
75.	1	Adequate drills with respect to implementation of Disaster Management plan needs to be carried out at regular intervals so as to ensure preparedness and rapid response to any disasters both man-made or natural.	Being Complied. 'Onsite Emergency and Disaster Management Plan' for the construction phase of the project is prepared and being implemented. Emergency response drills are being conducted at construction site.
76.	2	Although 'Disaster Management Plan' as Annexure-II is part of EIA Report under the Sub head 1.2.1- National Disasters needs further elaboration especially in terms of Emergency Response Measures, Rules and Responsibility, Mitigation, etc.	Being Complied. Updated 'Onsite Emergency and Disaster Management Plan' for the construction phase of the project is prepared and being implemented. Emergency response drills are being conducted at construction site.

No.	Reference No.	Conditions	Compliance
<b>Addendum to EC dated 23<sup>rd</sup> March 2020</b>			
	<b>I</b>	<b>Statutory compliance</b>	
77.	(i)	The project proponent shall obtain certificate from Chief Wildlife Warden (CWLW) of State through State Government that none of the area of the project falls in the notified Eco-sensitive Zone (ESZ) and no activity prohibited in the Eco-sensitive zone will be taken up.	Submitted & Complied.  (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0688 dated 24 <sup>th</sup> May 2021).
78.	(ii)	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Complied. Consent to Establish has been obtained from GSPCB.  (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0688 dated 24 <sup>th</sup> May 2021).
79.	(iii)	The project proponent shall obtain necessary permission from the competent authority for drawal of water from Tillari Irrigation Canal.	Complied. Permission has been obtained from WRD, GoG.  (Refer Annex – 4 of Half yearly EC compliance submitted vide letter no. GGIAL/MoEF&CC-EC/2021-2022/0688 dated 24 <sup>th</sup> May 2021).
	<b>II</b>	<b>Air quality monitoring and preservation</b>	
80.	(i)	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM <sub>10</sub> and PM <sub>2.5</sub> in reference to PM emission, and SO <sub>2</sub> and NO <sub>x</sub> in reference to SO <sub>2</sub> and NO <sub>x</sub>	Being Complied, Currently in the construction phase of the project, Environmental Monitoring of Suspended Particulate Matter (SPM), PM <sub>10</sub> , PM <sub>2.5</sub> ,



**Half Yearly EC Compliance Report (October 2021 to March 2022)**

No.	Reference No.	Conditions	Compliance
		emissions) within and outside the airport area covering upwind and downwind directions.	SO <sub>2</sub> , NO <sub>x</sub> and CO are being conducted. The AAQ Monitoring report is enclosed as <b>Annexure - 2</b> .
81.	(ii)	Notification GSR 94 (E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities shall be complied with.	Being Complied.
82.	(iii)	Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet	Being Complied.
83.	(iv)	The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.	Being Complied.
84.	(v)	Excavated materials shall be handled and transported in a manner that they do not cause any air pollution.	Being Complied.
85.	(vi)	The soil/construction materials carried by the vehicle should be covered by impervious sheeting to avoid leaking of the dusty materials.	Being Complied.
	<b>III</b>	<b>Water quality monitoring and preservation</b>	
86.	(i)	Appropriate drainage channels need to be designed to take care of the water flow into the nearest water courses/rivers, etc.	Complied. Considered in the design of storm water drainage system. Drainage plan has been revised and also approved by WRD, GoG.
87.	(ii)	It should be ensured that sustainable water flow in the various channels of watershed in the plateau is maintained.	Compliance shall be ensured. Requirement is considered in the drainage design, which is approved by WRD, GoG.
88.	(iii)	Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area.	Compliance shall be ensured. Requirement is considered in the design.



## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
		Domestic and industrial waste water shall not be allowed to be discharged into the storm water drains and directed to STP for treatment.	Currently, STP is under construction. Entire waste water generated will be treated in STP and will be further reused.
89.	(iv)	Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.	Compliance shall be ensured. Requirement is considered in the design. Execution will be done in line with the approved design.
90.	(v)	The runoff from paved structures like Aprons can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.	Compliance shall be ensured. Requirement is considered in the design.
91.	(vi)	Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.	Compliance shall be ensured. Requirement is considered in the design.
92.	(vii)	The project activity shall conform to the General Standards for Discharge of Environmental Pollutants notified in the Environment (Protection) Rules, 1986, and amended from time to time.	Being complied.
93.	(viii)	Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Rain water harvesting structures shall conform to CGWA guidelines. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.	Compliance shall be ensured. Requirement is considered in the design. Rain Water Harvesting structures are under construction.
	<b>IV</b>	<b>Noise monitoring and prevention</b>	
94.	(i)	Notification G.S.R. 568(E) dated 18.06.2018 of MoEF&CC regarding Ambient Air Quality Standards with respect to Noise in Airport Noise Zone shall be complied with.	Noted. Compliance shall be ensured during operational phase.



## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
95.	(ii)	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Being Complied. Noise levels monitoring is being conducted and monitoring report is enclosed in <b>Annexure - 2.</b>
96.	(iii)	Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipment's.	Being Complied. DG sets are installed with acoustic enclosures. Random workplace noise levels monitoring is carried out and monitoring reports are enclosed in the <b>Annexure-2.</b>
97.	(iv)	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	Noted. Compliance shall be ensured. DG sets are installed with acoustic enclosures. Necessary PPEs are provided.
98.	(v)	During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Noted. Compliance shall be ensured during operational phase.
99.	(vi)	Where construction activity is likely to cause noise nuisance to nearby residents, restrict it to only during day time i.e. between 7 am to 6 pm.	Noted. Being Complied.
	<b>V</b>	<b>Energy Conservation/climate change measures</b>	
100.	(i)	Energy conservation measures like installation of LED should be integral part of the project design and should be in place before project commissioning.	Noted. Compliance is being ensured.
101.	(ii)	Initiatives such as Green Infrastructure Development program, adoption of less emission intensive technologies, renewable energy program, electrical vehicles and Airport Carbon Accreditation need	Noted. Compliance shall be ensured. The requirements of Green Infrastructure Development program,





No.	Reference No.	Conditions	Compliance
		to be adopted to reduce its impact on climate change and Green House Gas (GHG) emissions as per environmental best practices governing greenfield airports.	adoption of less emission intensive technologies, renewable energy program and electrical vehicles are considered in the design. Airport Carbon Accreditation shall be adopted during operational phase.
	<b>VI</b>	<b>Waste Management</b>	
102.	(i)	Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).	Being Complied.
103.	(ii)	The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.	Being Complied.
104.	(iii)	The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out.	Noted. Compliance shall be ensured during operational phase.
105.	(iv)	Solid inert waste found on construction sites consists of building rubble, demolition material, concrete; bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or managed so as to strictly conform to the Solid Waste Management Rules, 2016, and Construction and Demolition Waste Management Rules, 2016.	Being Complied.
106.	(v)	The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:	Noted. Compliance shall be ensured during operational phase.
	a.	Trash collected in flight and disposed at the airport including segregation, collection and disposed.	



## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
	b.	Toilet wastes and sewage collected from aircrafts and disposed at the Airport.	
	c.	Wastes arising out of maintenance and workshops	
	d.	Wastes arising out of eateries and shops situated inside the airport complex.	
	e.	Hazardous and other wastes	
	<b>VII</b>	<b>Green Belt</b>	
107.	(i)	Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter-alia cover the entire periphery of the Air Port.	Noted. Compliance, as applicable for safe operation of airport, will be ensured.
108.	(ii)	The plantation species in and around Airport site should be carefully chosen to avoid bird nesting and to improve pollution control and noise control measures. Water intensive and/or invasive species should not be used for landscaping.	Noted. Compliance shall be ensured.
109.	(iii)	Plantation activity should be taken up under the expert guidance for forest department of Goa, care should be taken that soil erosion measures should be taken up on priority so that the rich mineralized soil of forest is not washed away. The plantation activity should also have an approach of soil conservation where planting is done along the contours avoiding gully formation. As far as possible monocultural plantation should be avoided.	Noted. Compliance shall be ensured.
110.	(iv)	The proposed 10 times compensatory plantation need to be monitored by the Government of Goa so that the target of planting 5.5 lakh saplings is achieved in a time bound manner, their survival rate is monitored and mortality is replenished. As major chunk of 2.5 lakh of saplings is proposed to be done by the village level Bio Diversity Committees, it is necessary to ensure that people are largely given native species and/or fruit bearing saplings so that they will be able to derive economic benefits from such fruit crops	Compliance is being ensured in collaboration with GoG. GGIAL has contributed INR 80 lakhs supporting the afforestation plan of more than 4.65 lakh of saplings distributed and planted so far through Goa State Biodiversity Board (GSBB). Joint site visit inspection



## Half Yearly EC Compliance Report (October 2021 to March 2022)

No.	Reference No.	Conditions	Compliance
		and also such trees will provide better biological environment to birds.	of plantation areas was also done by GSBB & GGIAL.
111.	(v)	Top soil shall be separately stored and used in the development of green belt.	Being Complied. The excavated top soil was stored at designated locations within the site and currently the same is being utilized for the landscaping and horticulture purposes.
	<b>VIII</b>	<b>Public hearing and Human health issues</b>	
112.	(i)	Solution/management plan regarding redressal of all the concerns raised in the public hearing must be clearly spelt out in the EMP and shall be implemented in letter and spirit. Compliance for each mitigation plan shall be submitted to Regional Office, MoEF&CC along with half yearly compliance report.	Being Complied in collaboration with GoG.
113.	(ii)	Provision of Electro-mechanical doors for toilets meant for disabled passengers shall be ensured. Children nursing/feeding room shall be located conveniently near arrival and departure gates.	Requirements are being considered in the Design.
114.	(iii)	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Being implemented for the construction phase of the project.
115.	(iv)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied. Labor colony has been established within project site with all necessary infrastructure and facilities.
116.	(v)	Occupational health surveillance of the workers shall be done on a regular basis.	Being Complied.

No.	Reference No.	Conditions	Compliance
		<b>Conditions of Hon'ble Supreme Court of India (SCI) Order dated 16/01/2020</b>	
117.	(i)	Ref. No. 47: Adopt a Zero Carbon Programme during construction and operational phases of the Airport.	Noted. Compliance shall be ensured.  In line with our commitments submitted to SCI, infrastructure required for the Zero Carbon program during operational phase is considered in the design and will be implemented during the operational phase of the Airport as per the plan.
118.	(ii)	Ref. No. 48 : The National Environmental Engineering Research Institute (NEERI) to be appointed to oversee compliance with the directions cumulatively issued by the Supreme Court.	Complied. NEERI has been appointed. NEERI reviewed the EC compliance on 27 <sup>th</sup> December 2021. Further, NEERI inspected the airport project site and reviewed the compliance during 21 <sup>st</sup> - 25 <sup>th</sup> March 2022.



**ANNEXURE – 1**

**ENVIRONMENTAL MITIGATION MEASURES AS PER EIA REPORT AND COMPLIANCE STATUS AS OF MARCH 2022**

S. No.	Mitigation measures	Compliance status
<b>Mitigation measures for Air Environment during Construction Phase</b>		
01	Ensure preventive maintenance of vehicles and equipment.	Being Complied. Sample copy of Checklist for Maintenance is enclosed as <b>Annexure-1 (A)</b> .
02	Ensure vehicles with valid Pollution under Control certificates are used.	Being Complied. Sample copy of PUC certificate is enclosed as <b>Annexure-1 (B)</b> .
03	Implement dust control activities such as water sprinkling on unpaved sites.	Being Complied with. Sample photographs of implementation of Dust control measures are enclosed as <b>Annexure- 1 (C)</b> .
04	Ensure vertical stacks with height sufficient for dispersion as per CPCB guideline for DG stacks.	DG sets stack height is as per the CPCB Guidelines. Photo showing DG with adequate stack height is enclosed in the <b>Annexure-1 (D)</b> .
<b>Mitigation measures for Water Environment during Construction Phase</b>		
05	Monitor water usage at construction camps to prevent wastage.	Being Complied.
06	Ensure STP at construction camps/sites and the proposed facilities are properly designed to handle peak waste water load and properly maintained.	Complied. Temporary STP of 225 KLD is in operation at the workmen colony. Another 50 KLD STP is also installed and in operation at another labour colony. Both STPs are within project site premises and designed to handle peak waste water load and being properly maintained.

S. No.	Mitigation measures	Compliance status
07	Ensure supply of temporary/portable toilets for construction staff.	Being Complied. Sample photo of portable toilet facility is enclosed as <b>Annexure-1 (E)</b> .
<b>Mitigation measures for Land Environment during Construction Phase</b>		
08	Avoiding rainy season for construction so as to avoid soil erosion.	Appropriate measures taken.
09	Restricting all construction activities inside project boundary.	Being followed.
10	Ensure top soil stock pile is not contaminated with any type of spills.	Being followed. Currently stocked top soil is being used for landscaping and horticulture purpose within the site.
11	Ensure any material resulting from clearing and grading should not be deposited on approach roads, streams or ditches, which may hinder the passage and/or natural water drainage.	Being followed.
<b>Mitigation measures for Noise Environment during Construction Phase</b>		
12	Ensure preventive maintenance of equipment and vehicles.	Being Complied.
13	Ensure DG sets are provided with acoustic enclosures and exhaust mufflers.	DG sets have provided with acoustic enclosures.
14	Ensure vehicle movement is avoided at night, and close to sensitive receptors (such as schools, hospitals, place of worships).	Being Complied.
<b>Mitigation measures for Biological Environment during Construction Phase</b>		
15	Keep a tally of trees cut.	Complied. Records have been maintained.
16	Avoid cutting of trees wherever possible.	Being Complied with.
17	Closing of trenches as soon as possible after pipeline laying, if any.	Being Complied with.
<b>Mitigation measures for Socio-economic Environment during Construction Phase</b>		
18	Prohibit use of firewood in project camps and making use of cooking gas is mandatory.	Being Complied.
19	Regulating speed limit of the vehicles	Being regulated.

ANNEXURE – 1 (A)

PREVENTATIVE MAINTENANCE OF VEHICLES

**FIELD SERVICE REPORT**

Work Order No: 21880340 Date: 05/02/2022

Machine Model: G510	Machine SN: 3345344	Flight SN: 6046152
Delivery Date: 05/02/2019	Under Warranty: 492%	Break Open: <input type="checkbox"/> Yes <input type="checkbox"/> No
Application: Grinding	Serial Code: 036	Break Open: <input type="checkbox"/> Yes <input type="checkbox"/> No
Customer: Lakshmi Services Co	Contact Person: Mr. Prasad	Contact No: 9845345678
Machine Location: Mopa, Panaji	Contract No: 21880340	

**Complaint:** Abnormal sound from both wheels  
**Event:** Abnormal excess play in all hubs which resulted in loosening of nut.

**Correction:** Hubs are repaired with bearings, random bearings, hub nut and bearings are done.

Part Number	Description	Qty	Part Number	Description	Qty

Lead technician: Arjun P. S. Assistant: Sudhakar / Sudhakar

Time	Created	Arrival at site	Leave from site	Back to office	Total mileage	Job start	Job complete

Any other findings on machine / Recommendations: Check if there is any other

Customer Comments: Check if there is any other

Signature: [Signature] Technician: [Signature] Supervisor: [Signature]

**FIELD SERVICE REPORT**

Work Order No: [Blank] Date: 25/03/2022

Machine Model: G510	Machine SN: 630789	Engine SN: 6046152
Delivery Date: 05/02/2019	Under Warranty: 60%	Break Open: <input type="checkbox"/> Yes <input type="checkbox"/> No
Application: Grinding	Serial Code: 036	Break Open: <input type="checkbox"/> Yes <input type="checkbox"/> No
Customer: Lakshmi Services Co	Contact Person: Mr. Prasad	Contact No: 9845345678
Machine Location: Mopa, Panaji	Contract No: 21880340	

**Complaint:** Abnormal sound from R.H.S. to drum front hubs.  
**Event:** Nut shifted away from steel threads.

**Correction:** Hubs shaft removed and given in repairs. New nut required along with new shaft.

Part Number	Description	Qty	Part Number	Description	Qty
411000190102	Cover	01	411000190111	Cover	01
411000190103	Screw	04	411000190112	Screw	04
411000190104	Nut	04	411000190113	Nut	04
411000190105	Sealing Ring	01			

Lead technician: Sudhakar Assistant: [Blank]

Time	Created	Arrival at site	Leave from site	Back to office	Total mileage	Job start	Job complete

Any other findings on machine / Recommendations: We are recommended to use a new hub

Customer Comments: [Blank]

Signature: [Signature] Technician: [Signature] Supervisor: [Signature]



**ANNEXURE – 1 (B)**

**PUC CERTIFICATE**

Form 50  
ISSUE DATE: 07/02/2022

**Pollution Under Control Certificate**  
Authorized By: Government of Maharashtra

Date: 07/02/2022  
Time: 12:44:58 PM  
Validity upto: 08/02/2023

Registration No. MH09EM4622  
Date of Registration: 07/02/2022  
Year & Year of Manufacturing: 2017  
Vehicle Category: DIESEL  
Engine No.: 1012206  
PUC Code: 07202  
Fee: Rs. 250/- (as applicable)

Vehicle Photo with Registration plate  
60 mm x 30 mm

Sl. No.	Parameter (as applicable)	Units (as applicable)	Emission Limits	Measured Value (Type 2)
1	Carbon Monoxide (CO)	percentage	3500 ± 200	1 ± 0.03
2	Hydrocarbon (HC)	percentage (%)	1 ± 0.03	0.03
3	Light absorption	1/metre	1.62	0.03

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Authorized Signature with stamp of PUC Center: [Signature]

Stamp: HARISHCHANDRA PUC CENTER, ASMAS ARCADE SH, WILA NEAR KARULI, ADA, RJ.

GOVERNMENT OF GOA  
DIRECTORATE OF TRANSPORT  
Rule 118B(10)(C)  
POLLUTION UNDER CONTROL CERTIFICATE

**PASS**

PUC LICENSE ID No: PUC/30/2011  
Valid Upto: 09/02/2022

**DIESEL VEHICLE**  
TRANSPORT VEHICLE

Vehicle Type: HMV  
Date of Testing: 07/01/2022  
ID No: GAPUC20220666510

Vehicle No: MH09EM4622  
Time of Testing: 10:35 AM  
Odometer Reading: 52141

Sl. No.	RPM	K Value	HSU Value %
1.	1574 - 3397	2.710	68.820
2.	1457 - 3799	0.430	16.900
3.	1450 - 3532	0.240	9.830
Mean	1575 - 3507	1.130	38.410

PUC Certificate Valid Till: 06/01/2023

HARISHCHANDRA PUC CENTER - ASMAS ARCADE SH, WILA NEAR KARULI, ADA, RJ.  
Email: mahadict@2025@gmail.com, Mobile: 8420304034

In case of queries or Feedback please write to us on Email: puc@transport.goa@gmail.com





**ANNEXURE – 1 (C)**

**DUST CONTROL MEASURES IMPLEMENTED AT SITE**



**WATER SPRINKLING ON UNPAVED HAUL ROADS**



**FOG CANNONS DEPLOYED AT EARTH WORK AREAS**



**ANNEXURE – 1 (D)**

**DIESEL GENERATORS WITH ADEQUATE STACK HEIGHT**



**ANNEXURE – 1 (E)**

**PORTABLE TOILET FACILITIES**





## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State) (G-A1)					
Average Ambient Temperature (°C)	30.3	Average Humidity (%)	76	Latitude	N 15°45'51.1"	
Average Wind Speed (km/hr)	1.9	Average Wind direction (Deg)	213	Longitude	E 73°56'32.4"	
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)					

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0027	18.56	7.53	3.24	<6.00	0.05	28.56
2.	07/10/2021	SEE/AR/10/2021/0101	22.72	11.38	<3.00	9.33	0.06	36.00
3.	11/10/2021	SEE/AR/10/2021/0177	15.68	10.18	<3.00	7.91	0.03	28.71
4.	14/10/2021	SEE/AR/10/2021/0261	24.59	15.77	3.96	9.22	0.07	42.65
5.	18/10/2021	SEE/AR/10/2021/0311	18.06	10.48	4.16	10.41	0.05	32.12
6.	21/10/2021	SEE/AR/10/2021/0362	24.56	14.62	3.55	6.83	0.06	41.66
7.	25/10/2021	SEE/AR/10/2021/0398	27.24	18.66	6.06	10.91	0.07	53.17
8.	28/10/2021	SEE/AR/10/2021/0466	23.25	9.63	4.29	8.81	0.03	33.34
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

: This certificate may not be reproduced in part, without the permission of this laboratory.

: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade *Akash*  
 2) Aditya Naik *Aditya*  
 Analyzed by

*Desai*  
 Nandkumar Desai  
 Reviewed by



*Arandeep*  
 Arandeep Sawant  
 Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2228-DTK-2011)	EI/FF/620	19/02/2021	18/02/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 290-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/630	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2028-DTD-2016)	LES-CCL/FF/MF/5C/1146	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR No. 05-DTK-2011)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550	EI/FF/624	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Nagzar(Goa State) (G-A3)				
Average Ambient Temperature (°C)	30.6	Average Humidity (%)	72	Latitude	N 15°45'37.3"
Average Wind Speed (km/hr)	2.3	Average Wind direction (Deg)	234	Longitude	E 73°53'14.22"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0029	12.63	7.28	<3.00	6.45	0.06	20.53
2.	07/10/2021	SEE/AR/10/2021/0103	18.14	6.61	<3.00	6.41	0.05	25.86
3.	11/10/2021	SEE/AR/10/2021/0179	14.97	8.19	<3.00	6.20	0.06	25.92
4.	14/10/2021	SEE/AR/10/2021/0263	27.16	20.67	<3.00	<6.00	0.03	50.37
5.	18/10/2021	SEE/AR/10/2021/0313	14.26	4.91	<3.00	6.60	0.05	19.69
6.	21/10/2021	SEE/AR/10/2021/0364	21.34	11.52	<3.00	<6.00	0.06	35.17
7.	25/10/2021	SEE/AR/10/2021/0400	22.33	20.29	<3.00	<6.00	0.03	46.44
8.	28/10/2021	SEE/AR/10/2021/0468	14.80	4.60	<3.00	<6.00	0.05	21.24
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

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2) Aditya Naik  
**Analyzed by**

*Pattade*  
*Naik*

*NDES*  
Nandkumar Desai  
**Reviewed by**



*Amrudeep*  
Amrudeep Sawant  
**Authorized Signatory**



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- CEIS 121(SR NO.01-DTB-2017)	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 286-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/628	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Purva Casarvarnem (Goa State)(G-A4)				
Average Ambient Temperature (°C)	31.2	Average Humidity (%)	78	Latitude	N 15°41'41.9"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	243	Longitude	E 73°50'16.6"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0030	22.32	18.01	3.32	6.14	0.05	42.54
2.	07/10/2021	SEE/AR/10/2021/0104	28.16	14.39	<3.00	<6.00	0.03	44.21
3.	11/10/2021	SEE/AR/10/2021/0180	13.37	9.48	<3.00	<6.00	0.06	24.52
4.	14/10/2021	SEE/AR/10/2021/0264	18.76	5.67	<3.00	6.41	0.05	24.97
5.	18/10/2021	SEE/AR/10/2021/0314	21.84	8.36	<3.00	6.18	0.03	31.21
6.	21/10/2021	SEE/AR/10/2021/0365	32.45	18.34	<3.00	6.34	0.06	53.93
7.	25/10/2021	SEE/AR/10/2021/0401	30.67	14.39	<3.00	<6.00	0.05	48.65
8.	28/10/2021	SEE/AR/10/2021/0469	27.45	18.55	<3.00	6.42	0.03	46.76
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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 2) Aditya Naik *Aditya Naik*  
 Analyzed by

*NDSC*  
 Nandkumar Desai  
 Reviewed by



*Ariandeep*  
 Ariandeep Sawant  
 Authorized Signatory

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Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 299-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3400	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL, Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Khajne Amere Porscodem(Goa State)(G-A5)				
Average Ambient Temperature (°C)	31.1	Average Humidity (%)	70	Latitude	N 15°40'38.0"
Average Wind Speed (km/hr)	2.4	Average Wind direction (Deg)	211	Longitude	E 73°46'21.2"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0031	20.19	11.60	3.46	<6.00	0.06	32.13
2.	07/10/2021	SEE/AR/10/2021/0105	15.10	8.23	<3.00	<6.00	0.03	23.57
3.	11/10/2021	SEE/AR/10/2021/0181	22.74	18.59	<3.00	<6.00	0.05	44.49
4.	14/10/2021	SEE/AR/10/2021/0265	26.49	16.47	<3.00	6.68	0.07	45.07
5.	18/10/2021	SEE/AR/10/2021/0315	11.67	6.99	<3.00	6.37	0.06	20.24
6.	21/10/2021	SEE/AR/10/2021/0366	14.80	5.86	3.23	<6.00	0.03	20.89
7.	25/10/2021	SEE/AR/10/2021/0402	23.86	18.46	<3.00	6.69	0.05	44.09
8.	28/10/2021	SEE/AR/10/2021/0470	18.16	8.22	<3.00	6.59	0.06	27.06
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Akash Pattade   
2) Aditya Naik   
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1895-DTJ-2014)	LES-CCL/FF/MF/SC/1152	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 288-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3401	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Rajvil Wada Torxem (Goa State)(G-A6)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	75	Latitude	N 15°48'40.0"
Average Wind Speed (km/hr)	1.9	Average Wind direction (Deg)	209	Longitude	E 73°52'50.2"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0032	26.12	15.71	4.07	<6.00	0.03	43.00
2.	07/10/2021	SEE/AR/10/2021/0106	18.36	9.59	4.19	<6.00	0.06	29.49
3.	11/10/2021	SEE/AR/10/2021/0182	21.76	18.09	<3.00	6.18	0.05	41.38
4.	14/10/2021	SEE/AR/10/2021/0266	16.21	13.76	<3.00	7.00	0.03	30.29
5.	18/10/2021	SEE/AR/10/2021/0316	35.60	18.42	<3.00	6.41	0.07	54.54
6.	21/10/2021	SEE/AR/10/2021/0367	26.84	15.47	<3.00	<6.00	0.05	43.56
7.	25/10/2021	SEE/AR/10/2021/0403	34.10	21.04	<3.00	6.54	0.03	57.23
8.	28/10/2021	SEE/AR/10/2021/0471	22.64	6.84	3.28	<6.00	0.06	31.62
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2024-DTD-2016)	LES-CCL/FF/MF/SC/1144	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 298-DTJ-2014 )

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/623	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Satarda(Maharashtra State)(M-A1)				
Average Ambient Temperature (°C)	31.6	Average Humidity (%)	74	Latitude	N15°43'01.3"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	204	Longitude	E 73°46'00.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0033	11.55	5.82	<3.00	7.14	0.05	18.43
2.	07/10/2021	SEE/AR/10/2021/0107	14.61	8.15	<3.00	<6.00	0.07	23.23
3.	11/10/2021	SEE/AR/10/2021/0183	21.86	12.56	<3.00	<6.00	0.06	37.11
4.	14/10/2021	SEE/AR/10/2021/0267	28.28	15.34	<3.00	7.68	0.03	45.09
5.	18/10/2021	SEE/AR/10/2021/0317	30.03	13.14	<3.00	6.15	0.05	43.88
6.	21/10/2021	SEE/AR/10/2021/0368	18.31	6.15	<3.00	7.20	0.06	25.04
7.	25/10/2021	SEE/AR/10/2021/0404	22.95	6.57	3.20	<6.00	0.06	30.72
8.	28/10/2021	SEE/AR/10/2021/0472	16.42	5.61	<3.00	<6.00	0.05	23.28
NAAQS Limits*			100	60	80	80	4	-
Units			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
Method			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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2) Aditya Naik  
Analyzed by

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*Aditya Naik*

*Nandkumar Desai*  
Reviewed by



*Anandeep Sawant*  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1901-DTJ-2014)	LES-CCL/FF/MF/SC/1149	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 104-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3402	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



# Sadekar Enviro Engineers Pvt. Ltd.

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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Dingna (Maharashtra State)(M-A2)				
Average Ambient Temperature (°C)	31.2	Average Humidity (%)	74	Latitude	N 15°46'12.3"
Average Wind Speed (km/hr)	1.5	Average Wind direction (Deg)	189	Longitude	E 73°49'20.5"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0034	21.45	10.85	<3.00	<6.00	0.03	33.44
2.	07/10/2021	SEE/AR/10/2021/0108	16.23	5.36	<3.00	<6.00	0.05	22.37
3.	11/10/2021	SEE/AR/10/2021/0184	18.40	14.55	<3.00	<6.00	0.06	35.07
4.	14/10/2021	SEE/AR/10/2021/0268	22.82	12.89	<3.00	7.32	0.05	36.25
5.	18/10/2021	SEE/AR/10/2021/0318	22.96	4.12	<3.00	6.32	0.05	26.97
6.	21/10/2021	SEE/AR/10/2021/0369	25.40	9.36	<3.00	6.71	0.07	36.87
7.	25/10/2021	SEE/AR/10/2021/0405	16.70	8.03	<3.00	6.85	0.06	25.19
8.	28/10/2021	SEE/AR/10/2021/0473	14.68	6.24	<3.00	<6.00	0.05	21.44
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

NDESA  
Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

HEAD OFF. & LAB.: Plot No. A-95, Road No. 16, Kisan Nagar Road, M.I.D.C. Wagle Industrial Area, Thane - 400 604, Maharashtra State, India.

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Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.189B-DTJ-2014)	LES-CCL/FF/MF/SC/1150	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 381-DTD-2016)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3399	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	30/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	October 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Netarde(Maharashtra State)(M-A3)				
Average Ambient Temperature (°C)	30.7	Average Humidity (%)	79	Latitude	N 15°46'11.7"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	231	Longitude	E 73°50'48.0"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	04/10/2021	SEE/AR/10/2021/0035	13.41	8.40	<3.00	<6.00	0.06	22.37
2.	07/10/2021	SEE/AR/10/2021/0109	18.45	12.68	<3.00	6.49	0.03	32.79
3.	11/10/2021	SEE/AR/10/2021/0185	16.62	6.82	<3.00	8.02	0.05	24.51
4.	14/10/2021	SEE/AR/10/2021/0269	22.34	17.55	<3.00	7.65	0.05	42.02
5.	18/10/2021	SEE/AR/10/2021/0319	30.94	13.76	<3.00	6.33	0.06	45.33
6.	21/10/2021	SEE/AR/10/2021/0370	24.68	16.22	<3.00	7.15	0.03	42.45
7.	25/10/2021	SEE/AR/10/2021/0406	21.55	13.51	<3.00	<6.00	0.05	35.55
8.	28/10/2021	SEE/AR/10/2021/0474	20.60	7.28	<3.00	6.73	0.06	30.02
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO:- SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

NDSH  
Nandkumar Desai  
Reviewed by



Arundep  
Arundep Sawant  
Authorized Signatory

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Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No	Calibrated on	Calibration due date
01	RD5- APM 460 BL(SR NO.1897-DTJ-2014)	LES-CCL/FF/MF/SC/1151	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 105-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/10/2021/0475	Date of Issue	02/11/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	28/10/2021	Temperature(°C)	28.4	Humidity (%)	68
Analysis Started On	30/10/2021	Analysis Completed On		02/11/2021	

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note** :
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Susmita Kapdoskar  
Analyzed by

  
Nandkumar Desai  
Reviewed by



  
Ananddeep Sawant  
Authorized Signatory

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/10/2021/0476	Date of Issue	02/11/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	28/10/2021	Temperature(°C)	28.4	Humidity (%)	68
Analysis Started On	30/10/2021	Analysis Completed On	02/11/2021		

### AMBIENT AIR LOCATION

Location of ambient air station	HSD Bunk (Inside Mopa Airport Premises)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
 : Test results relate only to the condition prevailing at the time of sampling.  
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 Susmita Kapdoskar  
 Analyzed by

  
 Nandkumar Desai  
 Reviewed by



  
 Ananddeep Sawant  
 Authorized Signatory



Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	24-DTD-2016	EI/FF/636	19/02/2021	18/02/2022



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/10/2021/0477	Date of Issue	02/11/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	28/10/2021	Temperature(°C)	28.4	Humidity (%)	68
Analysis Started On	30/10/2021	Analysis Completed On	02/11/2021		

### AMBIENT AIR LOCATION


Location of ambient air station	Shemecheadvan Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note** :
- Test results related only to the sample tested.
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Spemita Kapdoskar  
Analyzed by

  
Nandkumar Desai  
Reviewed by



  
Ananddeep Sawant  
Authorized Signatory

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



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## NOISE LEVEL MONITORING REPORT

Report No.	SEE/AR/10/2021/0186-0187, 0259-0260, 0321, 0288, 0320, 0353, 0356, 0289, 0355, 0352	Report Date	25/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sample Collected By	SEEPL Representative		
Sampling Plan	SEEPL/D/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10

### Chemical Testing - Atmospheric Pollution

Sr. No	Date of Monitoring	Report No.	Station ID	Zone	Sampling Location	Day Time Noise in dB(A)			Night Time Noise in dB(A)		
						Lmin	Lmax	Leq	Lmin	Lmax	Leq
1.	11/10/2021	SEE/AR/10/2021/0186	G-N1	I	Mopa Boundary	34.8	75.7	61.3	35.0	67.3	52.8
2.	11/10/2021	SEE/AR/10/2021/0187	G-N2	I	Shemecheadvan Boundary	30.3	66.6	63.1	30.0	69.6	48.9
3.	13/10/2021	SEE/AR/10/2021/0259	G-N3	C	Nagzar	32.8	71.6	59.6	34.6	64.8	46.0
4.	13/10/2021	SEE/AR/10/2021/0260	G-N4	R	Purva Casarvarnem	31.3	62.8	43.7	30.0	58.5	40.0
5.	18/10/2021	SEE/AR/10/2021/0321	G-N5	R	Chandel	30.9	66.7	48.9	30.2	63.2	40.4
6.	15/10/2021	SEE/AR/10/2021/0288	G-N6	R	Khajne Amere Porsoodem	38.7	71.5	48.3	30.5	50.5	39.8
7.	18/10/2021	SEE/AR/10/2021/0320	G-N7	R	Warkhand	30.8	62.0	49.7	30.0	46.6	38.6
8.	19/10/2021	SEE/AR/10/2021/0353	G-N8	C	Rajvil Wada Torvem	33.1	73.5	56.1	39.4	53.8	46.7
9.	20/10/2021	SEE/AR/10/2021/0356	G-N9	C	Village Panchayat Tamboxem -Mopa- Ugvem	30.4	66.6	50.8	33.3	55.8	46.5
10.	15/10/2021	SEE/AR/10/2021/0289	M-N1	R	Satarda	39.5	67.2	45.2	30.2	50.5	37.4
11.	20/10/2021	SEE/AR/10/2021/0355	M-N2	R	Dingna	30.9	65.9	45.4	30.0	57.3	38.3
12.	19/10/2021	SEE/AR/10/2021/0352	M-N3	R	Netarde	33.2	74.5	49.3	31.0	55.5	38.1

I - Industrial Zone, C - Commercial Zone, R - Residential Zone

➤ Noise Limits as per Schedule III of "The Environment (Protection) Rules, 1986" are as follows:

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial Area ( I )	75	70
(B)	Commercial Area ( C )	65	55
(C)	Residential Area ( R )	55	45
(D)	Silence Zone ( S )	50	40

➤ Day time is reckoned in between 6.00am to 10.00pm and night time is reckoned in between 10.00pm to 6.00am.

➤ \*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. A "decibel" is a unit in which noise is measured.

➤ "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

➤ Leq: It is the energy mean of the noise level over a specified period

**Note :** Monitoring has been done as per GPCB protocol for Ambient Level Noise Monitoring 2015.

: Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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Sagwan Gawas  
Monitored by

*NDES*  
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Calibration Details of Equipment used for Sampling

Noise Level Meter No.1(A0913-1393)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/346	18/07/2021	18/07/2022

Noise Level Meter No.2 (A0114-1408)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/347	18/07/2021	18/07/2022



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WORKPLACE NOISE LEVEL MONITORING REPORT			
Report No.	SEE/AR/10/2021/0478-0482	Report Date	30/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Date of Sampling	28/10/2021		

### Chemical Testing - Atmospheric Pollution

Sr. No.	Report No.	Sampling Location (From 1.0 meter off)	Noise in dB (A)
			Day Time
01.	SEE/AR/10/2021/0478	Hot Mix Plant – Linnhoff (160 TPH)	84.4
02.	SEE/AR/10/2021/0479	ATC & TB Building	72.4
03.	SEE/AR/10/2021/0480	Ripper Excavator	82.5
04.	SEE/AR/10/2021/0481	Drum Cutter	79.2
05.	SEE/AR/10/2021/0482	P.T.B. Area	76.4

- Occupational Exposure Limit for noise as per OSHA is 90dB (A) TWA (8hrly).
- \*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. A "decibel" is a unit in which noise is measured.
- \*A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- Leq: It is the energy mean of the noise level over a specified period.

**Note :** Test results related only to the sample tested.  
 : Test results relate only to the condition prevailing at the time of sampling.  
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 : Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Sanjivan Gawas  
 Monitored by

Nandkumar Desai  
 Reviewed by



Ananddeep Sawant  
 Authorized Signatory

Calibration Details of Equipment used for Sampling

Noise Level Meter No.1(A0913-1393)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/346	18/07/2021	18/07/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/10/2021/0335	Date of Issue		25/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPL/LD/FMT- 54	SEEPL/LD/FMT- 54	SEEPL/LD/FMT- 54		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	19/10/2021	Temperature(°C)	28.0	Humidity (%)	69
Analysis Started On	19/10/2021	Analysis Completed On		25/10/2021	

### STACK DETAILS

Attached To	Hot Mix Plant – Linnhoff (160 TPH)
Shape	Rectangular
Dimension	1.0 x 0.90 Mtr
Height from Ground Level	15.00 Mtr
Temperature	105 °C
Velocity of Flue Gases	11.68 m/sec
Volumetric Flue Gas Flow Rate	37843.20 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	29805.77 Nm <sup>3</sup> /hour

### POLLUTIONAL PARAMETERS

Sr. No.	Parameters	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.95	1.62	Kg/hour	IS 11255(Part II)
02.	Particulate Matter	18.84	150.00	mg/Nm <sup>3</sup>	IS 11255 (part I)

**\*\*Consent No.12/2020-PCB/510173/O0004024**

**Note :** Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Suamita Kapdoskar  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No.293 DTI-2020)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	ECL/SEEPL/2020-21/FLOW/3238A	16/12/2020	16/12/2021

FLUE GAS ANALYSER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Flue-Gas Analyser (Sr. No.20190427206A)	25/04/2021	24/04/2022



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STACK EMISSION REPORT					
Report No.	SEE/AR/10/2021/0354	Date of Issue	26/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPL/LD/FMT- 54	SEEPL/LD/FMT- 54	SEEPL/LD/FMT- 54		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	20/10/2021	Temperature(°C)	28.1	Humidity (%)	66
Analysis Started On	20/10/2021	Analysis Completed On	26/10/2021		

### STACK DETAILS

Attached To	Hot Mix Plant – Ammann(120 TPH)
Shape	Round
Dimension	0.78 Mtr
Height from Ground Level	15.00 Mtr
Temperature	90 °C
Velocity of Flue Gases	17.18 m/sec
Volumetric Flue Gas Flow Rate	29550.97 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	24250.09 Nm <sup>3</sup> /hour

### POLLUTIONAL PARAMETERS

Sr. No.	Parameters	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.77	1.62	Kg/hour	IS 11255(Part II)
02.	Particulate Matter	12.32	150.00	mg/Nm <sup>3</sup>	IS 11255 (part I)

**\*\*Consent No.12/2020-PCB/510173/O0004024**


**Note :** Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

  
Susmita Kapdoskar  
Analyzed by

  
Nandkumar Desai  
Reviewed by



  
Anandeeep Sawant  
Authorized Signatory

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Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No 458 DTH-15)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	EVET/306	20/02/2021	19/02/2022

BHOOMI GAS ANALYSERS

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Bhoomi Flexi (SI NO 5000381)	14/06/2021	13/06/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/10/2021/0336	Date of Issue	25/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPLD/FMT- 54	Sampling Procedure No.	SEEPLQSP-10		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	19/10/2021	Temperature(°C)	28.0	Humidity (%)	69
Analysis Started On	19/10/2021	Analysis Completed On	25/10/2021		

### STACK DETAILS

Attached To	Diesel Generator (500 KVA) (Sr. No.01/17/09/1460)
Shape	Round
Diameter	0.12 Mtr
Height From Ground Level	8.0 Mtr
Material of Construction	M.S.
Temperature	407 °C
Velocity of Flue Gases	17.10 m/sec
Volumetric Flue Gas Flow Rate	695.63 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	304.11 Nm <sup>3</sup> /hour
Type of Fuel	H.S.D.
Fuel Consumption	19.00 lit/hr

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameter	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.12	2.1	Kg/hour	IS 11255(Part II)
02.	NO <sub>x</sub>	0.22	9.2	g/kw-hr	IS 11255(Part VII)
03.	Carbon Monoxide	0.09	3.5	g/kw-hr	By Flue Gas Analyzer
04.	Hydrocarbons	0.08	1.3	g/kw-hr	By Flue Gas Analyzer
05.	Particulate Matter	0.11	0.3	g/kw-hr	IS 11255 (part I)

\*\* Consent No.12/2020-PCB/510173/O0004024

- Note :** Test results related only to the sample tested.  
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 : Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report

Susmita Kapdoskar  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No.293 DTI-2020)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	ECL/SEEPL/2020-21/FLOW3236A	16/12/2020	16/12/2021

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

FLUE GAS ANALYSER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Flue-Gas Analyser (Sr. No.20190427206A)	25/04/2021	24/04/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/10/2021/0357	Date of Issue	26/10/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	20/10/2021	Temperature(°C)	28.1	Humidity (%)	66
Analysis Started On	20/10/2021	Analysis Completed On	26/10/2021		

### STACK DETAILS

Attached To	Diesel Generator (125 KVA) (Sr. No. 01/16/09/2898)
Shape	Round
Diameter	0.07 Mtr
Height From Ground Level	4.5 Mtr
Material of Construction	M.S.
Temperature	350 °C
Velocity of Flue Gases	16.78 m/sec
Volumetric Flue Gas Flow Rate	229.55 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	109.73 Nm <sup>3</sup> /hour
Type of Fuel	H.S.D.
Fuel Consumption	7.00 lit/hr


### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.03	0.525	Kg/hour	IS 11255(Part II)
02.	NO <sub>x</sub>	0.20	9.2	g/kw-hr	IS 11255(Part VII)
03.	Carbon Monoxide	0.05	3.5	g/kw-hr	By Flue Gas Analyzer
04.	Hydrocarbons	0.04	1.3	g/kw-hr	By Flue Gas Analyzer
05.	Particulate Matter	0.09	0.3	g/kw-hr	IS 11255 (part I)


**\*\*Consent No.12/2020-PCB/510173/O0004024**

- Note :** Test results related only to the sample tested.  
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 Sushita Kapdoskar  
 Analyzed by

  
 Nandkumar Desai  
 Reviewed by



  
 Anandhep Sawant  
 Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No.293 DTI-2020)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	ECL/SEEPL/2020-21/FLOW/3238A	16/12/2020	16/12/2021

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

FLUE GAS ANALYSER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Flue-Gas Analyser (Sr. No.20190427206A)	25/04/2021	24/04/2022



# Sadekar Enviro Engineers Pvt. Ltd.

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## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/10/2021/199	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling point	Borewell 1			
Sample details	Ground Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.72	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.88	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	80.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	153.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	14.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2-</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	106.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By



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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/10/2021/199	Issue Date	20/10/2021
Order / Reference	As per dated 14/10/2021	Sample Received On	14/10/2021
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	18.43	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.03	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	16.03	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	<0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	5.7	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	4.2	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By



Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/10/2021/199	Issue Date	20/10/2021
Order / Reference	As per dated 14/10/2021	Sample Received On	14/10/2021
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



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## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/10/2021/200	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling point	Borewell No. 2			
Sample details	Ground Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass bottle + PVC Can	Sample Quantity	1000 ml + 4000ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.96	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.54	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	90.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	167.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	17.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	84.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

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Page 76 of 430

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/10/2021/200	Issue Date	20/10/2021
Order / Reference	As per dated 14/10/2021	Sample Received On	14/10/2021
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	18.43	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.28	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	10.68	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	<0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	6.20	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	5.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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2. Anisha Parab  
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Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/10/2021/200	Issue Date	20/10/2021
Order / Reference	As per dated 14/10/2021	Sample Received On	14/10/2021
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*NDesai*  
Nandkumar Desai  
Reviewed By



*Anandjeep Sawant*  
Anandjeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



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## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/10/2021/201	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling point	UG-Tank			
Sample details	Treated Water sample	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.90	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.30	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	36.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	75.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	14.01	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2-</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	44.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39) : 1991

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/10/2021/201	Issue Date	20/10/2021
Order / Reference	As per dated 14/10/2021	Sample Received On	14/10/2021
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	15.23	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.03	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	0.49	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	<0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	1.65	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/10/2021/201	Issue Date	20/10/2021
Order / Reference	As per dated 14/10/2021	Sample Received On	14/10/2021
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*Ananddeep*  
Ananddeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/10/2021/202	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling point	P.T.B			
Sample details	Drinking Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/10/2021/203	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling point	V.N.C Colony			
Sample details	Drinking Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/10/2021/204	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling point	R.R. Canteen			
Sample details	Drinking Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



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## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/10/2021/205	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling point	LSC Colony			
Sample details	Drinking Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



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ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/10/2021/345	Issue Date	30/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 25/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Inlet Water	Date of collection	25/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	25/10/2021	
Analysis Started On	25/10/2021	Analysis Completed On	30/10/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	4.30	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	2040.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	599.94	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	260.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	16.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/10/2021/346	Issue Date	30/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 25/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Outlet Water	Date of collection	25/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	25/10/2021	
Analysis Started On	25/10/2021	Analysis Completed On	30/10/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	8.03	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	140.00	mg/lit	250.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	26.25	mg/lit	30.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	62.00	mg/lit	100.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	6.40	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G

**Note:** Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

*Shweta*  
Shweta Sawant  
Analyzed By

*ND 25/10*  
Nandkumar Desai  
Reviewed By



*Asandeep*  
Asandeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/10/2021/206	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp ° C	Humidity %
			28.2	69
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Inlet Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.15	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	736.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	230.00	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	189.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	10.60	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

**Note:** Test results related only to the sample tested.

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Shweta Sawant  
Analyzed By

Nandkumar Desai  
Reviewed By



Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/10/2021/207	Issue Date	20/10/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 14/10/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.2	69
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Outlet Water	Date of collection	14/10/2021	
Sample Collected by	SEEPL Representative	Sample Received On	14/10/2021	
Analysis Started On	14/10/2021	Analysis Completed On	20/10/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	7.51	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	28.00	mg/lit	50.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	5.25	mg/lit	10.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	12.00	mg/lit	20.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	2.80	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G
6.	Ammonia	2.80	mg/lit	5.00	APHA( 23 <sup>rd</sup> Edition ) 4500 NH3B C
7.	Total Nitrogen ( as N)	4.37	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 4500 N-B

### Microbiological Parameters

8.	Faecal coliforms at 44.5°C for 24 hrs.	58	MPN Index/100ml	100	APHA ( 23 <sup>rd</sup> Edition ) 9221-E
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1. Shweta Sawant

2. Anisha Parab  
Analyzed By

Nandkumar Desai  
Reviewed By



Ananddeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
04.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/20...
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



# Sadekar Enviro Engineers Pvt. Ltd.

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SAVE WATER  
SAVE LIFE

Lab. accredited by MOEF & CC Valid up to 03.11.2023 • Certified by ISO 9001:2015 & ISO 45001 : 2018

## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	November 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State) (G-A1)				
Average Ambient Temperature (°C)	30.8	Average Humidity (%)	76	Latitude	N 15°45'51.1"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	219	Longitude	E 73°56'32.4"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				


Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0045	32.59	18.81	<3.00	6.58	0.06	54.25
2.	05/11/2021	SEE/AR/11/2021/0140	15.23	6.79	4.45	<6.00	0.05	23.31
3.	08/11/2021	SEE/AR/11/2021/0179	57.53	25.70	5.60	18.16	0.07	85.00
4.	11/11/2021	SEE/AR/11/2021/0242	71.89	47.06	5.18	17.84	0.06	122.06
5.	15/11/2021	SEE/AR/11/2021/0305	25.22	17.61	9.83	18.96	0.05	43.82
6.	18/11/2021	SEE/AR/11/2021/0355	48.12	30.49	3.90	11.29	0.03	80.08
7.	22/11/2021	SEE/AR/11/2021/0471	23.29	7.39	3.74	6.47	0.06	31.34
8.	25/11/2021	SEE/AR/11/2021/0543	16.86	5.04	4.09	8.41	0.05	22.39
9.	29/11/2021	SEE/AR/11/2021/0593	25.47	11.25	4.99	<6.00	0.05	37.20
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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- : Test methods of analyzed parameters are back side of analysis report.

1) Aditya Naik   
2) Dipali Sawant   
**Analyzed by**

  
**Nandkumar Desai**  
**Reviewed by**



  
**Ananddeep Sawant**  
**Authorized Signatory**

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Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2228-DTK-2011)	EI/FF/620	19/02/2021	18/02/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 290-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/630	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022

## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemeheadvan Boundary(Goa State) (G-A2)				
Average Ambient Temperature (°C)	30.4	Average Humidity (%)	72	Latitude	N 15°42'06.1"
Average Wind Speed (km/hr)	1.2	Average Wind direction (Deg)	234	Longitude	E 73°49'21.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0046	24.79	17.27	3.67	9.95	0.05	43.90
2.	05/11/2021	SEE/AR/11/2021/0141	19.28	11.73	<3.00	7.45	0.03	31.61
3.	08/11/2021	SEE/AR/11/2021/0180	58.34	21.01	10.13	9.25	0.06	81.76
4.	11/11/2021	SEE/AR/11/2021/0243	76.71	37.13	12.63	13.93	0.08	116.48
5.	15/11/2021	SEE/AR/11/2021/0306	24.72	11.03	5.24	10.88	0.07	37.25
6.	18/11/2021	SEE/AR/11/2021/0356	36.87	17.32	4.42	9.91	0.05	54.91
7.	22/11/2021	SEE/AR/11/2021/0472	20.39	6.44	4.09	<6.00	0.03	26.95
8.	25/11/2021	SEE/AR/11/2021/0544	26.68	13.16	<3.00	10.21	0.07	40.42
9.	29/11/2021	SEE/AR/11/2021/0594	93.56	52.89	<3.00	<6.00	0.06	149.02
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

1) Aditya Naik

2) Dipali Sawant

Analyzed by

  
Nandkumar Desai  
Reviewed by

  
Apandeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2028-DTD-2016)	LES-CCL/FF/MF/SC/1146	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR No. 05-DTK-2011)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550	EI/FF/624	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022

## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Nagzar(Goa State) (G-A3)				
Average Ambient Temperature (°C)	29.9	Average Humidity (%)	75	Latitude	N 15°45'37.3"
Average Wind Speed (km/hr)	2.1	Average Wind direction (Deg)	254	Longitude	E 73°53'14.22"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0047	21.35	16.72	<3.00	<6.00	0.03	38.92
2.	05/11/2021	SEE/AR/11/2021/0142	20.45	13.43	<3.00	<6.00	0.06	34.13
3.	08/11/2021	SEE/AR/11/2021/0181	52.97	19.92	<3.00	8.59	0.05	75.00
4.	11/11/2021	SEE/AR/11/2021/0244	57.69	34.81	3.71	13.90	0.07	93.87
5.	15/11/2021	SEE/AR/11/2021/0307	29.03	13.39	7.21	7.04	0.03	43.10
6.	18/11/2021	SEE/AR/11/2021/0357	22.19	6.11	4.73	6.85	0.05	29.17
7.	22/11/2021	SEE/AR/11/2021/0473	16.82	5.16	<3.00	<6.00	0.07	22.39
8.	25/11/2021	SEE/AR/11/2021/0545	22.20	12.89	<3.00	8.70	0.06	35.32
9.	29/11/2021	SEE/AR/11/2021/0595	26.65	5.57	<3.00	<6.00	0.05	32.87
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

1) Aditya Naik  
2) Dipali Sawant  
Analyzed by

NDesal  
Nandkumar Desal  
Reviewed by



A. Sawant  
Anandeeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- CEIS 121(SR NO.01-DTB-2017)	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 286-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/628	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022

## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Purva Casarvarnem (Goa State)(G-A4)				
Average Ambient Temperature (°C)	30.1	Average Humidity (%)	70	Latitude	N 15°41'41.9"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	202	Longitude	E 73°50'16.6"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0048	29.03	15.43	<3.00	6.07	0.05	46.71
2.	05/11/2021	SEE/AR/11/2021/0143	16.70	8.57	<3.00	6.51	0.03	26.53
3.	08/11/2021	SEE/AR/11/2021/0182	44.52	20.50	8.11	14.02	0.06	67.81
4.	11/11/2021	SEE/AR/11/2021/0245	72.37	42.50	7.15	9.57	0.07	118.08
5.	15/11/2021	SEE/AR/11/2021/0308	37.84	21.58	8.70	9.02	0.05	61.55
6.	18/11/2021	SEE/AR/11/2021/0358	30.97	8.77	<3.00	6.91	0.03	40.68
7.	22/11/2021	SEE/AR/11/2021/0474	18.37	7.07	3.22	<6.00	0.05	25.77
8.	25/11/2021	SEE/AR/11/2021/0546	21.35	13.51	<3.00	<6.00	0.05	35.69
9.	29/11/2021	SEE/AR/11/2021/0596	43.88	20.33	<3.00	<6.00	0.06	65.32
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Aditya Naik

2) Dipali Sawant

Analyzed by

N. Desai  
Nandkumar Desai  
Reviewed by



Amrdeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 299-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3400	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Khajne Amere Porscodem (Goa State) (G-A5)				
Average Ambient Temperature (°C)	31.2	Average Humidity (%)	74	Latitude	N 15°40'38.0"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	233	Longitude	E 73°46'21.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0049	28.09	19.84	<3.00	7.41	0.05	49.48
2.	05/11/2021	SEE/AR/11/2021/0144	21.67	12.10	<3.00	6.65	0.03	35.13
3.	08/11/2021	SEE/AR/11/2021/0183	53.64	13.85	<3.00	15.99	0.07	69.30
4.	11/11/2021	SEE/AR/11/2021/0246	81.31	43.16	3.86	14.12	0.05	127.01
5.	15/11/2021	SEE/AR/11/2021/0309	26.99	13.60	<3.00	10.35	0.06	42.27
6.	18/11/2021	SEE/AR/11/2021/0359	31.65	15.34	<3.00	7.30	0.03	48.73
7.	22/11/2021	SEE/AR/11/2021/0475	15.99	5.24	<3.00	<6.00	0.06	21.47
8.	25/11/2021	SEE/AR/11/2021/0547	21.06	14.72	3.11	6.71	0.05	36.48
9.	29/11/2021	SEE/AR/11/2021/0597	23.62	15.09	<3.00	<6.00	0.03	39.61
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Aditya Naik  
2) Dipali Sawant  
**Analyzed by**

*NDES 04*  
Nandkumar Desai  
**Reviewed by**



*Anandup*  
Anandup Sawant  
**Authorized Signatory**

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1895-DTJ-2014)	LES-CCL/FF/MF/SC/1152	15/07/2021	14/07/2022

UV Spectrophotometer:

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 288-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3401	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Rajvil Wada Torxem (Goa State)(G-A6)				
Average Ambient Temperature (°C)	30.8	Average Humidity (%)	72	Latitude	N 15°48'40.0"
Average Wind Speed (km/hr)	1.5	Average Wind direction (Deg)	224	Longitude	E 73°52'50.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0050	32.65	6.69	<3.00	<6.00	0.06	40.00
2.	05/11/2021	SEE/AR/11/2021/0145	26.87	14.85	<3.00	6.64	0.05	43.29
3.	08/11/2021	SEE/AR/11/2021/0184	44.38	21.37	6.36	<6.00	0.03	67.90
4.	11/11/2021	SEE/AR/11/2021/0247	84.90	38.76	3.65	9.88	0.06	127.32
5.	15/11/2021	SEE/AR/11/2021/0310	24.13	15.72	4.90	7.31	0.05	40.28
6.	18/11/2021	SEE/AR/11/2021/0360	20.50	13.02	4.04	7.30	0.03	34.16
7.	22/11/2021	SEE/AR/11/2021/0476	12.74	3.45	<3.00	6.47	0.06	16.59
8.	25/11/2021	SEE/AR/11/2021/0548	22.34	13.10	<3.00	7.71	0.05	36.10
9.	29/11/2021	SEE/AR/11/2021/0598	40.58	10.94	<3.00	<6.00	0.03	51.64
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Aditya Naik  
2) Dipali Sawant  
**Analyzed by**

**Reviewed by**  
Nandkumar Desai



**Authorized Signatory**  
Ananddeep Sawant

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2024-DTD-2016)	LES-CCL/FF/MF/SC/1144	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 298-DTI-2014 )

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/623	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Satarda(Maharashtra State)(M-A1)				
Average Ambient Temperature (°C)	31.2	Average Humidity (%)	74	Latitude	N15°43'01.3"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	254	Longitude	E 73°46'00.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0051	21.43	14.97	<3.00	<6.00	0.05	37.85
2.	05/11/2021	SEE/AR/11/2021/0146	18.56	5.66	<3.00	<6.00	0.03	24.46
3.	08/11/2021	SEE/AR/11/2021/0185	37.55	18.50	5.50	12.54	0.06	57.23
4.	11/11/2021	SEE/AR/11/2021/0248	76.97	35.80	<3.00	10.06	0.07	116.64
5.	15/11/2021	SEE/AR/11/2021/0311	23.90	11.73	7.40	8.73	0.05	36.26
6.	18/11/2021	SEE/AR/11/2021/0361	24.42	17.42	7.48	<6.00	0.05	42.71
7.	22/11/2021	SEE/AR/11/2021/0477	13.50	4.24	<3.00	<6.00	0.03	18.47
8.	25/11/2021	SEE/AR/11/2021/0549	19.70	7.28	3.81	7.61	0.06	26.83
9.	29/11/2021	SEE/AR/11/2021/0599	23.80	6.99	<3.00	<6.00	0.05	31.02
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Aditya Naik  
2) Dipali Sawant  
Analyzed by

NDES  
Nandkumar Desai  
Reviewed by



Aditya  
Aditya Sawant  
Authorized Signatory

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Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1901-DTJ-2014)	LES-CCL/FF/MF/SC/1149	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 104-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3402	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



AMBIENT AIR QUALITY MONITORING REPORT			
Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

AMBIENT AIR LOCATION					
Location of ambient air station	Dingna(Maharashtra State)(M-A2)				
Average Ambient Temperature (°C)	30.7	Average Humidity (%)	72	Latitude	N 15°46'12.3"
Average Wind Speed (km/hr)	1.4	Average Wind direction (Deg)	227	Longitude	E 73°49'20.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0052	21.45	17.09	<3.00	<6.00	0.05	39.79
2.	05/11/2021	SEE/AR/11/2021/0147	18.38	11.02	3.51	<6.00	0.06	29.76
3.	08/11/2021	SEE/AR/11/2021/0186	35.60	12.43	7.14	7.40	0.03	49.36
4.	11/11/2021	SEE/AR/11/2021/0249	44.81	28.15	<3.00	8.66	0.05	76.06
5.	15/11/2021	SEE/AR/11/2021/0312	18.63	11.52	6.33	6.48	0.03	30.73
6.	18/11/2021	SEE/AR/11/2021/0362	12.13	6.28	3.35	7.00	0.06	18.77
7.	22/11/2021	SEE/AR/11/2021/0478	18.58	8.82	<3.00	<6.00	0.03	27.58
8.	25/11/2021	SEE/AR/11/2021/0550	24.09	12.48	<3.00	6.95	0.05	36.80
9.	29/11/2021	SEE/AR/11/2021/0600	20.05	8.28	<3.00	<6.00	0.06	29.79
NAAQS Limits*			100	60	80	80	4	-
Units			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
Method			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

**\*NATIONAL AMBIENT AIR STANDARDS (2009)**

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2) Dipali Sawant  
Analyzed by

NDESJ  
Nandkumar Desai  
Reviewed by



Anandeeep  
Anandeeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.1898-DTJ-2014)	LES-CCL/FF/MF/5C/1150	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 381-DTD-2016)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/5C/3399	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



AMBIENT AIR QUALITY MONITORING REPORT			
Report Date	02/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa.		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	Nov2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Netarde(Maharashtra State)(M-A3)				
Average Ambient Temperature (°C)	31.4	Average Humidity (%)	76	Latitude	N 15°46'11.7"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	265	Longitude	E 73°50'48.0"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	01/11/2021	SEE/AR/11/2021/0053	17.65	7.98	<3.00	<6.00	0.05	28.06
2.	05/11/2021	SEE/AR/11/2021/0148	14.68	5.86	<3.00	<6.00	0.03	20.97
3.	08/11/2021	SEE/AR/11/2021/0187	48.12	17.38	3.84	<6.00	0.06	66.18
4.	11/11/2021	SEE/AR/11/2021/0250	24.03	14.57	<3.00	7.11	0.05	41.28
5.	15/11/2021	SEE/AR/11/2021/0313	22.58	6.84	5.63	9.34	0.03	30.31
6.	18/11/2021	SEE/AR/11/2021/0363	24.03	13.77	<3.00	6.97	0.05	38.29
7.	22/11/2021	SEE/AR/11/2021/0479	18.85	2.69	<3.00	6.32	0.06	21.71
8.	25/11/2021	SEE/AR/11/2021/0551	18.54	10.60	<3.00	<6.00	0.03	29.27
9.	29/11/2021	SEE/AR/11/2021/0601	30.69	13.43	<3.00	<6.00	0.05	44.62
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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2) Dipali Sawant

Analyzed by

Nandkumar Desai  
Reviewed by



Amaldeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No	Calibrated on	Calibration due date
01	RD5- APM 460 BL(SR NO.1897-DTJ-2014)	LES-CCL/FF/MF/SC/1151	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 105-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	21/11/2020	21/11/2021

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-306/307, Plot No. 01, Patel Estate, Reis Margis, Verem, Aho, Old Belim Road, Bunder, Porvurim, Panaji-Goa-403 101.  
Goa State, India. ☎ : (0832) 2411322 / 2411323 • E-mail : startatgoa@rediffmail.com

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AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/11/2021/0552	Date of Issue	01/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	25/11/2021	Temperature(°C)	28.1	Humidity (%)	69
Analysis Started On	29/11/2021	Analysis Completed On	01/12/2021		

### AMBIENT AIR LOCATION


Location of ambient air station	Mopa Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

**Note :** Test results related only to the sample tested.  
 : Test results relate only to the condition prevailing at the time of sampling.  
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 : Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

  
 Sushmita Kapdoskar  
 Analyzed by

  
 Nandkumar Desai  
 Reviewed by



  
 Arundeeep Sawant  
 Authorized Signatory

**HEAD OFF. & LAB.:** 1 Plot No. A-95, Road No. 16, Kisan Nagar Road, M.I.D.C. Wagle Industrial Area, Thane - 400 604, Maharashtra State, India.  
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**BRANCH OFF.:** 1 310, Dempo Towers, EDC Patto, Panaji-403 001, Goa State, India ☎ : (0832) 2437048 / 2437164  
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Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	24-DTD-2016	EI/FF/636	19/02/2021	18/02/2022



Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	24-DTD-2016	EI/FF/636	19/02/2021	18/02/2022



# Sadekar Enviro Engineers Pvt. Ltd.

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AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/11/2021/0554	Date of Issue	01/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	25/11/2021	Temperature(°C)	28.1	Humidity (%)	69
Analysis Started On	29/11/2021	Analysis Completed On	01/12/2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemecheadvan Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
 : Test results relate only to the condition prevailing at the time of sampling.  
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 : Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Susmita Kapdoskar  
Analyzed by

Nandkumar Desai  
Reviewed by



Arundeeep Sawant  
Authorized Signatory

HEAD OFF. & LAB. : Plot No. A-95, Road No. 16, Kisan Nagar Road, M.I.D.C. Wagle Industrial Area, Thane - 400 604, Maharashtra State, India.  
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E-mail : sadekarenviro@rediffmail.com \* Website : www.sadekarenviro.com



Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	24-DTD-2016	EI/FF/636	19/02/2021	18/02/2022



# Sadekar Enviro Engineers Pvt. Ltd.

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NOISE LEVEL MONITORING REPORT			
Report No.	SEE/AR/11/2021/0266-0267, 0423-0424, 0315, 0530, 0314, 0586, 0615, 0531, 0587, 0616	Report Date	02/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sample Collected By	SEEPL Representative		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10

### Chemical Testing - Atmospheric Pollution

Sr. No	Date of Monitoring	Report No.	Station ID	Zone	Sampling Location	Day Time Noise in dB(A)			Night Time Noise in dB(A)		
						Lmin	Lmax	Leq	Lmin	Lmax	Leq
1.	11/11/2021	SEE/AR/11/2021/0266	G-N1	I	Mopa Boundary	30.6	79.7	62.0	30.2	76.9	50.9
2.	11/11/2021	SEE/AR/11/2021/0267	G-N2	I	Shemecheedvan Boundary	35.7	86.3	57.8	31.6	78.4	52.7
3.	19/11/2021	SEE/AR/11/2021/0423	G-N3	C	Nagzar	30.7	76.6	59.7	34.8	56.3	43.4
4.	19/11/2021	SEE/AR/11/2021/0424	G-N4	R	Purva Casarvamem	33.9	57.7	47.7	31.9	61.7	41.1
5.	15/11/2021	SEE/AR/11/2021/0315	G-N5	R	Chandel	30.0	50.9	50.1	30.1	50.9	40.0
6.	24/11/2021	SEE/AR/11/2021/0530	G-N6	R	Khajne Amere Porcodem	30.0	54.9	42.4	30.0	49.7	39.6
7.	15/11/2021	SEE/AR/11/2021/0314	G-N7	R	Warkhand	30.0	86.6	52.4	30.0	58.1	40.4
8.	28/11/2021	SEE/AR/11/2021/0586	G-N8	C	Rajvil Wada Torxem	31.9	60.6	53.0	33.2	65.6	46.4
9.	30/11/2021	SEE/AR/11/2021/0615	G-N9	C	Village Panchayat Tamboxam -Mopa- Ugvem	30.0	59.9	53.4	30.0	59.8	49.7
10.	24/11/2021	SEE/AR/11/2021/0531	M-N1	R	Salarda	30.4	60.7	42.9	30.3	49.8	38.9
11.	28/11/2021	SEE/AR/11/2021/0587	M-N2	R	Dingna	30.0	59.6	45.0	30.1	49.4	36.9
12.	30/11/2021	SEE/AR/11/2021/0616	M-N3	R	Netarde	30.0	70.6	50.2	30.1	59.3	38.7

I - Industrial Zone, C - Commercial Zone, R - Residential Zone

> Noise Limits as per Schedule III of "The Environment (Protection) Rules, 1986" are as follows:

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial Area ( I )	75	70
(B)	Commercial Area ( C )	65	55
(C)	Residential Area ( R )	55	45
(D)	Silence Zone ( S )	50	40

> Day time is reckoned in between 6.00am to 10.00pm and night time is reckoned in between 10.00pm to 6.00am.

> \*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. A "decibel" is a unit in which noise is measured.

> "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

> Leq: It is the energy mean of the noise level over a specified period

Note : Monitoring has been done as per GPCB protocol for Ambient Level Noise Monitoring 2015.

: Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Sahjvan Gawas  
Monitored by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

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Calibration Details of Equipment used for Sampling

Noise Level Meter No.1(A0913-1393)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/346	18/07/2021	18/07/2022

Noise Level Meter No.2 (A0114-1408)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/347	18/07/2021	18/07/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/219	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	Borewell 1			
Sample details	Ground Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.12	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.70	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	108.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	150.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	15.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	108.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Halmakar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By

Anandeeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/11/2021/219	Issue Date	17/11/2021
Order / Reference	As per dated 11/11/2021	Sample Received On	11/11/2021
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	16.83	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.40	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	16.12	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.02	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	19.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	8.50	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By



Anandkumar Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/11/2021/219	Issue Date	17/11/2021
Order / Reference	As per dated 11/11/2021	Sample Received On	11/11/2021
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By

Anandeeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/220	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	Borewell No. 2			
Sample details	Ground Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass bottle + PVC Can	Sample Quantity	1000 ml + 4000ml	

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.43	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.27	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	94.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	130.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	17.01	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	82.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By



Arunjeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/11/2021/220	Issue Date	17/11/2021
Order / Reference	As per dated 11/11/2021	Sample Received On	11/11/2021
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	16.83	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.52	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	9.71	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	18.50	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	10.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmakar  
2. Anisha Parab  
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Nandkumar Desai  
Reviewed By

Anandeeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/11/2021/220	Issue Date	17/11/2021
Order / Reference	As per dated 11/11/2021	Sample Received On	11/11/2021
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**


Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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 1. Shreya Harmalkar  
 2. Anisha Parab   
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 Anandeeep Sawant  
 Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/221	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	WTP- (UG-Tank)			
Sample details	Treated Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.08	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.45	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	22.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	42.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	14.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2-</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	28.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

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2. Anisha Parab  
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NDESCY  
Nandkumar Desai  
Reviewed By



Ananddeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/11/2021/221	Issue Date	17/11/2021
Order / Reference	As per dated 11/11/2021	Sample Received On	11/11/2021
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	8.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.32	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	1.94	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	4.20	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	0.90	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/11/2021/221	Issue Date	17/11/2021
Order / Reference	As per dated 11/11/2021	Sample Received On	11/11/2021
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Microbiological Parameters


Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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 1. Shreya Harmalkar  
 2. Anisha Parab   
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 Nandkumar Desai  
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 Arandeep Sawant  
 Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



# Sadekar Enviro Engineers Pvt. Ltd.

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## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/222	Issue Date	15/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling point	R.R Canteen			
Sample details	Drinking Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	15/11/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*Anisha Parab*

Anisha Parab  
Analyzed by

*Nandkumar Desai*  
Nandkumar Desai  
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*Ananddeep Sawant*  
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Authorized Signatory

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Gazetted by Ministry of Environment, Forest & Climate Change, Govt Of India, S. O. 957 (E).

BRANCH OFF. : 310, Dempo Towers, EDC Patto, Panaji-403 001, Goa State, India ☎ : (0832) 2437048 / 2437164

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/216	Issue Date	15/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	V.N.C Colony			
Sample details	Drinking Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	15/11/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*Ananddeep Sawant*  
Ananddeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/217	Issue Date	15/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	P.T.B			
Sample details	Drinking Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	15/11/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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Anisha Parab  
Analyzed by



Nandkumar Desai  
Reviewed By

Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/218	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	LSC Colony			
Sample details	Drinking Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G


**Note:** Test results related only to the sample tested.

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Reviewed By

  
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Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/214	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Inlet Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

#### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.27	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	2760.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	800.00	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	314.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	21.40	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

Note: Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.



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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/215	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Outlet Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	7.10	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	132.00	mg/lit	250.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	21.58	mg/lit	30.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	47.00	mg/lit	100.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	6.00	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

Note: Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.



Shreya Harmalkar  
Analyzed By

Nandkumar Desai  
Reviewed By

Anandeeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/11/2021/223	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Inlet Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.20	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	552.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	185.64	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	153.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	12.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

Note: Test results related only to the sample tested.

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*Shweta*  
Shweta Sawant  
Analyzed By

*Nandkumar*  
Nandkumar Desai  
Reviewed By

*Anand*  
Anand Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/11/2021/224	Issue Date	17/11/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 11/11/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/D/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Outlet Water	Date of collection	11/11/2021	
Sample Collected by	SEEPL Representative	Sample Received On	11/11/2021	
Analysis Started On	11/11/2021	Analysis Completed On	17/11/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

#### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	7.39	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+B
2.	Chemical Oxygen Demand (COD)	20.00	mg/lit	50.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	5.00	mg/lit	10.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	10.00	mg/lit	20.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	2.00	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G
6.	Ammonia	3.34	mg/lit	5.00	APHA( 23 <sup>rd</sup> Edition ) 4500 NH3B C
7.	Total Nitrogen ( as N)	7.00	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 4500 N-B

#### Microbiological Parameters

8.	Faecal coliforms at 44.5°C for 24 hrs.	63	MPN Index/100ml	100	APHA ( 23 <sup>rd</sup> Edition ) 9221-E
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**Note:** Test results related only to the sample tested.

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1. Shweta Sawant

2. Anisha Parab

Analyzed By

*Shweta Sawant*  
*Anisha Parab*

10/8/2021  
Nandkumar Desai  
Reviewed By



*Anandkumar*  
Anandkumar Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
04.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022.		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State) (G-A1)				
Average Ambient Temperature (°C)	31.4	Average Humidity (%)	74	Latitude	N 15°45'51.1"
Average Wind Speed (km/hr)	1.2	Average Wind direction (Deg)	213	Longitude	E 73°56'32.4"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0063	7.22	<5.00	<3.00	6.19	0.05	9.88
2.	06/12/2021	SEE/AR/12/2021/0198	18.22	12.81	<3.00	13.60	0.06	31.53
3.	09/12/2021	SEE/AR/12/2021/0364	34.36	18.88	7.15	7.32	0.03	54.27
4.	13/12/2021	SEE/AR/12/2021/0436	41.69	22.58	<3.00	5.76	0.03	65.34
5.	16/12/2021	SEE/AR/12/2021/0540	61.51	14.55	3.23	12.02	0.05	78.63
6.	20/12/2021	SEE/AR/12/2021/0634	55.38	17.59	3.36	8.06	0.06	73.51
7.	23/12/2021	SEE/AR/12/2021/0715	81.49	32.60	<3.00	15.08	0.07	116.45
8.	27/12/2021	SEE/AR/12/2021/0837	44.01	19.54	3.88	6.72	0.08	65.93
9.	30/12/2021	SEE/AR/12/2021/0896	70.74	23.49	4.17	6.23	0.10	97.52
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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- : Test methods of analyzed parameters are back side of analysis report.

1) Akash Paltade *Paltade*  
 2) Aditya Naik *Naik*  
 Analyzed by

*NOES04*  
 Nandkumar Desai  
 Reviewed by



*Amrutesh*  
 Amrutesh Sawant  
 Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2228-DTK-2011)	EI/FF/620	19/02/2021	18/02/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 290-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/630	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-308/307, Plot No. 61, Patel Estate, Reis Magos, Verem, Alto, Old Belim Road, Bardez, Porvorim, Panaji-Goa-403 101.  
Goa State, India. ID : (0832) 2411322 / 2411323 • E-mail : starlabgoa@rediffmail.com

SPM: LIFEEN  
SPM: LIFE

Lab accredited by NIEF & GC Valid up to 03.11.2023 • Certified by ISO 9001:2015 & ISO 45001 : 2018

## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemeheadvan Boundary(Goa State) (G-A2)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	72	Latitude	N 15°42'06.1"
Average Wind Speed (km/hr)	1.1	Average Wind direction (Deg)	198	Longitude	E 73°49'21.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0064	10.92	<5.00	<3.00	<6.00	0.03	6.56
2.	06/12/2021	SEE/AR/12/2021/0199	19.90	13.60	4.57	15.79	0.05	33.92
3.	09/12/2021	SEE/AR/12/2021/0365	44.64	21.46	3.56	10.25	0.06	67.77
4.	13/12/2021	SEE/AR/12/2021/0437	65.42	23.29	<3.00	8.99	0.05	91.28
5.	16/12/2021	SEE/AR/12/2021/0541	74.44	15.05	<3.00	9.09	0.03	92.28
6.	20/12/2021	SEE/AR/12/2021/0635	90.77	30.15	3.10	7.25	0.05	122.16
7.	23/12/2021	SEE/AR/12/2021/0716	79.44	41.29	<3.00	10.02	0.06	123.45
8.	27/12/2021	SEE/AR/12/2021/0838	56.53	22.37	<3.00	10.27	0.09	82.01
9.	30/12/2021	SEE/AR/12/2021/0897	62.69	35.18	<3.00	9.34	0.08	100.62
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	mg/ m <sup>3</sup>	µg/ m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Anand Deep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2028-DTD-2016)	LES-CCL/FF/MF/SC/1146	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR No. 05-DTK-2011)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550	EI/FF/624	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Nagzar(Goa State) (G-A3)				
Average Ambient Temperature (°C)	31.4	Average Humidity (%)	75	Latitude	N 15°45'37.3"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	234	Longitude	E 73°53'14.22"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0065	7.14	<5.00	<3.00	<6.00	0.06	4.75
2.	06/12/2021	SEE/AR/12/2021/0200	21.36	16.63	<3.00	12.44	0.03	39.20
3.	09/12/2021	SEE/AR/12/2021/0366	28.65	16.43	6.25	8.46	0.05	45.94
4.	13/12/2021	SEE/AR/12/2021/0438	39.95	23.45	<3.00	20.13	0.03	64.10
5.	16/12/2021	SEE/AR/12/2021/0542	51.25	29.11	4.84	8.08	0.06	81.63
6.	20/12/2021	SEE/AR/12/2021/0636	61.97	27.03	<3.00	8.61	0.03	91.07
7.	23/12/2021	SEE/AR/12/2021/0717	73.89	31.06	8.75	7.76	0.08	106.63
8.	27/12/2021	SEE/AR/12/2021/0839	39.89	16.80	<3.00	9.90	0.06	58.76
9.	30/12/2021	SEE/AR/12/2021/0898	64.37	27.40	3.30	7.41	0.07	93.41
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

NDES  
Nandkumar Desai  
Reviewed by



Arandeep  
Arandeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- CEIS 121(SR NO.01-DTB-2017)	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 286-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/628	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Purva Casarvarnem (Goa State)(G-A4)				
Average Ambient Temperature (°C)	31.2	Average Humidity (%)	69	Latitude	N 15°41'41.9"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	216	Longitude	E 73°50'16.6"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0066	8.04	6.82	<3.00	<6.00	0.05	14.98
2.	06/12/2021	SEE/AR/12/2021/0201	32.04	12.56	<3.00	12.64	0.06	44.91
3.	09/12/2021	SEE/AR/12/2021/0367	36.84	22.83	3.98	9.82	0.07	60.98
4.	13/12/2021	SEE/AR/12/2021/0439	48.04	15.51	<3.00	14.39	0.06	64.26
5.	16/12/2021	SEE/AR/12/2021/0543	68.12	22.91	3.07	8.69	0.03	93.13
6.	20/12/2021	SEE/AR/12/2021/0637	76.67	24.37	3.75	7.97	0.07	101.32
7.	23/12/2021	SEE/AR/12/2021/0718	73.48	43.58	5.89	7.87	0.06	118.16
8.	27/12/2021	SEE/AR/12/2021/0840	66.66	15.72	<3.00	10.54	0.09	85.04
9.	30/12/2021	SEE/AR/12/2021/0899	60.40	27.32	3.32	8.94	0.05	89.78
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 299-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3400	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Khajne Amere Porscodem (Goa State) (G-A5)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	70	Latitude	N 15°40'38.0"
Average Wind Speed (km/hr)	1.3	Average Wind direction (Deg)	210	Longitude	E 73°46'21.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0067	10.83	<5.00	<3.00	<6.00	0.06	12.46
2.	06/12/2021	SEE/AR/12/2021/0202	27.24	10.60	3.39	14.50	0.08	38.76
3.	09/12/2021	SEE/AR/12/2021/0368	35.26	15.34	6.04	13.83	0.03	51.31
4.	13/12/2021	SEE/AR/12/2021/0440	35.95	17.59	<3.00	18.92	0.05	55.78
5.	16/12/2021	SEE/AR/12/2021/0544	42.39	21.33	<3.00	6.31	0.06	64.57
6.	20/12/2021	SEE/AR/12/2021/0638	76.04	33.68	<3.00	8.92	0.03	110.43
7.	23/12/2021	SEE/AR/12/2021/0719	71.11	24.58	<3.00	<6.00	0.07	96.76
8.	27/12/2021	SEE/AR/12/2021/0841	72.05	18.21	<3.00	10.11	0.05	91.63
9.	30/12/2021	SEE/AR/12/2021/0900	48.16	20.58	<3.00	8.43	0.06	69.21
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

**NDSC**  
Nandkumar Desai  
Reviewed by



Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1895-DTJ-2014)	LES-CCL/FF/MF/SC/1152	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 288-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3401	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Rajvil Wada Torxem (Goa State)(G-A6)				
Average Ambient Temperature (°C)	31.6	Average Humidity (%)	73	Latitude	N 15°48'40.0"
Average Wind Speed (km/hr)	1.4	Average Wind direction (Deg)	189	Longitude	E 73°52'50.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0068	8.32	7.15	3.26	<6.00	0.03	15.49
2.	06/12/2021	SEE/AR/12/2021/0203	30.57	12.89	<3.00	11.95	0.05	43.88
3.	09/12/2021	SEE/AR/12/2021/0369	32.40	19.09	4.47	9.71	0.08	52.71
4.	13/12/2021	SEE/AR/12/2021/0441	33.67	15.68	<3.00	14.04	0.06	50.65
5.	16/12/2021	SEE/AR/12/2021/0545	48.75	25.16	<3.00	8.54	0.03	77.09
6.	20/12/2021	SEE/AR/12/2021/0639	50.73	14.14	3.30	8.29	0.07	64.95
7.	23/12/2021	SEE/AR/12/2021/0720	61.52	40.00	4.03	10.03	0.05	102.21
8.	27/12/2021	SEE/AR/12/2021/0842	55.04	18.09	4.10	11.62	0.03	74.50
9.	30/12/2021	SEE/AR/12/2021/0901	33.88	19.84	4.09	8.80	0.06	54.69
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattada  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Amrdeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2024-DTD-2016)	LES-CCL/FF/MF/SC/1144	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 298-DTJ-2014 )

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/623	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Satarda(Maharashtra State)(M-A1)				
Average Ambient Temperature (°C)	31.7	Average Humidity (%)	69	Latitude	N15°43'01.3"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	232	Longitude	E 73°46'00.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0069	11.16	<5.00	<3.00	<6.00	0.06	13.56
2.	06/12/2021	SEE/AR/12/2021/0204	22.24	9.81	3.83	11.99	0.03	32.08
3.	09/12/2021	SEE/AR/12/2021/0370	20.65	17.13	5.63	7.73	0.05	37.95
4.	13/12/2021	SEE/AR/12/2021/0442	44.83	14.39	5.95	8.10	0.06	59.23
5.	16/12/2021	SEE/AR/12/2021/0546	48.12	16.63	3.40	7.40	0.07	62.07
6.	20/12/2021	SEE/AR/12/2021/0640	54.09	34.14	4.01	<6.00	0.05	88.40
7.	23/12/2021	SEE/AR/12/2021/0721	78.91	34.68	10.39	7.17	0.06	115.12
8.	27/12/2021	SEE/AR/12/2021/0843	61.42	10.27	4.63	11.34	0.07	74.42
9.	30/12/2021	SEE/AR/12/2021/0902	47.04	15.93	3.66	7.04	0.03	63.71
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Arundeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1901-DTJ-2014)	LES-CCL/FF/MF/SC/1149	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 104-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3402	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Dingna(Maharashtra State)(M-A2)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	71	Latitude	N 15°46'12.3"
Average Wind Speed (km/hr)	1.2	Average Wind direction (Deg)	189	Longitude	E 73°49'20.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0070	9.98	<5.00	<3.00	<6.00	0.05	9.90
2.	06/12/2021	SEE/AR/12/2021/0205	19.61	5.32	6.35	13.54	0.07	25.58
3.	09/12/2021	SEE/AR/12/2021/0371	24.61	14.30	4.83	8.61	0.06	39.82
4.	13/12/2021	SEE/AR/12/2021/0443	18.36	11.68	<3.00	14.76	0.03	31.28
5.	16/12/2021	SEE/AR/12/2021/0547	39.81	10.44	<3.00	<6.00	0.05	50.92
6.	20/12/2021	SEE/AR/12/2021/0641	44.99	17.05	4.58	8.00	0.06	62.95
7.	23/12/2021	SEE/AR/12/2021/0722	47.22	23.66	<3.00	6.68	0.06	71.50
8.	27/12/2021	SEE/AR/12/2021/0844	59.21	20.50	<3.00	8.90	0.08	80.83
9.	30/12/2021	SEE/AR/12/2021/0903	33.13	13.47	4.03	6.93	0.03	46.89
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			<b>µg/ m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>mg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Akash Pattade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.1898-DTJ-2014)	LES-CCL/FF/MF/SC/1150	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 381-DTD-2016)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3399	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	December 2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Netarde(Maharashtra State)(M-A3)				
Average Ambient Temperature (°C)	31.7	Average Humidity (%)	76	Latitude	N 15°46'11.7"
Average Wind Speed (km/hr)	1.5	Average Wind direction (Deg)	213	Longitude	E 73°50'48.0"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	02/12/2021	SEE/AR/12/2021/0071	8.16	<5.00	<3.00	<6.00	0.03	4.06
2.	06/12/2021	SEE/AR/12/2021/0206	24.22	12.31	<3.00	14.09	0.05	37.23
3.	09/12/2021	SEE/AR/12/2021/0372	36.66	11.06	6.24	9.28	0.06	49.08
4.	13/12/2021	SEE/AR/12/2021/0444	34.64	20.58	<3.00	14.96	0.07	56.45
5.	16/12/2021	SEE/AR/12/2021/0548	76.83	16.09	3.40	8.01	0.03	94.04
6.	20/12/2021	SEE/AR/12/2021/0642	66.27	39.01	<3.00	7.71	0.06	106.05
7.	23/12/2021	SEE/AR/12/2021/0723	75.32	19.13	4.93	<6.00	0.05	95.90
8.	27/12/2021	SEE/AR/12/2021/0845	43.38	16.88	3.94	9.34	0.03	61.69
9.	30/12/2021	SEE/AR/12/2021/0904	58.70	21.96	<3.00	7.56	0.06	82.22
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Anand Deep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.1897-DTJ-2014)	LES-CCL/FF/MF/SC/1151	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 105-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/12/2021/0445	Date of Issue	20/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	13/12/2021	Temperature(°C)	28.3	Humidity (%)	66
Analysis Started On	14/12/2021	Analysis Completed On	20/12/2021		

### AMBIENT AIR LOCATION


Location of ambient air station	Mopa Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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 Susmita Kapdoekar  
 Analyzed by

  
 Nandkumar Desai  
 Reviewed by



  
 Ananddeep Sawant  
 Authorized Signatory



Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/12/2021/0446	Date of Issue	20/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	13/12/2021	Temperature(°C)	28.3	Humidity (%)	66
Analysis Started On	14/12/2021	Analysis Completed On		20/12/2021	

### AMBIENT AIR LOCATION

Location of ambient air station	HSD Bunk (Inside Mopa Airport Premises)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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Susmita Kapdoskar  
Analyzed by

Nandkumar Desai  
Reviewed by



Apandeep Sawant  
Authorized Signatory

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-308/307, Plot No. 01, Patel Estate, Raw Margon, Verem, Aho, Old Belim Road, Bardoz, Panaji-Goa-403 101.  
Goa State, India. ☎ : (0832) 2411322 / 2411323 • E-mail : starlitgoa@rediffmail.com

SAVE WATER  
SAVE LIFE

Lab accredited by MoEF & CC Valid up to 03.11.2023 • Certified by ISO 9001:2015 & ISO 45001 : 2018

AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/12/2021/0447	Date of Issue	20/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	13/12/2021	Temperature(°C)	28.3	Humidity (%)	66
Analysis Started On	14/12/2021	Analysis Completed On	20/12/2021		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemecheadvan Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
 : Test results relate only to the condition prevailing at the time of sampling.  
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 : Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Susmita Kapdoskar  
Analyzed by

Nandkumar Desai  
Reviewed by



Anandjeep Sawant  
Authorized Signatory

HEAD OFF & LAB : Plot No. A-95, Road No. 18, Kisan Nagar Road, M.I.D.C. Wagle Industrial Area, Thane - 400 604, Maharashtra State, India.

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Gazetted By Ministry of Environment, Forest & Climate Change, Govt Of India, S. O. 857 (C)

BRANCH OFF : 310, Dempo Towers, EDC Palto, Panaji-403 001, Goa State, India ☎ : (0832) 2437048 / 2437154

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Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-306/307, Plot No. 61, Patel Estate, Reis Magna, Verem, Aho, Old Betim Road, Bardaz, Porvora, Panaji-Goa-403 101, Goa State, India. ☎ : (0832) 2411322 / 2411323 • E-mail : starbizgoa@gmail.com

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NOISE LEVEL MONITORING REPORT			
Report No.	SEE/AR/12/2021/0549-0550, 0598-0599, 0644, 0809, 0643, 0811-0812, 0810, 0820, 0819	Report Date	31/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sample Collected By	SEEPL Representative		
Sampling Plan	SEEPL/D/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10

### Chemical Testing - Atmospheric Pollution

Sr. No	Date of Monitoring	Report No.	Station ID	Zone	Sampling Location	Day Time Noise in dB(A)			Night Time Noise in dB(A)		
						Lmin	Lmax	Leq	Lmin	Lmax	Leq
1.	16/12/2021	SEE/AR/12/2021/0549	G-N1	I	Mopa Boundary	30.1	77.2	62.4	30.0	72.9	56.3
2.	16/12/2021	SEE/AR/12/2021/0550	G-N2	I	Shemachadvan Boundary	37.5	70.6	58.9	32.3	60.6	53.3
3.	18/12/2021	SEE/AR/12/2021/0598	G-N3	C	Nagzar	32.3	78.2	60.1	30.0	66.4	48.3
4.	18/12/2021	SEE/AR/12/2021/0599	G-N4	R	Purva Casarvarnem	30.1	62.6	49.5	30.0	58.1	38.7
5.	20/12/2021	SEE/AR/12/2021/0644	G-N5	R	Chendel	30.0	71.8	48.3	30.1	60.6	39.4
6.	24/12/2021	SEE/AR/12/2021/0809	G-N6	R	Khajne Amere Porcodem	30.0	72.3	49.2	30.4	63.3	39.8
7.	20/12/2021	SEE/AR/12/2021/0643	G-N7	R	Warkhand	30.0	73.0	48.6	30.1	54.0	40.5
8.	25/12/2021	SEE/AR/12/2021/0811	G-N8	C	Rajvil Wada Torxem	33.6	72.1	60.7	30.0	69.1	47.9
9.	25/12/2021	SEE/AR/12/2021/0812	G-N9	C	Village Panchayat Tamboxem -Mopa- Ugvem	30.0	69.9	57.1	30.1	55.9	45.4
10.	24/12/2021	SEE/AR/12/2021/0810	M-N1	R	Satarde	30.0	73.4	47.3	30.0	59.5	40.3
11.	26/12/2021	SEE/AR/12/2021/0820	M-N2	R	Dingna	30.0	63.3	45.4	33.3	49.9	37.3
12.	26/12/2021	SEE/AR/12/2021/0819	M-N3	R	Netarde	30.0	75.3	49.6	30.0	49.9	39.4

I – Industrial Zone, C – Commercial Zone, R – Residential Zone

> Noise Limits as per Schedule III of "The Environment (Protection) Rules, 1986" are as follows:

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial Area ( I )	75	70
(B)	Commercial Area ( C )	65	55
(C)	Residential Area ( R )	55	45
(D)	Silence Zone ( S )	50	40

- > Day time is reckoned in between 6.00am to 10.00pm and night time is reckoned in between 10.00pm to 6.00am.
- > \*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. A "decibel" is a unit in which noise is measured.
- > "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- > Leq. It is the energy mean of the noise level over a specified period

Note : Monitoring has been done as per GPCB protocol for Ambient Level Noise Monitoring 2015.

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Sanjivan Gawas  
Monitored by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

HEAD OFF. & LAB : Plot No. A-25, Road No. 18, Kisan Nagar Road, M.I.D.C. Wagle Industrial Area, Thane - 400 004, Maharashtra State, India.

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BRANCH OFF. : 310, Dempo Towers, EDC Patto, Panaji-403 001, Goa State, India ☎ : (0832) 2437048 / 2437164

E-mail : sadekarenviro@gmail.com • Website : www.sadekarenviro.com • CIN : U18520GJ2011198027C-1163778

Calibration Details of Equipment used for Sampling

Noise Level Meter No.1(A0913-1393)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/346	18/07/2021	18/07/2022

Noise Level Meter No.2 (A0114-1408)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/347	18/07/2021	18/07/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/12/2021/0450	Report Date	17/12/2021		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	13/12/2021	Temperature(°C)	28.5	Humidity (%)	68
Analysis Started On	13/12/2021	Analysis Completed On	17/12/2021		

### STACK DETAILS

Attached To	Diesel Generator (Caterpillar - 500 KVA) (Near ACC Plant)
Shape	Round
Diameter	0.15 Mtr
Height From Ground Level	5.0 Mtr
Material of Construction	M.S.
Temperature	343 °C
Velocity of Flue Gases	6.66 m/sec
Volumetric Flue Gas Flow Rate	424.38 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	205.06 Nm <sup>3</sup> /hour
Type of Fuel	H.S.D.
Fuel Consumption	20.00 lit/hr
Load	300.00 KVA (60%)

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameter	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.09	-	Kg/hour	IS 11255(Part II)
02.	NO <sub>x</sub>	0.18	9.2	g/kw-hr	IS 11255(Part VII)
03.	Carbon Monoxide	0.08	3.5	g/kw-hr	By Flue Gas Analyzer
04.	Hydrocarbons	0.07	1.3	g/kw-hr	By Flue Gas Analyzer
05.	Particulate Matter	0.10	0.3	g/kw-hr	IS 11255 (part I)


\*\*As per Sr. No.94,95 and 96 of Schedule I of The Environmental (Protection) rule 1986


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: Test results relate only to the condition prevailing at the time of sampling

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Sumita Kapdoskar  
Analyzed by

  
Nandkumar Desai  
Reviewed by

  
Ananddeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No.458 DTH-15)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	EI/ET/306	20/02/2021	19/02/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

BHOOMI GAS ANALYSERS

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Bhoomi Flexi (SI NO.5000391)	14/06/2021	13/06/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/205	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	Borewell 1			
Sample details	Ground Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.62	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.46	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	102.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	141.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	17.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S/F
11.	Total Hardness as CaCO <sub>3</sub>	100.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause-6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

NDES  
Nandkumar Desai  
Reviewed By



Agandeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/12/2021/205	Issue Date	15/12/2021
Order / Reference	As per dated 09/12/2021	Sample Received On	09/12/2021
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	16.83	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.03	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	14.08	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.02	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	19.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	8.50	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

*Shreya Harmalkar*  
*Anisha Parab*

*Nandkumar Desai*  
Nandkumar Desai  
Reviewed By



*Anandeep Sawant*  
Anandeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/12/2021/205	Issue Date	15/12/2021
Order / Reference	As per dated 09/12/2021	Sample Received On	09/12/2021
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

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1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

*[Handwritten signatures]*

*[Handwritten signature]*  
Nandkumar Desai  
Reviewed By

*[Handwritten signature]*  
Arundeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/206	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	Borewell No. 2			
Sample details	Ground Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass bottle + PVC Can	Sample Quantity	1000 ml + 4000ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.02	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.80	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	92.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	121.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	20.52	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	96.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By

Agandeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/05/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/12/2021/206	Issue Date	15/12/2021
Order / Reference	As per dated 09/12/2021	Sample Received On	09/12/2021
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	16.03	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.09	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	13.59	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	18.50	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	10.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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2. Anisha Parab  
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*Shreya Harmalkar*  
*Anisha Parab*

*NDesai*  
Nandkumar Desai  
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*Ananddeep*  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/12/2021/206	Issue Date	15/12/2021
Order / Reference	As per dated 09/12/2021	Sample Received On	09/12/2021
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*Ananddeep Sawant*  
Ananddeep Sawant  
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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	28/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/207	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 66
Sampling point	WTP-Treated			
Sample details	Treated Water sample	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.71	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.37	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	10.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	47.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	11.01	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S/F
11.	Total Hardness as CaCO <sub>3</sub>	8.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39) : 1991

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/12/2021/207	Issue Date	15/12/2021
Order / Reference	As per dated 09/12/2021	Sample Received On	09/12/2021
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.05	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	<0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/12/2021/207	Issue Date	15/12/2021
Order / Reference	As per dated 09/12/2021	Sample Received On	09/12/2021
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/204	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	R.R. Canteen			
Sample details	Drinking Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G


**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C)	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/208	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	V.N.C Colony			
Sample details	Drinking Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

#### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/209	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C 28.1	Humidity % 66
Sampling point	L.S.C Colony			
Sample details	Drinking Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C)	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/227	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	86
Sampling point	P.T.B			
Sample details	Drinking Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G


**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/369	Issue Date	22/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 16/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.4	65
Sampling point	K.M.V Colony			
Sample details	Drinking Water	Date of collection	16/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	16/12/2021	
Analysis Started On	16/12/2021	Analysis Completed On	22/12/2021	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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Reviewed By

*Amardeep Sawant*

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Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/12/2021/225	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Inlet Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.41	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	1680.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	575.00	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	254.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	15.40	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

**Note:** Test results related only to the sample tested.

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Arundeeep Sawant  
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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/12/2021/226	Issue Date	15/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 09/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	86
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Outlet Water	Date of collection	09/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	09/12/2021	
Analysis Started On	09/12/2021	Analysis Completed On	15/12/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	6.93	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	120.00	mg/lit	250.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	19.63	mg/lit	30.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	53.00	mg/lit	100.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	6.40	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G

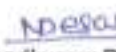
**Note:** Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

  
Mugdha Gawade  
Analyzed By



  
Nandkumar Desai  
Reviewed By

  
Arandeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/12/2021/289	Issue Date	18/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 13/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.5	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Inlet Water	Date of collection	13/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	13/12/2021	
Analysis Started On	13/12/2021	Analysis Completed On	18/12/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.26	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	392.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	145.00	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	132.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	10.40	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

**Note:** Test results related only to the sample tested.

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*Shweta*  
Shweta Sawant  
Analyzed By

*Nandkumar*  
Nandkumar Desai  
Reviewed By

*Ananddeep*  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/12/2021/289	Issue Date	18/12/2021	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 13/12/2021	Environmental Condition of Lab	Temp °C	Humidity %
			28.5	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Outlet Water	Date of collection	13/12/2021	
Sample Collected by	SEEPL Representative	Sample Received On	13/12/2021	
Analysis Started On	13/12/2021	Analysis Completed On	18/12/2021	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

#### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	7.07	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	16.00	mg/lit	50.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	4.60	mg/lit	10.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	12.00	mg/lit	20.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	2.00	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G
6.	Ammonia	1.68	mg/lit	5.00	APHA( 23 <sup>rd</sup> Edition ) 4500 NH3B C
7.	Total Nitrogen ( as N)	6.80	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 4500 N-B

#### Microbiological Parameters

8.	Faecal coliforms at 44.5°C for 24 hrs.	33	MPN Index/100ml	100	APHA ( 23 <sup>rd</sup> Edition ) 9221-E
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1. Shweta Sawant

2. Anisha Parab

Analyzed By

  
Nandkumar Desai  
Reviewed By

  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
04.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State) (G-A1)				
Average Ambient Temperature (°C)	31.7	Average Humidity (%)	69	Latitude	N 15°45'51.1"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	224	Longitude	E 73°56'32.4"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0054	83.34	38.55	4.54	<6.00	0.06	124.25
2.	06/01/2022	SEE/AR/01/2022/0123	72.83	27.61	3.43	6.12	0.05	102.53
3.	10/01/2022	SEE/AR/01/2022/0173	56.79	21.75	4.52	8.15	0.07	78.64
4.	13/01/2022	SEE/AR/01/2022/0248	67.09	16.47	<3.00	6.70	0.05	84.67
5.	17/01/2022	SEE/AR/01/2022/0348	87.50	19.09	3.34	8.50	0.11	149.85
6.	20/01/2022	SEE/AR/01/2022/0418	84.10	32.31	<3.00	7.67	0.09	145.49
7.	24/01/2022	SEE/AR/01/2022/0452	88.72	45.31	4.96	6.94	0.07	157.40
8.	27/01/2022	SEE/AR/01/2022/0523	86.08	31.73	4.95	7.83	0.10	180.45
9.	31/01/2022	SEE/AR/01/2022/0549	86.12	28.57	5.04	9.67	0.06	127.36
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	mg/ m <sup>3</sup>	µg/ m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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- : Test methods of analyzed parameters are back side of analysis report.

1) Dipali Sawant  
2) Akash Pattade  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2228-DTK-2011)	EI/FF/620	19/02/2021	18/02/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 290-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/630	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemecheadvan Boundary(Goa State) (G-A2)				
Average Ambient Temperature (°C)	31.8	Average Humidity (%)	68	Latitude	N 15°42'06.1"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	234	Longitude	E 73°49'21.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0055	62.26	25.32	<3.00	6.66	0.06	89.24
2.	06/01/2022	SEE/AR/01/2022/0124	67.20	45.53	<3.00	7.81	0.03	113.91
3.	10/01/2022	SEE/AR/01/2022/0174	30.86	20.71	3.78	8.77	0.05	51.65
4.	13/01/2022	SEE/AR/01/2022/0249	64.31	28.44	<3.00	<6.00	0.07	93.82
5.	17/01/2022	SEE/AR/01/2022/0349	66.78	13.02	<3.00	9.51	0.09	106.24
6.	20/01/2022	SEE/AR/01/2022/0419	71.91	21.62	<3.00	7.04	0.08	97.85
7.	24/01/2022	SEE/AR/01/2022/0453	84.63	44.79	3.45	6.67	0.05	171.09
8.	27/01/2022	SEE/AR/01/2022/0524	81.54	36.51	3.09	7.84	0.13	161.92
9.	31/01/2022	SEE/AR/01/2022/0550	80.81	25.78	4.83	9.82	0.07	114.42
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1)Dipali Sawant  
2)Akash Pattade  
**Analyzed by**

**Reviewed by**  
Nandkumar Desai



**Authorized Signatory**  
Anand Deep Sawant



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2028-DTD-2016)	LES-CCL/FF/MF/SC/1146	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR No. 05-DTK-2011)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550	EI/FF/624	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Nagzar(Goa State) (G-A3)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	72	Latitude	N 15°45'37.3"
Average Wind Speed (km/hr)	2.0	Average Wind direction (Deg)	216	Longitude	E 73°53'14.22"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0056	29.73	27.40	<3.00	<6.00	0.06	58.24
2.	06/01/2022	SEE/AR/01/2022/0125	67.63	26.82	3.00	6.55	0.07	65.08
3.	10/01/2022	SEE/AR/01/2022/0175	15.45	8.32	3.18	9.63	0.05	23.89
4.	13/01/2022	SEE/AR/01/2022/0250	62.10	31.40	<3.00	<6.00	0.03	94.28
5.	17/01/2022	SEE/AR/01/2022/0350	41.79	11.39	4.70	7.87	0.07	54.75
6.	20/01/2022	SEE/AR/01/2022/0420	40.64	17.30	4.78	<6.00	0.06	58.77
7.	24/01/2022	SEE/AR/01/2022/0454	87.58	38.42	4.52	6.15	0.05	141.83
8.	27/01/2022	SEE/AR/01/2022/0525	86.23	42.08	4.79	8.58	0.08	135.97
9.	31/01/2022	SEE/AR/01/2022/0551	51.94	21.50	4.23	8.61	0.03	78.27
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

1) Dipali Sawant  
2) Akash Pattade  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- CEIS 121(SR NO.01-DTB-2017)	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 286-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/628	20/02/2021	19/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Purva Casarvarnem (Goa State)(G-A4)				
Average Ambient Temperature (°C)	31.5	Average Humidity (%)	73	Latitude	N 15°41'41.9"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	231	Longitude	E 73°50'16.6"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0057	55.25	32.27	<3.00	6.80	0.03	88.58
2.	06/01/2022	SEE/AR/01/2022/0126	68.33	37.80	<3.00	7.76	0.06	107.18
3.	10/01/2022	SEE/AR/01/2022/0176	34.86	16.80	3.63	8.34	0.05	51.80
4.	13/01/2022	SEE/AR/01/2022/0251	57.23	26.57	3.48	<6.00	0.05	84.37
5.	17/01/2022	SEE/AR/01/2022/0351	54.91	17.13	<3.00	8.42	0.08	77.97
6.	20/01/2022	SEE/AR/01/2022/0421	87.10	33.02	3.27	7.77	0.09	179.35
7.	24/01/2022	SEE/AR/01/2022/0455	78.04	51.90	4.13	<6.00	0.06	181.61
8.	27/01/2022	SEE/AR/01/2022/0526	80.13	47.78	3.55	8.66	0.07	172.31
9.	31/01/2022	SEE/AR/01/2022/0552	77.53	30.90	<3.00	7.70	0.05	125.21
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1)Dipali Sawant  
2)Akash Pattade  
Analyzed by

Nandkumar Desai  
Reviewed by



Ashdeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 299-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3400	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Khajne Amere Porscodem (Goa State) (G-A5)				
Average Ambient Temperature (°C)	30.7	Average Humidity (%)	72	Latitude	N 15°40'38.0"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	211	Longitude	E 73°46'21.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0058	29.31	18.46	<3.00	6.46	0.06	50.55
2.	06/01/2022	SEE/AR/01/2022/0127	40.74	21.58	3.40	<6.00	0.04	63.33
3.	10/01/2022	SEE/AR/01/2022/0177	16.84	6.86	<3.00	8.37	0.03	23.77
4.	13/01/2022	SEE/AR/01/2022/0252	27.93	10.10	3.39	7.64	0.05	38.39
5.	17/01/2022	SEE/AR/01/2022/0352	23.77	11.48	<3.00	9.22	0.03	39.78
6.	20/01/2022	SEE/AR/01/2022/0422	48.56	14.47	6.85	<6.00	0.07	65.85
7.	24/01/2022	SEE/AR/01/2022/0456	78.57	40.29	3.95	<6.00	0.08	130.98
8.	27/01/2022	SEE/AR/01/2022/0527	81.10	36.30	4.19	10.66	0.06	159.75
9.	31/01/2022	SEE/AR/01/2022/0553	35.85	14.72	4.35	9.28	0.05	56.36
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note :** Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

1) Dipali Sawant  
2) Akash Pattade  
Analyzed by

*Dipali Sawant*  
*Akash Pattade*

*NDS*  
Nandkumar Desai  
Reviewed by



*Indeep Sawant*  
Indeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1895-DTJ-2014)	LES-CCL/FF/MF/SC/1152	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 288-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3401	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Rajvil Wada Torxem (Goa State)(G-A6)				
Average Ambient Temperature (°C)	31.1	Average Humidity (%)	69	Latitude	N 15°48'40.0"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	228	Longitude	E 73°52'50.2"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0059	37.90	24.91	<3.00	7.62	0.07	63.63
2.	06/01/2022	SEE/AR/01/2022/0128	47.54	13.02	<3.00	8.32	0.06	61.45
3.	10/01/2022	SEE/AR/01/2022/0178	22.22	6.69	3.78	8.48	0.03	28.99
4.	13/01/2022	SEE/AR/01/2022/0253	21.37	20.46	4.03	<6.00	0.05	42.07
5.	17/01/2022	SEE/AR/01/2022/0353	27.85	10.48	<3.00	8.17	0.06	39.04
6.	20/01/2022	SEE/AR/01/2022/0423	33.93	12.56	<3.00	7.42	0.05	48.96
7.	24/01/2022	SEE/AR/01/2022/0457	66.78	45.66	3.26	<6.00	0.07	112.61
8.	27/01/2022	SEE/AR/01/2022/0528	59.81	26.70	3.88	9.66	0.08	97.87
9.	31/01/2022	SEE/AR/01/2022/0554	90.16	49.03	4.02	9.72	0.10	160.75
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Dipali Sawant  
2) Akash Pattade  
Analyzed by

*Dipali Sawant*  
*Akash Pattade*

*Nandkumar Desai*  
Reviewed by



*Arundeep Sawant*  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2024-DTD-2016)	LES-CCL/FF/MF/SC/1144	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 298-DT)-2014 )

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/623	19/02/2021	18/02/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Satarda(Maharashtra State)(M-A1)				
Average Ambient Temperature (°C)	31.5	Average Humidity (%)	74	Latitude	N15°43'01.3"
Average Wind Speed (km/hr)	1.9	Average Wind direction (Deg)	198	Longitude	E 73°46'00.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0060	29.94	11.39	3.08	6.33	0.07	41.80
2.	06/01/2022	SEE/AR/01/2022/0129	46.38	20.25	<3.00	8.42	0.03	68.29
3.	10/01/2022	SEE/AR/01/2022/0179	18.46	8.52	5.74	8.55	0.06	27.26
4.	13/01/2022	SEE/AR/01/2022/0254	37.27	11.31	<3.00	<6.00	0.05	48.81
5.	17/01/2022	SEE/AR/01/2022/0354	29.62	8.19	<3.00	6.68	0.03	44.32
6.	20/01/2022	SEE/AR/01/2022/0424	45.96	18.30	<3.00	7.16	0.06	65.27
7.	24/01/2022	SEE/AR/01/2022/0458	85.97	32.19	3.09	<6.00	0.05	119.49
8.	27/01/2022	SEE/AR/01/2022/0529	79.60	28.69	4.33	9.35	0.03	126.08
9.	31/01/2022	SEE/AR/01/2022/0555	35.32	15.18	4.43	8.76	0.06	52.28
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 05)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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1)Dipali Sawant  
2)Akash Pattade  
Analyzed by

Nandkumar Desai  
Reviewed by



Arvind Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1901-DTJ-2014)	LES-CCL/FF/MF/SC/1149	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 104-OTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3402	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Dingna(Maharashtra State)(M-A2)				
Average Ambient Temperature (°C)	31.2	Average Humidity (%)	69	Latitude	N 15°46'12.3"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	213	Longitude	E 73°49'20.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0061	22.04	12.60	<3.00	<6.00	0.05	34.98
2.	06/01/2022	SEE/AR/01/2022/0130	35.61	20.83	<3.00	<6.00	0.03	58.11
3.	10/01/2022	SEE/AR/01/2022/0180	11.93	7.15	4.54	7.57	0.06	19.18
4.	13/01/2022	SEE/AR/01/2022/0255	30.91	12.31	<3.00	<6.00	0.03	43.58
5.	17/01/2022	SEE/AR/01/2022/0355	21.16	9.19	3.03	7.45	0.05	33.42
6.	20/01/2022	SEE/AR/01/2022/0425	28.15	10.94	4.40	7.44	0.06	45.68
7.	24/01/2022	SEE/AR/01/2022/0459	55.91	28.19	3.03	<6.00	0.07	84.43
8.	27/01/2022	SEE/AR/01/2022/0530	72.45	44.12	3.61	9.09	0.08	117.17
9.	31/01/2022	SEE/AR/01/2022/0556	59.13	20.38	4.11	9.01	0.05	82.19
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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1)Dipali Sawant  
2)Akash Patilade  
**Analyzed by**

**Reviewed by**  
Nandkumar Desai



**Authorized Signatory**  
Arundeeep Sawant

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1902-DTJ-2014)	LES-CCL/FF/MF/SC/1148	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 381-DTD-2016)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3399	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	January 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Netarde(Maharashtra State)(M-A3)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	73	Latitude	N 15°46'11.7"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	210	Longitude	E 73°50'48.0"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/01/2022	SEE/AR/01/2022/0062	75.86	34.68	<3.00	6.76	0.05	111.47
2.	06/01/2022	SEE/AR/01/2022/0131	68.85	16.30	<3.00	8.23	0.06	85.51
3.	10/01/2022	SEE/AR/01/2022/0181	32.41	11.85	3.08	8.61	0.03	44.51
4.	13/01/2022	SEE/AR/01/2022/0256	65.67	24.87	<3.00	<6.00	0.05	90.84
5.	17/01/2022	SEE/AR/01/2022/0356	25.44	8.44	3.98	7.50	0.06	34.56
6.	20/01/2022	SEE/AR/01/2022/0426	57.27	23.33	<3.00	6.56	0.03	80.76
7.	24/01/2022	SEE/AR/01/2022/0460	87.72	34.31	<3.00	<6.00	0.05	128.55
8.	27/01/2022	SEE/AR/01/2022/0531	78.30	45.34	8.55	9.40	0.10	155.41
9.	31/01/2022	SEE/AR/01/2022/0557	76.98	19.92	3.60	9.85	0.07	98.39
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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1)Dipali Sawant  
2)Akash Pattade  
**Analyzed by**

Nandkumar  
Nandkumar Desai  
**Reviewed by**



Arun Deep  
Arun Deep Sawant  
**Authorized Signatory**

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.1897-DTJ-2014)	LES-CCL/FF/MF/SC/1151	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 105-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/01/2022/0357	Date of Issue	24/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	17/01/2022	Temperature(°C)	28.2	Humidity (%)	68
Analysis Started On	18/01/2022	Analysis Completed On		24/01/2022	

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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 Susmita Kapdoskar  
 Analyzed by

  
 Nandkumar Desai  
 Reviewed by



  
 Ananddeep Sawant  
 Authorized Signatory



Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/01/2022/0358	Date of Issue	24/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	17/01/2022	Temperature(°C)	28.2	Humidity (%)	68
Analysis Started On	18/01/2022	Analysis Completed On		24/01/2022	

### AMBIENT AIR LOCATION

Location of ambient air station	HSD Bunk (Inside Mopa Airport Premises)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note** :
- Test results related only to the sample tested.
  - Test results relate only to the condition prevailing at the time of sampling.
  - This certificate may not be reproduced in part, without the permission of this laboratory.
  - Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

  
Sumilla Kapdoskar  
Analyzed by

  
Nandkumar Desai  
Reviewed by



  
Ananddeep Sawant  
Authorized Signatory

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	24-DTD-2016	EI/FF/636	19/02/2021	18/02/2022



AMBIENT AIR QUALITY MONITORING REPORT					
Report No.	SEE/AR/01/2022/0359	Date of Issue	24/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	17/01/2022	Temperature(°C)	28.2	Humidity (%)	68
Analysis Started On	18/01/2022	Analysis Completed On		24/01/2022	

### AMBIENT AIR LOCATION

Location of ambient air station	Shemecheadvan Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
 : Test results relate only to the condition prevailing at the time of sampling.  
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 Susmita Kapdoskar  
 Analyzed by

  
 Nandkumar Desai  
 Reviewed by



  
 Ananddeep Sawant  
 Authorized Signatory

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



## NOISE LEVEL MONITORING REPORT

Report No.	SEE/AR/01/2022/0257-0258, 0301-0302, 0361, 0495, 0360, 0534, 0542, 0496, 0535, 0543	Report Date	01/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sample Collected By	SEEPL Representative		
Sampling Plan	SEEPL/D/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10

### Chemical Testing - Atmospheric Pollution

Sr. No	Date of Monitoring	Report No.	Station ID	Zone	Sampling Location	Day Time Noise in dB(A)			Night Time Noise in dB(A)		
						Lmin	Lmax	Leq	Lmin	Lmax	Leq
1.	13/01/2022	SEE/AR/01/2022/0257	G-N1	I	Mopa Boundary	30.1	79.9	61.5	30.0	68.6	53.3
2.	13/01/2022	SEE/AR/01/2022/0258	G-N2	I	Shemecheadvan Boundary	33.2	77.9	65.6	35.6	74.0	58.0
3.	14/01/2022	SEE/AR/01/2022/0301	G-N3	C	Nagzar	35.3	77.6	59.5	30.8	56.8	49.7
4.	14/01/2022	SEE/AR/01/2022/0302	G-N4	R	Purva Casarvarnem	30.0	67.7	48.7	30.0	62.1	39.6
5.	17/01/2022	SEE/AR/01/2022/0361	G-N5	R	Chandel	31.4	75.2	49.1	30.3	46.6	38.9
6.	25/01/2022	SEE/AR/01/2022/0495	G-N6	R	Khajna Amore Porcodem	31.6	74.5	49.3	31.1	63.7	39.8
7.	17/01/2022	SEE/AR/01/2022/0360	G-N7	R	Warkhand	34.1	70.4	48.9	33.0	62.2	38.3
8.	29/01/2022	SEE/AR/01/2022/0534	G-N8	C	Rajvil Wade Torxem	30.1	77.4	59.7	31.8	70.2	45.6
9.	30/01/2022	SEE/AR/01/2022/0542	G-N9	C	Village Panchayat Tamboxem -Mopa- Ugvern	30.3	79.9	58.5	30.7	53.7	49.1
10.	25/01/2022	SEE/AR/01/2022/0496	M-N1	R	Salarda	32.6	72.3	49.3	30.1	53.9	39.9
11.	29/01/2022	SEE/AR/01/2022/0535	M-N2	R	Dingna	30.0	68.4	44.7	30.0	61.3	39.2
12.	30/01/2022	SEE/AR/01/2022/0543	M-N3	R	Netarde	30.0	68.4	49.2	30.0	60.7	38.5

I – Industrial Zone, C – Commercial Zone, R – Residential Zone

➤ Noise Limits as per Schedule III of "The Environment (Protection) Rules, 1986" are as follows:

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial Area ( I )	75	70
(B)	Commercial Area ( C )	65	55
(C)	Residential Area ( R )	55	45
(D)	Silence Zone ( S )	50	40

➤ Day time is reckoned in between 6.00am to 10.00pm and night time is reckoned in between 10.00pm to 6.00am.

➤ "dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. A "decibel" is a unit in which noise is measured.

➤ "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

➤ Leq: It is the energy mean of the noise level over a specified period

**Note :** Monitoring has been done as per GPCB protocol for Ambient Level Noise Monitoring 2015.

: Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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Sahjwan Gawas  
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Nandkumar Desai  
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Calibration Details of Equipment used for Sampling

Noise Level Meter No.1(A0913-1393)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/346	18/07/2021	18/07/2022

Noise Level Meter No.2 (A0114-1408)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/347	18/07/2021	18/07/2022



WORKPLACE NOISE LEVEL MONITORING REPORT			
Report No.	SEE/AR/01/2022/0182-0187	Date of Issue	12/01/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Date of Sampling	10/01/2022		

### Chemical Testing – Atmospheric Pollution

Sr. No.	Report No.	Sampling Location (From 1.0 meter off)	Noise in dB (A)
			Day Time
01.	SEE/AR/01/2022/0182	HEMM (Surface Miner)	81.4
02.	SEE/AR/01/2022/0183	PTB 1- BHS Trea (K-110)	71.2
03.	SEE/AR/01/2022/0184	PTB 2	77.3
04.	SEE/AR/01/2022/0185	Hot Mix Plant	80.5
05.	SEE/AR/01/2022/0186	Crusher CH-2000 (LHS)	76.8
06.	SEE/AR/01/2022/0187	RETWZ (WMM)(Paver with Compaction)	78.9

- **Occupational Exposure Limit for noise as per OSHA is 90dB (A) TWA (8hrly).**
- \*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. A "decibel" is a unit in which noise is measured.
- "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- Leq: It is the energy mean of the noise level over a specified period.

**Note :** Test results related only to the sample tested.

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Calibration Details of Equipment used for Sampling

Noise Level Meter No.3 (HE:002221H)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/344	19/07/2021	18/07/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/01/2022/0244	17/01/2022	17/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	13/01/2022	Temperature(°C)	28.2	Humidity (%)	69
Analysis Started On	13/01/2022	Analysis Completed On	17/01/2022		

### STACK DETAILS

Attached To	Diesel Generator (500 KVA) (Sr. No.01/17/09/1460)
Shape	Round
Diameter	0.12 Mtr
Height From Ground Level	8.0 Mtr
Material of Construction	M.S.
Temperature	393 °C
Velocity of Flue Gases	16.61 m/sec
Volumetric Flue Gas Flow Rate	675.70 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	301.76 Nm <sup>3</sup> /hour
Type of Fuel	H.S.D.
Fuel Consumption	19.00 lit/hr

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameter	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.09	2.1	Kg/hour	IS 11255(Part II)
02.	NO <sub>x</sub>	0.10	9.2	g/kw-hr	IS 11255(Part VII)
03.	Carbon Monoxide	0.08	3.5	g/kw-hr	By Flue Gas Analyzer
04.	Hydrocarbons	0.06	1.3	g/kw-hr	By Flue Gas Analyzer
05.	Particulate Matter	0.13	0.3	g/kw-hr	IS 11255 (part I)

\*\* Consent No.12/2020-PCB/510173/O0004024

- Note** :
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Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No 458 DTH-15)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1 )	EI/ET/306	20/02/2021	19/02/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

BHOOMI GAS ANALYSERS

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Bhoomi Flexi (SI NO.5000391)	14/06/2021	13/06/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/01/2022/0247	Date of Issue	17/01/2022		
Name of Client:	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	13/01/2022	Temperature(°C)	28.2	Humidity (%)	69
Analysis Started On	13/01/2022	Analysis Completed On	17/01/2022		

### STACK DETAILS

Attached To	Diesel Generator No.2 (125 KVA) (WMM Plant)
Shape	Round
Diameter	0.07 Mtr
Height From Ground Level	4.4 Mtr
Material of Construction	M.S.
Temperature	297 °C
Velocity of Flue Gases	15.85 m/sec
Volumetric Flue Gas Flow Rate	216.83 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	113.28 Nm <sup>3</sup> /hour
Type of Fuel	H.S.D.
Fuel Consumption	8.5 lit/hr

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.04	0.525	Kg/hour	IS 11255(Part II)
02.	NO <sub>x</sub>	0.15	9.2	g/kw-hr	IS 11255(Part VIII)
03.	Carbon Monoxide	0.06	3.5	g/kw-hr	By Flue Gas Analyzer
04.	Hydrocarbons	0.04	1.3	g/kw-hr	By Flue Gas Analyzer
05.	Particulate Matter	0.10	0.3	g/kw-hr	IS 11255 (part I)

\*\*Consent No.12/2020-PCB/510173/O0004024

**Note :** Test results related only to the sample tested.

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Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No.458 DTH-15)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	EI/ET/306	20/02/2021	19/02/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

BHOOMI GAS ANALYSERS

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Bhoomi Flexi (SI NO,5000391)	14/06/2021	13/06/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/01/2022/0245	17/01/2022	17/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPL/LD/FMT- 54	SEEPL/LD/FMT- 54	SEEPL/LD/FMT- 54		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	13/01/2022	Temperature(°C)	28.2	Humidity (%)	69
Analysis Started On	13/01/2022	Analysis Completed On		17/01/2022	

### STACK DETAILS

Attached To	Hot Mix Plant – Linnhoff (160 TPH)
Shape	Rectangular
Dimension	1.0 x 0.90 Mtr
Height from Ground Level	15.00 Mtr
Temperature	71 °C
Velocity of Flue Gases	12.49 m/sec
Volumetric Flue Gas Flow Rate	40467.60 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	35039.62 Nm <sup>3</sup> /hour

### POLLUTIONAL PARAMETERS

Sr. No.	Parameters	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.79	1.62	Kg/hour	IS 11255(Part II)
02.	Particulate Matter	88.76	150.00	mg/Nm <sup>3</sup>	IS 11255 (part I)

**\*\*Consent No.12/2020-PCB/510173/O0004024**


**Note :** Test results related only to the sample tested.

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Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No.458 DTH-15)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	EI/ET/306	20/02/2021	19/02/2022

BHOOMI GAS ANALYSERS

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Bhoomi Flexi (SI NO.5000391)	14/06/2021	13/06/2022



STACK EMISSION REPORT					
Report No.	SEE/AR/01/2022/0246	17/01/2022	17/01/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sampling Plan	SEEPLD/FMT- 54	SEEPLD/FMT- 54	SEEPLD/FMT- 54		
Sample Collected By	SEEPL Representative	Environmental condition of lab			
Date of Sampling	13/01/2022	Temperature(°C)	28.2	Humidity (%)	69
Analysis Started On	13/01/2022	Analysis Completed On		17/01/2022	

### STACK DETAILS

Attached To	Hot Mix Plant - Ammann (120 TPH)
Shape	Round
Dimension	0.78 Mtr
Height from Ground Level	15.00 Mtr
Temperature	82 °C
Velocity of Flue Gases	16.28 m/sec
Volumetric Flue Gas Flow Rate	28002.90 m <sup>3</sup> /hour
Volumetric Flue Gas Flow Rate	23493.92 Nm <sup>3</sup> /hour

### POLLUTIONAL PARAMETERS

Sr. No.	Parameters	Result	Limits**	Unit	Method
01.	SO <sub>2</sub>	0.68	1.62	Kg/hour	IS 11255(Part II)
02.	Particulate Matter	79.92	150.00	mg/Nm <sup>3</sup>	IS 11255 (part I)

**\*\*Consent No.12/2020-PCB/510173/O0004024**

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Calibration details of Equipment used for Sampling & Analysis

Stack Kit (SR No 458 DTH-15)

Sr No.	Instrument Type	Certificate No.	Calibrated on	Calibration due date
01	Vayubodhan (VSS-1)	EI/ET/306	20/02/2021	19/02/2022

BHOOMI GAS ANALYSERS

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	Bhoomi Flexi (SI NO.5000391)	14/06/2021	13/06/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/203	Issue Date	15/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	WTP-Treated			
Sample details	Treated Water sample	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.50	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.64	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	22.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	48.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	17.01	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	30.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39) : 1991

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/01/2022/203	Issue Date	15/01/2022
Order / Reference	As per dated 10/01/2022	Sample Received On	10/01/2022
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	8.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.04	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	2.43	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	<0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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Ananddeep Sawant  
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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/01/2022/203	Issue Date	15/01/2022
Order / Reference	As per dated 10/01/2022	Sample Received On	10/01/2022
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.



1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

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Nandkumar Desai  
Reviewed By

*[Handwritten signature]*  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/201	Issue Date	15/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	Borewell 1			
Sample details	Ground Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.83	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.18	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	112.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	133.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	18.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S/F
11.	Total Hardness as CaCO <sub>3</sub>	100.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
 2. Anisha Parab  
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*Shreya Harmalkar*  
*Anisha Parab*

*Nandkumar Desai*  
 Reviewed By



*Anand Deep Sawant*  
 Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/01/2022/201	Issue Date	15/01/2022
Order / Reference	As per dated 10/01/2022	Sample Received On	10/01/2022
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	17.63	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.05	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	13.60	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.04	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	15.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	6.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmalkar  
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*Nandkumar Desai*  
Nandkumar Desai  
Reviewed By



*Ananddeep Sawant*  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/01/2022/201	Issue Date	15/01/2022
Order / Reference	As per dated 10/01/2022	Sample Received On	10/01/2022
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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2. Anisha Parab  
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NDESAJ  
Nandkumar Desai  
Reviewed By

*[Handwritten signature]*  
Apardeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/202	Issue Date	15/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	Borewell No. 2			
Sample details	Ground Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022	
Sample Container	Glass bottle + PVC Can	Sample Quantity	1000 ml + 4000ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.92	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.20	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	100.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	135.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	27.52	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	96.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar  
Nandkumar Desai  
Reviewed By



Ananddeep  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/01/2022/202	Issue Date	15/01/2022
Order / Reference	As per dated 10/01/2022	Sample Received On	10/01/2022
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	16.83	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.06	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	13.11	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	15.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	7.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/01/2022/202	Issue Date	15/01/2022
Order / Reference	As per dated 10/01/2022	Sample Received On	10/01/2022
Analysis Started On	10/01/2022	Analysis Completed On	15/01/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*Apandeep Sawant*  
Apandeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/196	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab.	Temp °C	Humidity %
			28.1	66
Sampling point	R.R. Canteen			
Sample details	Drinking Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

#### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNindex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNindex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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Nandkumar Desai  
Reviewed By

*Ananddeep Sawant*

Ananddeep Sawant  
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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C)	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/200	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	K.M.V Colony			
Sample details	Drinking Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*Ananddeep Sawant*  
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Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/199	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	V.N.C Colony			
Sample details	Drinking Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.



*Anisha Parab*

Anisha Parab  
Analyzed by

*Nandkumar Desai*

Nandkumar Desai  
Reviewed By

*Anandeeep Sawant*

Anandeeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/197	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	L.S.C Colony			
Sample details	Drinking Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

#### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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*Anisha Parab*

Anisha Parab  
Analyzed by

*Nandkumar Desai*

Nandkumar Desai  
Reviewed By

*Apandeep Sawant*

Apandeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/198	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling point	P.T.B			
Sample details	Drinking Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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Anisha Parab  
Analyzed by



Nandkumar Desai  
Reviewed By

Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/192	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Inlet Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

#### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	7.40	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	840.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	311.08	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	291.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	15.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

**Note:** Test results related only to the sample tested.

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*Shweta*  
Shweta Sawant  
Analyzed By

*NKDC*  
Nandkumar Desai  
Reviewed By

*Anandip*  
Anandip Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE01/2022/193	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Outlet Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	6.40	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	136.00	mg/lit	250.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	22.36	mg/lit	30.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	64.00	mg/lit	100.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	6.00	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

**Note:** Test results related only to the sample tested.

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*Shweta*  
Shweta Sawant  
Analyzed By



*NDS*  
Nandkumar Desai  
Reviewed By

*Sanjeev*  
Sanjeev Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/194	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Inlet Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.24	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	436.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	155.40	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	124.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	10.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G

**Note:** Test results related only to the sample tested.

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*Mugdha Gawade*  
Mugdha Gawade  
Analyzed By

*Nandkumar Desai*  
Nandkumar Desai  
Reviewed By

*Ananddeep Sawant*  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/01/2022/195	Issue Date	14/01/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 10/01/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	66
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Outlet Water	Date of collection	10/01/2022	
Sample Collected by	SEEPL Representative	Sample Received On	10/01/2022	
Analysis Started On	10/01/2022	Analysis Completed On	14/01/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

**Chemical Parameters**

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	6.93	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	32.00	mg/lit	50.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	5.20	mg/lit	10.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	16.00	mg/lit	20.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	2.80	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G
6.	Ammonia	2.24	mg/lit	5.00	APHA( 23 <sup>rd</sup> Edition ) 4500 NH3B C
7.	Total Nitrogen ( as N)	8.75	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 4500 N-B

**Microbiological Parameters**

8.	Faecal coliforms at 44.5°C for 24 hrs.	46	MPN Index/100ml	100	APHA ( 23 <sup>rd</sup> Edition ) 9221-E
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**Note:** Test results related only to the sample tested.

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1. Mugdha Gawade  
2. Anisha Parab  
Analyzed ByNandkumar Desai  
Reviewed ByAnanddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
04.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State) (G-A1)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	70	Latitude	N 15°45'51.1"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	232	Longitude	E 73°56'32.4"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0106	77.37	44.95	5.84	8.48	0.06	125.10
2.	07/02/2022	SEE/AR/02/2022/0203	43.90	32.52	3.33	<6.00	0.03	77.21
3.	10/02/2022	SEE/AR/02/2022/0312	85.31	27.20	5.15	10.38	0.08	160.32
4.	14/02/2022	SEE/AR/02/2022/0371	89.18	22.12	4.08	7.93	0.11	113.94
5.	17/02/2022	SEE/AR/02/2022/0501	31.47	14.01	<3.00	<6.00	0.05	45.73
6.	21/02/2022	SEE/AR/02/2022/0638	62.39	19.17	4.10	9.68	0.07	82.70
7.	24/02/2022	SEE/AR/02/2022/0716	57.18	18.75	4.35	8.96	0.03	76.76
8.	28/02/2022	SEE/AR/02/2022/0754	81.38	26.28	4.18	13.97	0.08	113.34
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note :** Test results related only to the sample tested.

- : Test results relate only to the condition prevailing at the time of sampling.
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- : Test methods of analyzed parameters are back side of analysis report.

1) Dipali Sawant  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2228-DTK-2011)	EI/FF/620	19/02/2021	18/02/2022

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 290-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/630	20/02/2021	19/02/2022

Fine Particulate Sampler (SR NO. 991-DTI-2020)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3772	24/09/2021	23/09/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemeheadvan Boundary(Goa State) (G-A2)				
Average Ambient Temperature (°C)	31.2	Average Humidity (%)	71	Latitude	N 15°42'06.1"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	254	Longitude	E 73°49'21.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0107	46.84	24.37	5.28	10.79	0.05	72.83
2.	07/02/2022	SEE/AR/02/2022/0204	37.90	26.20	<3.00	7.45	0.06	64.76
3.	10/02/2022	SEE/AR/02/2022/0313	65.76	22.75	4.36	<6.00	0.03	89.54
4.	14/02/2022	SEE/AR/02/2022/0372	80.23	34.10	6.62	9.14	0.08	116.74
5.	17/02/2022	SEE/AR/02/2022/0502	27.07	8.57	<3.00	<6.00	0.06	35.75
6.	21/02/2022	SEE/AR/02/2022/0639	37.97	18.71	3.39	9.31	0.03	58.80
7.	24/02/2022	SEE/AR/02/2022/0717	62.50	12.27	3.99	10.35	0.07	78.61
8.	28/02/2022	SEE/AR/02/2022/0755	68.19	22.50	<3.00	11.60	0.06	93.17
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note** : Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Test methods of analyzed parameters are back side of analysis report.

1)Dipali Sawant  
2)Aditya Naik  
Analyzed by

*Ndesai*  
Nandkumar Desai  
Reviewed by



*Arundeeep*  
Arundeeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BI(SR NO.2028-DTD-2016)	LES-CCL/FF/MF/SC/1146	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR No. 05-DTK-2011)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550	EI/FF/624	19/02/2021	18/02/2022

Fine Particulate Sampler (SR NO. 992-DTI-2020)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3768	24/09/2021	23/09/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-306/307, Plot No. 81, Patel Estate, Rein Margos, Vorem, Alto, Old Belim Road, Bardez, Porsvorn, Panaji-Goa-403 101, Goa State, India. ☎ : (0832) 2411322 / 2411323 • E-mail : sateh@goa@rediffmail.com

SPM: 100  
SPM: 100

Lab accredited by MIEF & CC Valid up to 03.11.2023 • Certified by ISO 9001:2015 & ISO 45001 :2018

## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Nagzar(Goa State) (G-A3)				
Average Ambient Temperature (°C)	30.7	Average Humidity (%)	73	Latitude	N 15°45'37.3"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	231	Longitude	E 73°53'14.22"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0108	37.24	27.07	4.43	10.63	0.03	65.19
2.	07/02/2022	SEE/AR/02/2022/0205	54.52	27.82	<3.00	<6.00	0.06	83.41
3.	10/02/2022	SEE/AR/02/2022/0314	55.52	29.77	5.10	6.53	0.05	86.45
4.	14/02/2022	SEE/AR/02/2022/0373	64.60	35.47	3.99	10.93	0.08	101.38
5.	17/02/2022	SEE/AR/02/2022/0503	28.38	18.75	<3.00	<6.00	0.07	47.92
6.	21/02/2022	SEE/AR/02/2022/0640	46.15	12.64	5.55	11.34	0.05	61.48
7.	24/02/2022	SEE/AR/02/2022/0718	44.31	32.35	5.02	10.00	0.06	79.43
8.	28/02/2022	SEE/AR/02/2022/0756	42.81	30.19	5.13	10.15	0.03	74.18
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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- : Test methods of analyzed parameters are back side of analysis report.

1)Dipali Sawant  
2)Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Amardeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- CEIS 121(SR NO.01-DTB-2017)	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 286-DTI-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/628	20/02/2021	19/02/2022

Fine Particulate Sampler (SR NO. 983-DTI-2020)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3771	24/09/2021	23/09/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-306/007, Plot No. 61, Patel Estate, Reis Magos, Verem, Aho, Old Belim Road, Bardez, Porvorim, Panaji-Goa-403 101, Goa State, India. (C) : (0832) 2411322 / 2411323 • E-mail : sde@sgna@rediffmail.com

SPVLE WATER  
SPVLE LIFE

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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Purva Casarvarnem (Goa State)(G-A4)				
Average Ambient Temperature (°C)	31.3	Average Humidity (%)	73	Latitude	N 15°41'41.9"
Average Wind Speed (km/hr)	2.1	Average Wind direction (Deg)	210	Longitude	E 73°50'16.6"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0109	75.84	34.89	4.76	8.28	0.05	114.30
2.	07/02/2022	SEE/AR/02/2022/0206	68.94	27.86	<3.00	<6.00	0.06	98.15
3.	10/02/2022	SEE/AR/02/2022/0315	87.52	40.29	3.97	6.43	0.07	145.60
4.	14/02/2022	SEE/AR/02/2022/0374	85.75	28.40	3.63	10.48	0.09	126.69
5.	17/02/2022	SEE/AR/02/2022/0504	54.56	16.55	<3.00	<6.00	0.05	72.41
6.	21/02/2022	SEE/AR/02/2022/0641	76.09	28.11	5.58	7.23	0.06	105.26
7.	24/02/2022	SEE/AR/02/2022/0719	71.67	36.30	<3.00	9.28	0.07	113.63
8.	28/02/2022	SEE/AR/02/2022/0757	74.68	35.93	<3.00	10.42	0.05	111.69
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Dipali Sawant  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Anand Deep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1456-DTD-2009)	LES-CCL/FF/MF/SC/1157	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 299-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3400	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Khajne Amere Porscodem (Goa State) (G-A5)				
Average Ambient Temperature (°C)	30.2	Average Humidity (%)	72	Latitude	N 15°40'38.0"
Average Wind Speed (km/hr)	1.9	Average Wind direction (Deg)	253	Longitude	E 73°46'21.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0110	44.26	22.70	4.35	7.76	0.03	68.09
2.	07/02/2022	SEE/AR/02/2022/0207	70.05	21.58	<3.00	<6.00	0.05	92.11
3.	10/02/2022	SEE/AR/02/2022/0316	70.74	38.30	3.26	6.98	0.06	110.40
4.	14/02/2022	SEE/AR/02/2022/0375	84.36	21.08	8.11	9.09	0.10	118.05
5.	17/02/2022	SEE/AR/02/2022/0505	30.46	17.34	<3.00	<6.00	0.05	48.00
6.	21/02/2022	SEE/AR/02/2022/0642	43.38	18.09	4.93	7.71	0.03	63.12
7.	24/02/2022	SEE/AR/02/2022/0720	55.75	15.97	3.89	<6.00	0.06	72.76
8.	28/02/2022	SEE/AR/02/2022/0758	34.54	17.84	<3.00	10.14	0.05	53.26
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

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1) Dipali Sawant  
2) Aditya Naik  
Analyzed by

*NDESJ*  
Nandkumar Desai  
Reviewed by



*Arundeep*  
Arundeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1895-DTJ-2014)	LES-CCL/FF/MF/SC/1152	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 288-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3401	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Rajvil Wada Torxem (Goa State)(G-A6)				
Average Ambient Temperature (°C)	31.1	Average Humidity (%)	73	Latitude	N 15°48'40.0"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	265	Longitude	E 73°52'50.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0111	62.33	31.44	5.14	10.64	0.05	95.43
2.	07/02/2022	SEE/AR/02/2022/0208	78.06	19.79	<3.00	<6.00	0.07	98.52
3.	10/02/2022	SEE/AR/02/2022/0317	85.83	24.04	3.52	12.31	0.06	123.94
4.	14/02/2022	SEE/AR/02/2022/0376	80.40	18.30	3.83	12.42	0.07	100.17
5.	17/02/2022	SEE/AR/02/2022/0506	42.05	10.98	<3.00	<6.00	0.03	53.59
6.	21/02/2022	SEE/AR/02/2022/0643	70.88	17.17	6.86	8.95	0.05	88.82
7.	24/02/2022	SEE/AR/02/2022/0721	63.89	20.46	4.52	11.66	0.06	86.48
8.	28/02/2022	SEE/AR/02/2022/0759	39.83	11.39	<3.00	13.38	0.08	52.53
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

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2) Aditya Naik  
Analyzed by

*ndesai*  
Nandkumar Desai  
Reviewed by



*Asant*  
Asantdeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.2024-DTD-2016)	LES-CCL/FF/MF/SC/1144	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 298-DTJ-2014 )

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	EI/FF/623	19/02/2021	18/02/2022

Fine Particulate Sampler (SR NO. 03-DTA-2017)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS – AL 112	LES-CCL/FF/PM/SC/1107	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Satarda(Maharashtra State)(M-A1)				
Average Ambient Temperature (°C)	31.6	Average Humidity (%)	70	Latitude	N15°43'01.3"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	252	Longitude	E 73°46'00.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0112	49.67	17.17	4.08	9.16	0.07	67.40
2.	07/02/2022	SEE/AR/02/2022/0209	56.50	21.79	<3.00	8.50	0.06	78.57
3.	10/02/2022	SEE/AR/02/2022/0318	57.12	23.58	5.47	6.73	0.08	81.48
4.	14/02/2022	SEE/AR/02/2022/0377	77.22	22.21	5.48	8.04	0.03	100.49
5.	17/02/2022	SEE/AR/02/2022/0507	24.87	7.32	<3.00	<6.00	0.05	32.35
6.	21/02/2022	SEE/AR/02/2022/0644	37.38	15.09	3.84	9.18	0.07	52.61
7.	24/02/2022	SEE/AR/02/2022/0722	51.42	14.10	3.15	7.77	0.03	66.84
8.	28/02/2022	SEE/AR/02/2022/0760	54.85	19.13	<3.00	11.73	0.06	75.30
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

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Analyzed by

*ndesai*  
Nandkumar Desai  
Reviewed by



*Amandeep*  
Amandeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1901-DTJ-2014)	LES-CCL/FF/MF/SC/1149	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 104-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3402	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Dingna(Maharashtra State)(M-A2)				
Average Ambient Temperature (°C)	30.9	Average Humidity (%)	73	Latitude	N 15°46'12.3"
Average Wind Speed (km/hr)	1.9	Average Wind direction (Deg)	233	Longitude	E 73°49'20.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0113	50.12	21.50	4.31	10.05	0.06	72.69
2.	07/02/2022	SEE/AR/02/2022/0210	33.11	20.87	3.05	6.30	0.05	54.86
3.	10/02/2022	SEE/AR/02/2022/0319	59.96	19.54	5.67	<6.00	0.07	80.52
4.	14/02/2022	SEE/AR/02/2022/0378	65.54	20.67	6.43	10.68	0.08	87.43
5.	17/02/2022	SEE/AR/02/2022/0508	19.14	8.19	<3.00	<6.00	0.03	28.44
6.	21/02/2022	SEE/AR/02/2022/0645	39.57	10.31	3.68	8.37	0.05	51.12
7.	24/02/2022	SEE/AR/02/2022/0723	41.77	14.60	<3.00	7.40	0.06	57.34
8.	28/02/2022	SEE/AR/02/2022/0761	65.34	21.79	5.38	10.84	0.03	88.79
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182(Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182(Part 10)	IS 5182(Part IV)

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2)Aditya Naik  
**Analyzed By**

*Nesaj*  
Nandkumar Desai  
**Reviewed by**



*Amrdeep*  
Amrdeep Sawant  
**Authorized Signatory**

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1902-DTJ-2014)	LES-CCL/FF/MF/SC/1148	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 381-DTD-2016)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3399	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	03/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	February 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Netarde(Maharashtra State)(M-A3)				
Average Ambient Temperature (°C)	31.4	Average Humidity (%)	72	Latitude	N 15°46'11.7"
Average Wind Speed (km/hr)	2.1	Average Wind direction (Deg)	243	Longitude	E 73°50'48.0"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/02/2022	SEE/AR/02/2022/0114	62.11	19.17	4.31	8.59	0.06	84.05
2.	07/02/2022	SEE/AR/02/2022/0211	80.28	14.22	<3.00	7.68	0.07	94.92
3.	10/02/2022	SEE/AR/02/2022/0320	83.61	22.75	5.95	<6.00	0.03	129.16
4.	14/02/2022	SEE/AR/02/2022/0379	75.38	20.13	4.37	12.65	0.09	98.36
5.	17/02/2022	SEE/AR/02/2022/0509	26.11	6.61	<3.00	<6.00	0.05	33.74
6.	21/02/2022	SEE/AR/02/2022/0646	78.00	19.13	5.65	8.50	0.06	99.49
7.	24/02/2022	SEE/AR/02/2022/0724	59.53	21.04	<3.00	9.70	0.03	83.00
8.	28/02/2022	SEE/AR/02/2022/0762	66.04	13.22	4.91	11.40	0.06	81.27
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note :** Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

: Test methods of analyzed parameters are back side of analysis report.

1)Dipali Sawant  
2)Aditya Naik  
Analyzed by

*NDesai*  
Nandkumar Desai  
Reviewed by



*Ananddeep*  
Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.1897-DTJ-2014)	LES-CCL/FF/MF/SC/1151	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 105-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report No.	SEE/AR/02/2022/0321	Date of Issue	17/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	10/02/2022	Temperature(°C)	28.4	Humidity (%)	67
Analysis Started On	15/02/2022	Analysis Completed On		17/02/2022	

## AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

## Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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 Susmita Kapdoskar  
 Analyzed by

  
 Nandkumar Desai  
 Reviewed by



  
 Anandeeep Sawant  
 Authorized Signatory



Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report No.	SEE/AR/02/2022/0322	Date of Issue	17/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	10/02/2022	Temperature(°C)	28.4	Humidity (%)	67
Analysis Started On	15/02/2022	Analysis Completed On		17/02/2022	

## AMBIENT AIR LOCATION

Location of ambient air station	HSD Bunk (Inside Mopa Airport Premises)
Instruments Used	Organic Vapour Sampler

## Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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*Susmita*  
Susmita Kapdoskar  
Analyzed by

*N. Desai*  
Nandkumar Desai  
Reviewed by



*A. Sawant*  
Ananddeep Sawant  
Authorized Signatory

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	24-DTD-2016	E/FF/636	19/02/2021	18/02/2022



### AMBIENT AIR QUALITY MONITORING REPORT

Report No.	SEE/AR/02/2022/0323	Date of Issue	17/02/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	10/02/2022	Temperature(°C)	28.4	Humidity (%)	67
Analysis Started On	15/02/2022	Analysis Completed On	17/02/2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemecheadvan Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

### Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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Nandkumar Desai  
Reviewed by



Anandhep Sawant  
Authorized Signatory

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/635	19/02/2021	18/02/2022



## NOISE LEVEL MONITORING REPORT

Report No.	SEE/AR/02/2022/0380-0381, 0490-0491, 0325, 0615, 0324, 0705, 0685, 0616, 0684, 0705	Report Date	28/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sample Collected By	SEEPL Representative		
Sampling Plan	SEEPL/D/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10

### Chemical Testing - Atmospheric Pollution

Sr. No	Date of Monitoring	Report No.	Station ID	Zone	Sampling Location	Day Time Noise in dB(A)			Night Time Noise in dB(A)		
						Lmin	Lmax	Leq	Lmin	Lmax	Leq
1.	14/02/2022	SEE/AR/02/2022/0380	G-N1	I	Mopa Boundary	30.1	76.4	63.9	31.3	69.4	52.3
2.	14/02/2022	SEE/AR/02/2022/0381	G-N2	I	Shemecheadvan Boundary	33.5	81.2	64.2	30.0	69.5	53.5
3.	16/02/2022	SEE/AR/02/2022/0490	G-N3	C	Nagzar	30.0	71.6	58.3	30.0	65.9	49.7
4.	16/02/2022	SEE/AR/02/2022/0491	G-N4	R	Purva Casarvarnem	30.0	66.0	49.5	30.0	63.8	39.5
5.	10/02/2022	SEE/AR/02/2022/0325	G-N5	R	Chandel	30.1	63.3	49.7	30.0	49.9	39.2
6.	18/02/2022	SEE/AR/02/2022/0615	G-N6	R	Khajne Amere Porcodem	30.0	55.5	49.1	30.1	59.3	36.9
7.	10/02/2022	SEE/AR/02/2022/0324	G-N7	R	Warkhand	30.0	61.3	49.5	30.0	51.0	39.5
8.	23/02/2022	SEE/AR/02/2022/0705	G-N8	C	Rajvil Wada Torxem	30.9	79.4	59.0	33.4	70.6	46.4
9.	22/02/2022	SEE/AR/02/2022/0685	G-N9	C	Village Panchayat Tamboxem -Mopa- Ugverm	30.0	76.5	59.1	30.7	61.3	49.9
10.	18/02/2022	SEE/AR/02/2022/0616	M-N1	R	Satarda	30.2	59.9	47.2	30.0	53.6	38.7
11.	22/02/2022	SEE/AR/02/2022/0684	M-N2	R	Dingna	31.3	64.8	49.9	30.3	55.2	39.8
12.	23/02/2022	SEE/AR/02/2022/0705	M-N3	R	Netarde	30.0	71.0	49.8	30.0	56.7	39.6

### I – Industrial Zone, C – Commercial Zone, R – Residential Zone

➤ Noise Limits as per Schedule III of "The Environment (Protection) Rules, 1986" are as follows:

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial Area ( I )	75	70
(B)	Commercial Area ( C )	65	55
(C)	Residential Area ( R )	55	45
(D)	Silence Zone ( S )	50	40

- Day time is reckoned in between 6.00am to 10.00pm and night time is reckoned in between 10.00pm to 6.00am.
- \*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is referable to human hearing. A "decibel" is a unit in which noise is measured.
- "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- Leq: It is the energy mean of the noise level over a specified period

**Note** : Monitoring has been done as per GPCB protocol for Ambient Level Noise Monitoring 2015.

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Sanjivan Gawas  
Monitored by

Nandkumar Desai  
Reviewed by



Anand Deep Sawant  
Authorized Signatory

Calibration Details of Equipment used for Sampling

Noise Level Meter No.1(A0913-1393)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/346	18/07/2021	18/07/2022

Noise Level Meter No.2 (A0114-1408)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/347	18/07/2021	18/07/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/186	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	WTP-Treated			
Sample details	Treated Water sample	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.37	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.33	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	20.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	40.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	<10.00	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	24.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39) : 1991

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By



Anand Deep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE02/2022/186	Issue Date	15/02/2022
Order / Reference	As per dated 07/02/2022	Sample Received On	07/02/2022
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	5.61	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.04	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	2.42	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	<0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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2. Anisha Parab  
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*Anandeeep Sawant*  
Anandeeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE02/2022/186	Issue Date	15/02/2022
Order / Reference	As per dated 07/02/2022	Sample Received On	07/02/2022
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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1. Shreya Harmalkar  
2. Anisha Parab  
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Nandkumar Desai  
Reviewed By



  
Ananddeep Sawant  
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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/184	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling point	Borewell 1			
Sample details	Ground Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	6.68	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.62	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	96.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	150.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	11.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S/F
11.	Total Hardness as CaCO <sub>3</sub>	100.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
2. Anisha Parab  
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Nandkumar Desai  
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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/02/2022/184	Issue Date	15/02/2022
Order / Reference	As per dated 07/02/2022	Sample Received On	07/02/2022
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	16.03	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.04	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	14.50	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.06	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	3.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	3.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmalkar  
2. Anisha Parab  
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*Shreya Harmalkar*  
*Anisha Parab*

*Nandkumar Desal*  
Nandkumar Desal  
Reviewed By



*Ananddeep Sawant*  
Ananddeep Sawant  
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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/02/2022/184	Issue Date	15/02/2022
Order / Reference	As per dated 07/02/2022	Sample Received On	07/02/2022
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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2. Anisha Parab  
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Nandkumar Desai  
Reviewed By



Anandeeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C)	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/185	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling point	Borewell No. 2			
Sample details	Ground Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle + PVC Can	Sample Quantity	1000 ml + 4000ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.02	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.58	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	80.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	129.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	12.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S/F
11.	Total Hardness as CaCO <sub>3</sub>	76.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

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2. Anisha Parab  
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Nandkumar  
Nandkumar Desai  
Reviewed By



Anand  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/02/2022/185	Issue Date	15/02/2022
Order / Reference	As per dated 07/02/2022	Sample Received On	07/02/2022
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	18.43	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.05	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	7.23	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	7.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	5.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmalkar  
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Nandkumar Desai  
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Agandeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/02/2022/185	Issue Date	15/02/2022
Order / Reference	As per dated 07/02/2022	Sample Received On	07/02/2022
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/179	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling point	R.R. Canteen			
Sample details	Drinking Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C)	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/183	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	K.M.V Colony			
Sample details	Drinking Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/182	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	V.N.C Colony			
Sample details	Drinking Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/01/2022/180	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C 28.1	Humidity % 68
Sampling point	L.S.C Colony			
Sample details	Drinking Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNindex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNindex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C.)	Q/004	T2021/08/071	26/08/2021	26/08/2022
03.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/181	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling point	A.T.C Tower			
Sample details	Drinking Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/02/2022/175	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Inlet Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.54	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	1480.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	460.00	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	264.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	18.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G

**Note:** Test results related only to the sample tested.

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*Mugdha*  
Mugdha Gawade  
Analyzed By

*Nandkumar*  
Nandkumar Desai  
Reviewed By

*Ananddeep*  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/02/2022/176	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Outlet Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	6.78	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	168.00	mg/lit	250.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	25.32	mg/lit	30.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	70.00	mg/lit	100.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	5.40	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

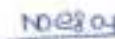
**Note:** Test results related only to the sample tested.

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Mugdha Gawade  
Analyzed By



  
Nandkumar Desai  
Reviewed By

  
Anandjeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/02/2022/177	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Inlet Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.61	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	640.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	174.93	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	105.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	9.60	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G


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Mugdha Gawade  
Analyzed By



  
Nandkumar Desai  
Reviewed By

  
Anandjeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/02/2022/178	Issue Date	15/02/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/02/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28.1	68
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Outlet Water	Date of collection	07/02/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/02/2022	
Analysis Started On	07/02/2022	Analysis Completed On	15/02/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	5.69	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	40.00	mg/lit	50.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	6.50	mg/lit	10.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	14.00	mg/lit	20.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	2.80	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G
6.	Ammonia	1.12	mg/lit	5.00	APHA( 23 <sup>rd</sup> Edition ) 4500 NH3B C
7.	Total Nitrogen ( as N)	6.00	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 4500 N-B

### Microbiological Parameters

8.	Faecal coliforms at 44.5°C for 24 hrs.	33	MPN Index/100ml	100	APHA ( 23 <sup>rd</sup> Edition ) 9221-E
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1. Mugdha Gawade  
2. Anisha Parab  
Analyzed By



N Desai  
Nandkumar Desai  
Reviewed By

Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
04.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State) (G-A1)				
Average Ambient Temperature (°C)	32.1	Average Humidity (%)	68	Latitude	N 15°45'51.1"
Average Wind Speed (km/hr)	1.8	Average Wind direction (Deg)	238	Longitude	E 73°56'32.4"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0069	81.20	47.86	6.73	10.06	0.11	146.83
2.	07/03/2022	SEE/AR/03/2022/0220	79.30	25.78	5.24	7.09	0.09	118.15
3.	10/03/2022	SEE/AR/03/2022/0320	80.50	39.67	4.77	9.40	0.14	139.32
4.	14/03/2022	SEE/AR/03/2022/0389	83.70	49.82	4.90	6.67	0.13	140.97
5.	17/03/2022	SEE/AR/03/2022/0446	66.19	23.49	3.97	6.80	0.06	96.14
6.	21/03/2022	SEE/AR/03/2022/0520	79.32	43.58	6.83	10.10	0.07	125.57
7.	25/03/2022	SEE/AR/03/2022/0742	85.90	24.87	9.14	14.06	0.11	124.25
8.	28/03/2022	SEE/AR/03/2022/0808	48.90	11.06	5.26	7.05	0.05	61.23
9.	31/03/2022	SEE/AR/03/2022/0870	83.40	46.20	7.48	8.47	0.07	140.99
NAAQS Limits*			100	60	80	80	4	-
Units			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
Method			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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- : Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 991-DTI-2020)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3772	24/09/2021	23/09/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Shemeheadvan Boundary(Goa State) (G-A2)				
Average Ambient Temperature (°C)	31.9	Average Humidity (%)	66	Latitude	N 15°42'06.1"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	243	Longitude	E 73°49'21.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0070	86.50	33.27	6.00	13.27	0.08	136.34
2.	07/03/2022	SEE/AR/03/2022/0221	78.40	14.06	4.49	7.70	0.07	109.06
3.	10/03/2022	SEE/AR/03/2022/0321	49.29	13.27	4.03	10.08	0.05	68.23
4.	14/03/2022	SEE/AR/03/2022/0390	81.28	25.99	4.37	10.77	0.06	113.05
5.	17/03/2022	SEE/AR/03/2022/0447	71.60	34.85	4.67	7.14	0.08	110.06
6.	21/03/2022	SEE/AR/03/2022/0521	59.45	18.75	3.19	9.01	0.05	81.35
7.	25/03/2022	SEE/AR/03/2022/0743	58.84	35.93	3.74	10.91	0.07	99.29
8.	28/03/2022	SEE/AR/03/2022/0809	35.09	10.15	9.97	11.75	0.06	46.25
9.	31/03/2022	SEE/AR/03/2022/0871	34.23	15.59	8.15	10.28	0.05	51.21
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	<b>-</b>
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note :** Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Anandjeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 991-DTI-2020)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3772	24/09/2021	23/09/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Nagzar(Goa State) (G-A3)				
Average Ambient Temperature (°C)	32.1	Average Humidity (%)	68	Latitude	N 15°45'37.3"
Average Wind Speed (km/hr)	1.7	Average Wind direction (Deg)	245	Longitude	E 73°53'14.22"
Instruments Used	FPS(APM-550), RDS(APM-460) & GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0071	49.63	19.75	3.80	9.52	0.05	71.95
2.	07/03/2022	SEE/AR/03/2022/0222	54.96	12.43	5.01	8.83	0.06	70.05
3.	10/03/2022	SEE/AR/03/2022/0322	42.56	13.47	<3.00	7.98	0.03	60.65
4.	14/03/2022	SEE/AR/03/2022/0391	77.06	31.40	3.25	11.96	0.07	113.06
5.	17/03/2022	SEE/AR/03/2022/0448	30.33	12.27	5.04	<6.00	0.08	44.98
6.	21/03/2022	SEE/AR/03/2022/0522	48.70	19.75	5.28	8.67	0.06	70.14
7.	25/03/2022	SEE/AR/03/2022/0744	34.66	24.33	5.20	6.33	0.03	61.37
8.	28/03/2022	SEE/AR/03/2022/0810	35.28	20.42	4.46	10.09	0.07	57.92
9.	31/03/2022	SEE/AR/03/2022/0872	47.43	15.93	10.38	12.66	0.06	66.64
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

**Note :** Test results related only to the sample tested.

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade

2) Aditya Naik

Analyzed by

Nandkumar Desai  
Reviewed by



Anandeeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO.2027-DTD-2016)	LES-CCL/FF/MF/SC/1145	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 991-DTI-2020)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3772	24/09/2021	23/09/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Purva Casarvarnem (Goa State)(G-A4)				
Average Ambient Temperature (°C)	31.4	Average Humidity (%)	65	Latitude	N 15°41'41.9"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	216	Longitude	E 73°50'16.6"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0072	67.72	30.98	8.44	13.14	0.06	102.16
2.	07/03/2022	SEE/AR/03/2022/0223	62.71	31.15	<3.00	9.88	0.05	96.92
3.	10/03/2022	SEE/AR/03/2022/0323	74.16	18.71	5.00	9.54	0.08	97.97
4.	14/03/2022	SEE/AR/03/2022/0392	83.20	32.85	3.30	12.18	0.09	122.01
5.	17/03/2022	SEE/AR/03/2022/0449	63.25	14.51	5.06	<6.00	0.10	80.84
6.	21/03/2022	SEE/AR/03/2022/0523	60.72	15.14	<3.00	6.67	0.06	79.40
7.	25/03/2022	SEE/AR/03/2022/0745	49.62	19.88	4.07	10.01	0.05	72.24
8.	28/03/2022	SEE/AR/03/2022/0811	47.62	21.12	4.10	9.03	0.06	71.39
9.	31/03/2022	SEE/AR/03/2022/0873	33.63	17.17	4.64	12.86	0.07	52.17
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	mg/ m <sup>3</sup>	µg/ m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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: Test methods of analyzed parameters are back side of analysis report.

1) Akash Pattade

2) Aditya Naik

Analyzed by

Nandkumar Desai

Reviewed by

Anandjeep Sawant

Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1456-DTD-2009)	LES-CCL/FF/MF/SC/1157	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 299-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3400	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Khajne Amere Porscodem (Goa State) (G-A5)				
Average Ambient Temperature (°C)	31.7	Average Humidity (%)	65	Latitude	N 15°40'38.0"
Average Wind Speed (km/hr)	1.9	Average Wind direction (Deg)	234	Longitude	E 73°46'21.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0073	56.31	18.21	3.93	12.23	0.07	75.38
2.	07/03/2022	SEE/AR/03/2022/0224	28.57	11.35	4.21	10.03	0.06	41.27
3.	10/03/2022	SEE/AR/03/2022/0324	52.39	15.47	4.04	7.74	0.03	71.40
4.	14/03/2022	SEE/AR/03/2022/0393	85.11	17.34	4.29	12.38	0.09	104.38
5.	17/03/2022	SEE/AR/03/2022/0450	66.71	22.08	5.48	<6.00	0.06	110.06
6.	21/03/2022	SEE/AR/03/2022/0524	26.03	10.60	<3.00	<6.00	0.03	39.27
7.	25/03/2022	SEE/AR/03/2022/0746	45.51	21.21	<3.00	12.67	0.08	69.85
8.	28/03/2022	SEE/AR/03/2022/0812	39.78	15.22	10.13	9.10	0.05	56.15
9.	31/03/2022	SEE/AR/03/2022/0874	35.00	18.84	5.25	10.32	0.03	54.85
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Akash Pattade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1895-DTJ-2014)	LES-CCL/FF/MF/SC/1152	15/07/2021	14/07/2022

UV Spectrophotometer .

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration


Fine Particulate Sampler (SR No. 288-DTJ-2014)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3401	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



AMBIENT AIR QUALITY MONITORING REPORT								
Report Date	01/04/2022							
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited							
Address of Client	Mopa, Goa							
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10					
Sample Collected By	SEEPL Representative							
Month of Sampling	March 2022							
AMBIENT AIR LOCATION								
Location of ambient air station	Rajvil Wada Torxem (Goa State)(G-A6)							
Average Ambient Temperature (°C)	31.9	Average Humidity (%)	66	Latitude	N 15°48'40.0"			
Average Wind Speed (km/hr)	1.4	Average Wind direction (Deg)	254	Longitude	E 73°52'50.2"			
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)							
Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0074	66.45	19.46	6.70	10.41	0.05	87.46
2.	07/03/2022	SEE/AR/03/2022/0225	59.13	16.38	3.55	10.05	0.03	78.27
3.	10/03/2022	SEE/AR/03/2022/0325	52.32	20.33	4.08	6.90	0.08	74.01
4.	14/03/2022	SEE/AR/03/2022/0394	72.81	22.16	4.09	9.30	0.10	97.79
5.	17/03/2022	SEE/AR/03/2022/0451	54.78	18.88	3.10	<6.00	0.06	74.97
6.	21/03/2022	SEE/AR/03/2022/0525	53.32	21.37	5.37	9.84	0.05	75.15
7.	25/03/2022	SEE/AR/03/2022/0747	79.50	35.68	5.49	6.58	0.10	121.96
8.	28/03/2022	SEE/AR/03/2022/0813	34.38	12.39	7.92	11.49	0.06	49.13
9.	31/03/2022	SEE/AR/03/2022/0875	42.63	19.38	5.09	12.10	0.05	63.23
NAAQS Limits*			100	60	80	80	4	-
Units			µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	µg/ m <sup>3</sup>	mg/ m <sup>3</sup>	µg/ m <sup>3</sup>
Method			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)
*NATIONAL AMBIENT AIR STANDARDS (2009)								
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1) Akash Pattade 2) Aditya Naik Analyzed by			NCS-04 Nandkumar Desai Reviewed by			 Anandjeep Sawant Authorized Signatory		

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.1897-DTJ-2014)	LES-CCL/FF/MF/SC/1151	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 03-DTA-2017)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS – AL 112	LES-CCL/FF/PM/SC/1107	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



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Goa State, India. ☎ : (0832) 2411322 / 2411323 • E-mail : starlabgoa@rediffmail.com

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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Satarda(Maharashtra State)(M-A1)				
Average Ambient Temperature (°C)	31.7	Average Humidity (%)	67	Latitude	N15°43'01.3"
Average Wind Speed (km/hr)	1.6	Average Wind direction (Deg)	248	Longitude	E 73°46'00.2"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0075	52.18	17.55	4.38	8.86	0.03	70.20
2.	07/03/2022	SEE/AR/03/2022/0226	35.83	15.39	4.74	<6.00	0.06	51.72
3.	10/03/2022	SEE/AR/03/2022/0326	50.46	22.08	4.77	8.91	0.05	73.00
4.	14/03/2022	SEE/AR/03/2022/0395	70.24	21.42	5.98	9.42	0.07	93.17
5.	17/03/2022	SEE/AR/03/2022/0452	65.57	15.72	5.35	<6.00	0.08	84.47
6.	21/03/2022	SEE/AR/03/2022/0526	33.45	16.47	4.27	10.70	0.09	50.96
7.	25/03/2022	SEE/AR/03/2022/0748	36.89	13.31	3.92	12.59	0.05	51.63
8.	28/03/2022	SEE/AR/03/2022/0814	39.05	17.26	5.34	12.73	0.06	57.02
9.	31/03/2022	SEE/AR/03/2022/0876	41.73	20.17	4.17	11.43	0.09	64.24
<b>NAAQS Limits*</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>4</b>	-
<b>Units</b>			µg/ m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
<b>Method</b>			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 05)	IS 5182( Part 10)	IS 5182( Part IV)

\*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Akash Paltade  
2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Anandjeep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1901-DTJ-2014)	LES-CCL/FF/MF/SC/1149	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR NO. 104-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3402	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



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AMBIENT AIR QUALITY MONITORING REPORT			
Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Dingna(Maharashtra State)(M-A2)				
Average Ambient Temperature (°C)	32.1	Average Humidity (%)	68	Latitude	N 15°46'12.3"
Average Wind Speed (km/hr)	1.3	Average Wind direction (Deg)	243	Longitude	E 73°49'20.5"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0076	56.75	16.84	<3.00	10.39	0.06	73.82
2.	07/03/2022	SEE/AR/03/2022/0227	66.05	21.62	4.82	11.17	0.08	90.48
3.	10/03/2022	SEE/AR/03/2022/0327	42.63	15.22	4.54	8.58	0.07	58.96
4.	14/03/2022	SEE/AR/03/2022/0396	76.50	27.45	4.20	10.61	0.05	105.29
5.	17/03/2022	SEE/AR/03/2022/0453	34.80	14.60	4.69	<6.00	0.03	50.02
6.	21/03/2022	SEE/AR/03/2022/0527	30.75	16.34	3.19	12.10	0.06	47.94
7.	25/03/2022	SEE/AR/03/2022/0749	42.89	18.63	4.48	11.37	0.07	62.59
8.	28/03/2022	SEE/AR/03/2022/0815	31.78	18.30	3.50	11.03	0.06	50.91
9.	31/03/2022	SEE/AR/03/2022/0877	38.32	12.31	4.07	11.37	0.05	52.08
NAAQS Limits*			100	60	80	80	4	-
Units			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
Method			IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 08)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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2) Aditya Naik  
Analyzed by

Nandkumar Desai  
Reviewed by



Anandeeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	RDS- APM 460 (SR NO. 1461-DTD-2009)	LES-CCL/FF/MF/SC/1154	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler (SR No. 381-DTD-2016)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/RF/SC/3399	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



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## AMBIENT AIR QUALITY MONITORING REPORT

Report Date	01/04/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		
Address of Client	Mopa, Goa		
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10
Sample Collected By	SEEPL Representative		
Month of Sampling	March 2022		

### AMBIENT AIR LOCATION

Location of ambient air station	Netarde(Maharashtra State)(M-A3)				
Average Ambient Temperature (°C)	31.9	Average Humidity (%)	66	Latitude	N 15°46'11.7"
Average Wind Speed (km/hr)	1.5	Average Wind direction (Deg)	234	Longitude	E 73°50'48.0"
Instruments Used	FPS(APM-550), RDS(APM-460) &GPS (APM - 411)				

Sr. No	Date of Sampling	Report No.	PARAMETERS					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	SPM
1.	03/03/2022	SEE/AR/03/2022/0077	75.10	24.62	5.15	12.35	0.08	103.61
2.	07/03/2022	SEE/AR/03/2022/0228	47.08	11.52	4.58	8.97	0.05	61.07
3.	10/03/2022	SEE/AR/03/2022/0328	61.56	23.41	3.67	8.31	0.03	85.76
4.	14/03/2022	SEE/AR/03/2022/0397	63.22	26.41	5.65	11.75	0.08	96.35
5.	17/03/2022	SEE/AR/03/2022/0454	73.02	36.09	4.30	<6.00	0.06	111.22
6.	21/03/2022	SEE/AR/03/2022/0528	34.61	11.60	5.44	9.13	0.05	47.57
7.	25/03/2022	SEE/AR/03/2022/0750	52.86	19.21	7.47	<6.00	0.07	73.54
8.	28/03/2022	SEE/AR/03/2022/0816	41.35	22.25	5.67	14.74	0.05	66.51
9.	31/03/2022	SEE/AR/03/2022/0878	52.39	11.81	3.08	9.71	0.06	65.28

#### NAAQS Limits\*

	100	60	80	80	4	-
Units	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>
Method	IS 5182( Part 23)	Lab SOP NO.: SEE/LD/SOP-AA-04	IS 5182 (Part 02)	IS 5182 (Part 06)	IS 5182( Part 10)	IS 5182( Part IV)

#### \*NATIONAL AMBIENT AIR STANDARDS (2009)

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1) Akash Pattade  
 2) Aditya Naik  
 Analyzed by

Nandkumar Desai  
 Reviewed by



Apurdeep Sawant  
 Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Respirable Dust Sampler's with Gaseous Sampling

Sr No.	Equipment Name	Certificate No	Calibrated on	Calibration due date
01	RDS- APM 460 BL(SR NO.1719-DTI-2012)	LES-CCL/FF/MF/SC/1153	15/07/2021	14/07/2022

UV Spectrophotometer

Sr No.	Equipment Name	Calibration
01	UV	In House Calibration

Fine Particulate Sampler ( SR NO. 105-DTK-2012)

Sr No.	Equipment Name	Certificate No.	Calibrated on	Calibration due date
01	FPS - APM 550 MINI	LES-CCL/FF/MF/SC/1155	15/07/2021	14/07/2022

CO METER

Sr No.	Instrument Type	Calibrated on	Calibration due date
01	CO Analyzer (SR No. 01 DT L14)	20/11/2021	19/11/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-308/207, Plot No. 111, Patel Estate, Reis Margis, Vemim, Ahoi, Old Belim Road, Bunder, Porvairim, Panaji-Goa-403 101.  
Goa State, India. ☎ : (0832) 2411322 / 2411323 • E-mail : starlabgoa@rediffmail.com

SAVE LITTER  
SAVE LIFE

Lab accredited by MoEF & CC Valid up to 03.11.2023 • Certified by ISO 9001:2015 & ISO 45001 :2018

## AMBIENT AIR QUALITY MONITORING REPORT

Report No.	SEE/AR/03/2022/0329	Date of Issue	17/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	10/03/2022	Temperature(°C)	28.3	Humidity (%)	65
Analysis Started On	14/03/2022	Analysis Completed On		17/03/2022	

## AMBIENT AIR LOCATION

Location of ambient air station	Mopa Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

## Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18


**Note :** Test results related only to the sample tested.

: Test results relate only to the condition prevailing at the time of sampling.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

  
Susmita Kapdoskar  
Analyzed by

  
Nandkumar Desai  
Reviewed by



  
Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/3523	18/02/2022	17/02/2023



# Sadekar Enviro Engineers Pvt. Ltd.

B-306/307, Plot No. 61, Patel Estate, Row Margos, Verem, Alto, Old Belim Road, Bardar, Porvorim, Panaji-Goa-403 101.  
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## AMBIENT AIR QUALITY MONITORING REPORT

Report No.	SEE/AR/03/2022/0330	Date of Issue	17/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	10/03/2022	Temperature(°C)	28.3	Humidity (%)	65
Analysis Started On	14/03/2022	Analysis Completed On		17/03/2022	

## AMBIENT AIR LOCATION

Location of ambient air station	HSD Bunk (Inside Mopa Airport Premises)
Instruments Used	Organic Vapour Sampler

## Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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Susmita Kapdoskar  
Analyzed by

Nandkumar Desai  
Reviewed by



Anandhep Sawant  
Authorized Signatory



Calibration details of Equipment used for Sampling & Analysis

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/3523	18/02/2022	17/02/2023



# Sadekar Enviro Engineers Pvt. Ltd.

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SPM/ L1/11/11  
SPM/ L1/11/11

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## AMBIENT AIR QUALITY MONITORING REPORT

Report No.	SEE/AR/03/2022/0331	Date of Issue	17/03/2022		
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited				
Address of Client	Mopa, Goa				
Sample Collected By	SEEPL Representative	Environmental condition of Lab			
Date of Sampling	10/03/2022	Temperature(°C)	28.3	Humidity (%)	65
Analysis Started On	14/03/2022	Analysis Completed On		17/03/2022	

## AMBIENT AIR LOCATION

Location of ambient air station	Shemecheadvan Boundary (Goa State)
Instruments Used	Organic Vapour Sampler

## Chemical Testing - Atmospheric Pollution

Sr. No.	Parameters	Result	Unit	Method
01.	Total VOC	<1.0	ppm	Method 18

- Note :** Test results related only to the sample tested.  
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SuSmitta Kapdoskar  
Analyzed by

Nandkumar Desai  
Reviewed by

Ananddeep Sawant  
Authorized Signatory

Calibration details of Equipment used for Sampling & Analysis

Organic Vapour Sampler

Sr No.	Equipment Name	Sr. No.	Certificate No.	Calibrated on	Calibration due date
01	OVS Sampler	101-DTD-2014	EI/FF/3523	18/02/2022	17/02/2023



# Sadekar Enviro Engineers Pvt. Ltd.

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SAVE LIFE  
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## NOISE LEVEL MONITORING REPORT

Report No.	SEE/AR/03/2022/0332-0333, 0858-0859, 0818, 0759, 0817, 0498, 0850, 0759, 0499, 0851	Report Date	01/04/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa international Airport Limited		
Address of Client	Mopa, Goa		
Sample Collected By	SEEPL Representative		
Sampling Plan	SEEPL/D/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10

### Chemical Testing - Atmospheric Pollution

Sr. No	Date of Monitoring	Report No.	Station ID	Zone	Sampling Location	Day Time Noise in dB(A)			Night Time Noise in dB(A)		
						Lmin	Lmax	Leq	Lmin	Lmax	Leq
1.	10/03/2022	SEE/AR/03/2022/0332	G-N1	I	Mopa Boundary	30.0	83.3	65.8	30.0	79.0	53.2
2.	10/03/2022	SEE/AR/03/2022/0333	G-N2	I	Shemecheadvan Boundary	30.0	72.3	61.1	30.1	73.3	51.3
3.	30/03/2022	SEE/AR/03/2022/0858	G-N3	C	Nagzar	31.6	76.2	59.1	30.0	75.4	48.9
4.	30/03/2022	SEE/AR/03/2022/0859	G-N4	R	Purva Casarvarnem	30.0	73.9	48.7	30.0	63.3	38.8
5.	29/03/2022	SEE/AR/03/2022/0818	G-N5	R	Chandel	30.0	68.6	49.0	30.0	64.1	39.3
6.	26/03/2022	SEE/AR/03/2022/0759	G-N6	R	Khajne Amere Porscodem	32.1	69.7	47.4	30.0	55.8	39.9
7.	29/03/2022	SEE/AR/03/2022/0817	G-N7	R	Warkhand	30.4	65.4	48.5	30.0	58.9	37.4
8.	20/03/2022	SEE/AR/03/2022/0498	G-N8	C	Rajvil Wada Torxem	30.0	74.1	58.6	30.0	61.3	46.0
9.	29/03/2022	SEE/AR/03/2022/0850	G-N9	C	Village Panchayat Tamboxem -Mopa- Ugvem	30.0	72.8	58.2	33.2	72.3	47.1
10.	26/03/2022	SEE/AR/03/2022/0759	M-N1	R	Salarda	30.0	67.8	46.5	30.0	59.7	37.4
11.	20/03/2022	SEE/AR/03/2022/0499	M-N2	R	Dingna	30.0	70.3	44.2	30.0	53.3	35.5
12.	29/03/2022	SEE/AR/03/2022/0851	M-N3	R	Netarde	30.0	69.4	49.1	30.0	53.5	38.1

I - Industrial Zone, C - Commercial Zone, R - Residential Zone

> Noise Limits as per Schedule III of "The Environment (Protection) Rules, 1986" are as follows:

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial Area ( I )	75	70
(B)	Commercial Area ( C )	65	55
(C)	Residential Area ( R )	55	45
(D)	Silence Zone ( S )	50	40

- > Day time is reckoned in between 8.00am to 10.00pm and night time is reckoned in between 10.00pm to 6.00am.
- > \*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing. A "decibel" is a unit in which noise is measured.
- > \*A, in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- > Leq: It is the energy mean of the noise level over a specified period

**Note :** Monitoring has been done as per GPCB protocol for Ambient Level Noise Monitoring 2015.

- : Test results related only to the sample tested.
- : Test results relate only to the condition prevailing at the time of sampling
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- : Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Sanjivan Gawas  
Monitored by

Nandkumar Desai  
Reviewed by



Amitdeep Sawant  
Authorized Signatory

HEAD OFF. & LAB : Plot No. A-95, Road No. 16, Kusan Nagar Road, M.I.D.C. Wagle Industrial Area, Thane - 400 604, Maharashtra State, India.

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Calibration Details of Equipment used for Sampling

Noise Level Meter No.1(A0913-1393)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/346	18/07/2021	18/07/2022

Noise Level Meter No.2 (A0114-1408)

Sr No.	Equipment Name	Calibration Certificate No.	Calibrated on	Calibration due date
01	Noise Level Meter	LES-CCL/MECH/SLM/347	18/07/2021	18/07/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/171	Issue Date	14/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C 28	Humidity % 69
Sampling point	WTP-Treated			
Sample details	Treated Water sample	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022	
Sample Container	Glass bottle	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.79	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.36	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	22.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	51.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	16.51	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2-</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	26.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39) : 1991

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

Nandkumar Desai  
Reviewed By



Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/03/2022/171	Issue Date	14/03/2022
Order / Reference	As per dated 07/03/2022	Sample Received On	07/03/2022
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

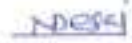
Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	7.21	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.05	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	1.91	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	<0.01	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	<1.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by



  
Nandkumar Desai  
Reviewed By



  
Anandheep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/03/2022/171	Issue Date	14/03/2022
Order / Reference	As per dated 07/03/2022	Sample Received On	07/03/2022
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

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2. Anisha Parab  
Analyzed by

*Anisha Parab*

*N Desai*  
Nandkumar Desai  
Reviewed By



*Anand*  
Anand Deep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/169	Issue Date	14/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28	69
Sampling point	Borewell 1			
Sample details	Ground Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022	
Sample Container	Glass bottles	Sample Quantity	5000 ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.41	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.68	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	60.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	86.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	19.02	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S <sup>2-</sup> F
11.	Total Hardness as CaCO <sub>3</sub>	60.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

1. Shreya Harmalkar  
2. Anisha Parab  
Analyzed by

NCSOY  
Nandkumar Desai  
Reviewed By



Anand  
Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/03/2022/169	Issue Date	14/03/2022
Order / Reference	As per dated 07/03/2022	Sample Received On	07/03/2022
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	10.42	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.06	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	8.25	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.10	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	5.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	4.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05,	IS 3025 (Part 2)

1. Shreya Harmalkar  
2. Anisha Parab  
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*Shreya Harmalkar*  
*Anisha Parab*

*N. Desai*  
Nandkumar Desai  
Reviewed By



*Anandeeep Sawant*  
Anandeeep Sawant  
Authorized Signatory

**Equipment Calibration Details**

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/03/2022/169	Issue Date	14/03/2022
Order / Reference	As per dated 07/03/2022	Sample Received On	07/03/2022
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

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2. Anisha Parab  
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NDesai  
Nandkumar Desai  
Reviewed By



Anandeeep  
Anandeeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



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Lab accredited by MoEF & CC Valid up to 03.11.2023 • Certified by ISO 9001:2015 & ISO 45001 :2018

## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/170	Issue Date	14/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C 28	Humidity % 69
Sampling point	Borewell No. 2			
Sample details	Ground Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022	
Sample Container	Glass bottle + PVC Can	Sample Quantity	1000 ml + 4000ml	

### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	pH	7.07	-	6.5 - 8.5	IS 3025 (Part 11)
2.	Turbidity	0.74	NTU	1.00	IS 3025 (Part 5)
3.	Taste	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2160 B
4.	Color	<1.00	Hazen unit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2120 B
5.	Odour	Agreeable	-	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 2150 B
6.	Total Alkalinity	76.00	mg/lit	200.00	IS 3025 (Part 23)
7.	Total Dissolved Solids	137.00	mg/lit	500.00	IS 3025 (Part 16)
8.	Chlorides as Cl <sup>-</sup>	21.02	mg/lit	250.00	IS 3025 (Part 32)
9.	Sulphate as SO <sub>4</sub> <sup>-2</sup>	<5.00	mg/lit	200.00	IS 3025 (Part 24)
10.	Sulfides	<2.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 S/F
11.	Total Hardness as CaCO <sub>3</sub>	80.00	mg/lit	200.00	IS 3025 (Part 21)
12.	Ammonia	<0.50	mg/lit	0.50	IS- 3025 (Part 34)
13.	Mineral oil	<0.1	mg/lit	0.50	Clause 6 of IS 3025 (Part 39)

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2. Anisha Parab  
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Nandkumar Desai  
Reviewed By



Apurdeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/03/2022/170	Issue Date	14/03/2022
Order / Reference	As per dated 07/03/2022	Sample Received On	07/03/2022
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

#### Chemical Testing

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
14.	Residual free chlorine	<0.20	mg/lit	0.20	IS 3025 (Part 26)
15.	Nitrate as NO <sub>3</sub>	<1.00	mg/lit	45.00	IS 3025 (Part 34)
16.	Fluoride as F <sup>-</sup>	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 F D
17.	Phenolic compound	<0.02	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5530-B,C
18.	Cyanide	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 4500 CN -D
19.	Anionic Detergents	<0.10	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 5540 - C

#### Metal Analysis

20.	Aluminium as Al	<0.01	mg/lit	0.03	IS 3025 (Part 2)
21.	Arsenic as As	<0.01	mg/lit	0.01	IS 3025 (Part 2)
22.	Boron as B	<0.01	mg/lit	0.50	IS 3025 (Part 2)
23.	Calcium as Ca	15.23	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Ca B
24.	Cadmium as Cd	<0.001	mg/lit	0.003	IS 3025 (Part 2)
25.	Iron as Fe	0.12	mg/lit	1.00	IS 3025 (Part 2)
26.	Lead as Pb	<0.01	mg/lit	0.01	IS 3025 (Part 2)
27.	Magnesium as Mg	10.23	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3500Mg B
28.	Chromium as Cr	<0.01	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
29.	Mercury as Hg	<0.001	mg/lit	0.001	IS 3025 (Part 2)
30.	Zinc as Zn	0.06	mg/lit	5.00	IS 3025 (Part 2)
31.	Sodium as Na	8.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
32.	Potassium as K	4.00	mg/lit	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 3120 B
33.	Copper as Cu	<0.01	mg/lit	0.05	IS 3025 (Part 2)

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*Anisha Parab*

*NCS*  
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*Anandup*  
Anandup Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022

Report No.	SEE/03/2022/170	Issue Date	14/03/2022
Order / Reference	As per dated 07/03/2022	Sample Received On	07/03/2022
Analysis Started On	07/03/2022	Analysis Completed On	14/03/2022
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited		

**Microbiological Parameters**

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
34.	Total coliforms at 37°C for 48 hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
35.	E.coli at 44.5°C for 24hrs.	Absent	MPN Index/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

Note: Test results related only to the sample tested.

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Nandkumar Desai  
Reviewed By



Asandip  
Apardeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/022	2021/08/236	26/08/2021	26/08/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	U V Spectrophotometer	Q/0166	-	Inhouse Calibration	
04.	ICP- OES	Q/162	-	Inhouse Calibration	
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022





### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/165	Issue Date	11/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28	69
Sampling point	L.S.C Colony			
Sample details	Drinking Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	11/03/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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Nandkumar Desai  
Reviewed By



Ananddeep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/166	Issue Date	11/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28	69
Sampling point	A.T.C Tower			
Sample details	Drinking Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	11/03/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/168	Issue Date	11/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28	69
Sampling point	K.M.V Colony			
Sample details	Drinking Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	11/03/2022	
Sample Container	Glass bottle	Sample Quantity	1000 ml	

#### Microbiological Parameters

Sr. No.	Parameter	Result	Unit	IS desirable Limit (As per IS 10500)	Method
1.	MPN	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-B
2.	E.coli at 44.5°C for 24hrs.	Absent	MPNIndex/100ml	Not Specified	APHA( 23 <sup>rd</sup> Edition ) 9221-G

**Note:** Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
02.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
03..	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
04.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



### ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/162	Issue Date	11/03/2022	
Name of Client	M/s, Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28	69
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP (KMV)			
Sample details	Inlet Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	11/03/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

#### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.73	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	368.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	114.24	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	87.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	7.40	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O & G

Note: Test results related only to the sample tested.

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### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022
03.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
04.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
05.	Microbiological Incubator ( 37 °C )	Q/003	T2021/08/070	26/08/2021	26/08/2022
06.	Microbiological Incubator (44.5 °C )	Q/004	T2021/08/071	26/08/2021	26/08/2022
07.	Laminar Air Flow	Q/001	2021/08/234	26/08/2021	26/08/2022
08.	Autoclave	Q/010	E2021/05/012	28/05/2021	28/05/2022



ANALYSIS REPORT FOR WATER SAMPLE				
Report No.	SEE/03/2022/160	Issue Date	11/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28	69
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Inlet Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	11/03/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	Method
1.	pH	6.23	-	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	1520.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	500.00	mg/lit	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	241.00	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	16.20	mg/lit	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G

**Note:** Test results related only to the sample tested.

: This certificate may not be reproduced in part, without the permission of this laboratory.

: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Mugdha Gawade  
Analyzed By

Nandkumar Desai  
Reviewed By



Anand Deep Sawant  
Authorized Signatory

### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022



# Sadekar Enviro Engineers Pvt. Ltd.

B-305/307, Plot No. 51, Patel Estate, Rain Marg, Verna, Ahs, Old Belim Road, Bardez, Porvorim, Panaji-Goa-403 101.  
Goa State, India. ☎ : (0832) 2411322 / 2411323 • E-mail : starlahgoa@rediffmail.com

SPM WATER  
SPM LIFE

Lab accredited by MoEF & CC Valid up to 03.11.2023 • Certified by ISO 9001:2015 & ISO 45001 :2018

## ANALYSIS REPORT FOR WATER SAMPLE

Report No.	SEE/03/2022/161	Issue Date	11/03/2022	
Name of Client	M/s. Megawide Construction DMCC C/o GMR Goa International Airport Limited			
Address of Client	Mopa, Goa			
Order / Reference	As per dated 07/03/2022	Environmental Condition of Lab	Temp °C	Humidity %
			28	69
Sampling Plan	SEEPL/LD/FMT- 54	Sampling Procedure No.	SEEPL/QSP-10	
Sampling point	STP			
Sample details	Outlet Water	Date of collection	07/03/2022	
Sample Collected by	SEEPL Representative	Sample Received On	07/03/2022	
Analysis Started On	07/03/2022	Analysis Completed On	11/03/2022	
Sample Container	Glass Bottle + PVC Can	Sample Quantity	1000 ml + 1000ml	

### Chemical Parameters

Sr. No.	Parameters	Results	Unit	*Limits	Method
1.	pH	6.70	-	5.5 – 9.0	APHA( 23 <sup>rd</sup> Edition ) 4500 H+-B
2.	Chemical Oxygen Demand (COD)	172.00	mg/lit	250.00	APHA( 23 <sup>rd</sup> Edition ) 5220-B
3.	Biochemical Oxygen Demand (27°C 3 day)(BOD)	26.04	mg/lit	30.00	IS 3025 (Part 44)
4.	Total Suspended Solids (TSS)	64.00	mg/lit	100.00	APHA( 23 <sup>rd</sup> Edition ) 2540-D
5.	Oil & Grease (O & G)	5.00	mg/lit	10.00	APHA( 23 <sup>rd</sup> Edition ) 5520-O &G

**Note:** Test results related only to the sample tested.

: This certificate may not be reproduced in part, without the permission of this laboratory.

: Calibration details of the equipments used in monitoring and / or analysis is back side of analysis report.

Mugdha Gawade  
Analyzed By

Nandkumar Desai  
Reviewed By



Ananddeep Sawant  
Authorized Signatory



### Equipment Calibration Details

Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Details	
				Calibration Date	Next Calibration Due Date
01.	pH Meter	Q/062	2021/09/001	04/09/2021	04/09/2022
02.	COD Digester	Q/019	E2021/05/015	28/05/2021	28/05/2022
03.	BOD incubator	Q/002	E2021/05/014	28/05/2021	28/05/2022
04.	Hot Air Oven	Q/039	T2021/06/017	26/06/2021	26/06/2022

**ANNEXURE – 3**

**ENVIRONMENTAL EXPENDITURE DURING FY 2021-22**

*Note: All cost expenditures are in INR Crore.*

S. N.	Particulars	EXPENSES During FY 2021 – 2022 (in INR Crore)
1.	AAQ & Noise Levels Monitoring (in Goa & Maharashtra States)	0.377
2.	Dust suppression through tankers & chemical dust suppressants	0.476
3.	Water sprinkling tankers and fog / mist canons for dust suppression	0.316
4.	Periodical Fund deposit to GSBB for compensatory tree afforestation	0.2
5.	Trees cutting, stacking & enumeration for approach CAT-1 lightning	0.07
6.	Translocation of trees within the site with maintenance	0.118
7.	Top soil preservation measures	1.211
8.	Labour colony - STP (225 KLD)	0.102
9.	Labour Colony – STP (50 KLD)	0.057
10.	Occupational health surveillance	0.035
11.	CTE application fees	0.02
12.	CTO application fees	0.02
13.	Environment Management Cell set up	1.240
14.	Monsoon protection works	0.845
15.	Waste Management (Alterz Energy)	0.069
18.	Vacuum Tanker for (Portable toilets at site)	0.038
19.	Environmental Compliance Monitoring by NEERI	0.390
20.	Installation and commissioning of Continuous Ambient Air Quality Monitoring system (CAAQMS)	0.848
21.	Aviation Noise Monitoring Terminal units (NMT)	1.578
22.	Digital Online Display unit	0.058
	<b>TOTAL</b>	<b>8.068</b>



**ANNEXURE – 4**

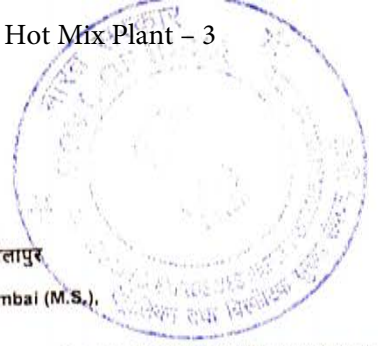
**LIST OF STATUTORY PERMITS / APPROVALS RELATED TO ENVIRONMENT  
AS OF 31<sup>st</sup> MARCH 2022**

S.N.	Statutory Permits/Approval	Date		Statutory Authority	Permit enclosed as
		Issued	Validity		
1.	PESO Approval for 25 KL LDO Tank for Hot Mix Plant - 3	03/02/2022	-	PESO	Appendix-1
2.	Initial Approval for HSD Tank	25/02/2022	-	PESO	Appendix-2





भारत सरकार  
Government of India  
वाणिज्य और उद्योग मंत्रालय  
Ministry of Commerce & Industry  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पिसो)  
Petroleum & Explosives Safety Organisation (PESO)  
ए-1 और ए-2 विंग, पाँचवा तल, केंद्रीय कार्यालय परिसर, सी.बी.डी. बेलापुर  
नवी मुंबई (मह.)- 400614  
A1 & A2 wing, 5th Floor, C.G.O. complex, CBD Belapur, Navi Mumbai (M.S.),  
Mumbai - 400614



E-mail : [jtcemumbai@explosives.gov.in](mailto:jtcemumbai@explosives.gov.in)  
Phone/Fax No : 022 - 27575946,27573881

दिनांक /Dated : 03/02/2022

Only Approval ( no Licence)

फ़ीस रु. /Fees : Rs. 2000/- (अनुमोदन) Approval for permission

संख्या /No. : A/P/WC/GA/15/15 (P528493)

सेवा  
में  
/To,

M/s. MEGAWIDE CONSTRUCTION DMCC,  
MOPA GREEN FIELD AIRPORT, SURVEY NOS.21/5,21/6,21/  
CHANDEL,  
Pernem,  
Taluka: Pernem,  
District: NORTH GOA  
State: Goa  
PIN: 403512

विषय

/Sub पेट्रोलियम वर्ग "ग" के भंडारण संदर्भ में.

Storage of Petroleum not exceeding 25 KL Class C.

महोदय

/Dear  
Sir(s),

कृपया आपके उपर्युक्त विषय से संबंधित पत्र संख्या OIN992264 दिनांक b>03/02/2022 का संदर्भ ग्रहण करें ।  
Please refer to your letter No OIN992264 dated 03/02/2022.

पेट्रोलियम नियम, 2002 के अंतर्गत नियम 140 के अधिन आपके Survey No, 21/5,21/6,21/7,21/8,21/8,22/17,22/18 and 22/19, MOPA GREEN FIELD AIRPORT, CHANDEL, Pernem, Taluka: Pernem, District: NORTH GOA, State: Goa, PIN: 403512 स्थित परिसर में 25 किलोलीटर पेट्रोलियम वर्ग "ग" के भंडारण संबंधी सूचना नोट की गई है. संबंधित आरेखण की प्रतिलिपि इस कार्यालय की मोहर के साथ संलग्न है. कृपया नोट करें कि अगर पेट्रोलियम वर्ग "ग" Class C का किसी एक समय भंडारण 45 KL किलोलीटर से अधिक होता है तो आपको इस कार्यालय से अनुज्ञाप्ति प्राप्त करनी होगी. आपके इन्स्टालेशन को लागू पेट्रोलियम नियम, 2002 के अध्याय VI में किए गए प्रावधानों का कड़ाई से पालन करें.

Your intimation under Rule 140 of Petroleum Rules 2002 regarding storage of 25 KL of Class C in your factory premises at Survey No, 21/5,21/6,21/7,21/8,21/8,22/17,22/18 and 22/19, MOPA GREEN FIELD AIRPORT, CHANDEL, Pernem, Taluka: Pernem, District: NORTH GOA, State: Goa, PIN: 403512 is noted and a copy of drawing bearing this office stamp is enclosed. In case of any addition/alteration, revised drawings/documents may be submitted to this office for reissue of the permission. Please note that you will have to take out a Licence if storage of Class C exceeds 45 KL at any one time. This provisions of Chapter VI of Petroleum Rules, 2002 as applicable to your installation should be strictly observed.

फिर भी, यह अनुमोदन/अनुमति अन्य प्राधिकारियों से आवश्यक अनुमति/क्लीयरन्स प्राप्त करने से या यथा लागू अन्य विधियों से छूट नहीं देती है ।

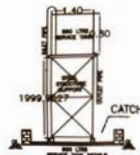
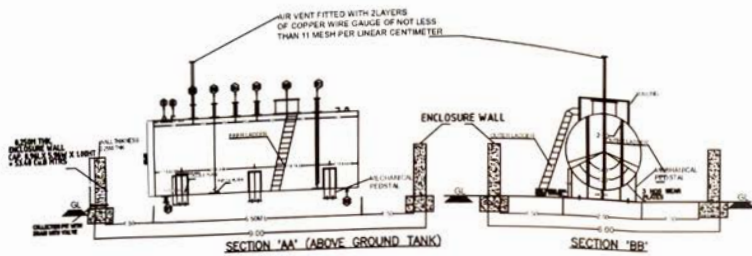
This approval/permission, however, does not absolve from obtaining necessary permission/clearance from other authorities or under other statutes as applicable.

Yours faithfully,

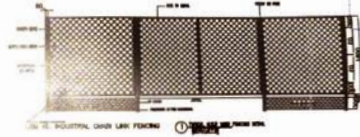
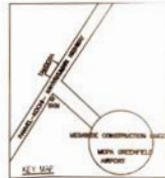
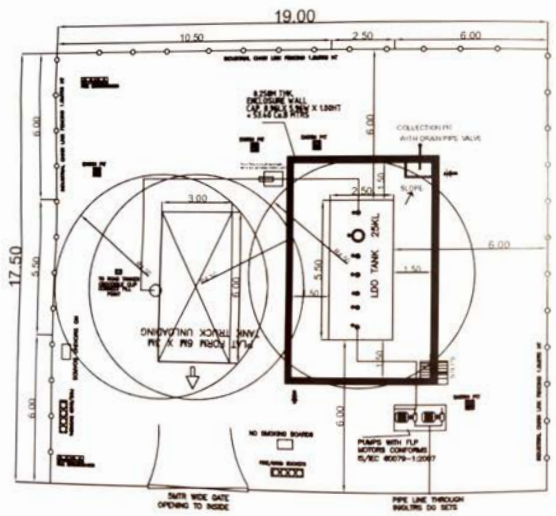
(यू. एस. भांगे)  
(UJWAL SHANKAR BHANGE)  
विस्फोटक नियंत्रक  
Controller of Explosives  
कृते संयुक्त मुख्य विस्फोटक नियंत्रक  
For Jt. Chief Controller of Explosives  
नवी मुंबई (मह.)/Mumbai

(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : <http://peso.gov.in> देखें)  
(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)  
Note:-This is system generated document does not require signature.

Digitally signed by SHRI UJWAL S BHANGE  
Reason: Approval No : A/P/WC/GA/15/15  
Location: West Circle [P528493]  
Date:2022.02.03 05:10:18 +05:30



PLAN APPROVED  
 AIR/WC/GA/15/15  
 (P528493)  
 5/10/22  
 3



LINE	NOZZLE SYMBOL	SIZE	COOD
01	FILL PIPE	80	1
02	EMPTY NOZZLE	80	1
03	LEVEL TRANSMITTER NOZZLE	80	1
04	SPARE NOZZLE	80	1
05	0.5M PIPE	80	1
06	1M NOZZLE	80	1
07	2M NOZZLE	80	1
08	CONTAINED BUSH	8	2
09	50MM LINE	8	2

- NOTES:**
1. THE FABRICATION IS IN STEEL.
  2. THE FABRICATION IS PER IS-8001.
  3. APPROVAL OF CONSTRUCTION AS PER IS-8001 IS REQUIRED.
  4. EXTERNAL SURFACE OF THE TANK SHALL BE PAINTED WITH 3 COATS OF ANTI-RUST PAINT AND COATED WITH LINER THE APPROVED MATERIAL BASED ON THE TANK.
  5. THE TANK SHALL BE ELECTRICALLY CONNECTED WITH EARTH AT BOTH END PLACES OF TANK WHICH SHALL BE CONNECTED TO GROUND PLATE.
  6. NECESSARY CAUTION SHOULD BE TAKEN AT SITE.
  7. ALL THE ELECTRICAL FITTINGS ARE PER SITE IN THE NEW TANK AREA AS PER NEW DESIGN.
  8. ALL PERFORMANCE PARAMETERS AS PER IS-8001 IS-8001/IS-8001/IS-8001 IS TO BE FOLLOWED.
  9. AIRSPACE SHOULD BE MAINTAINED PROPERLY.
  10. NO LEAK LINE ARE PERMITTED UNDER THE TANK AREA.
  11. TANK TO BE PER OF LIGHTNING.
  12. PROTECTIVE CLAMP SHALL BE PROVIDED TO CONNECT TO HAVE TANKERS AS A DISCHARGE.
  13. DISCHARGING TANK PLANTS AND OTHER TANK SURVIVORS CONNECTED TO TANKS SHALL BE PROVIDED.

NEAREST POLICE STATION - PERENA  
 NEAREST RAILWAY STATION - PERENA  
 NEAREST FIRE STATION - PERENA

SL NO	DESCRIPTION	DATE	DESIGNER	PROJECT	SCALE
01	1:500 & 1:2500	2022	MEGA	MEGA	1:100

PROJECT AT:  
 M/s. MEGAWIDE CONSTRUCTION DMCC  
 MOPA GREEN FIELD AIRPORT  
 Survey No. 21.5.21.6.21.7.21.8.21.9.22.17.22.18.22.19  
 CHANDEL VILLAGE, PERNAM TALUK,  
 NORTH GOA DISTRICT, GOA - 403512

TITLE:  
 LAYOUT PLAN FOR 1 X 2500 CLASS "C" LDO  
 ABOVEGROUND HORIZONTAL STORAGE TANK FACILITIES  
 SCALE: 1:100  
 DATE: 25/01/2022 DWG. NO.: MEGA/AC006/2022

LAYOUT PLAN  
 SCALE 1:100





भारत सरकार /Government of India

वाणिज्य और उद्योग मंत्रालय/ Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)/Petroleum & Explosives Safety Organisation (PESO)

ए-1 और ए-2 विंग, पाँचवा तल, कक्षीय कार्यालय परिसर, सी.बी.डी. बेलपुर, नवी मुंबई (महा.)/A1 & A2 wing, 5th Floor, C.G.O. complex, CBD Belapur, Navi Mumbai (M.S.), Mumbai - 400614

ईमेल/Email :- jtccemumbai@explosives.gov.in

दूरभाष/Phone, फैक्स / Fax :- 022 - 27575946,27573881

संख्या /No : A/P/SC/KA/15/275 (P529504)

दिनांक /Dated : 25-02-2022

सेवा में  
/To,

M/s. GMR GOA INTERNATIONAL AIRPORT LTD  
MOPA AIRPORT PROJECT SITE ,  
VIA DADACHIWADI ROAD , NAGZER ,  
PERNEM TALUK , GOA – 403512.

विषय

/Sub : Survey No. 114/1, 114/4, 115/1, 115/2, 117/1, 117/4 , MOPA AIRPORT PROJECT SITE , VIA DADACHIWADI ROAD , NAGZER , PERNEM TALUK , GOA – 403512. में उल्लिखित पेट्रोलियम वर्ग B अधिष्ठापन के अनुमोदन के संदर्भ में I Proposed Petroleum Storage Class B Installation at Survey No. 114/1, 114/4, 115/1, 115/2, 117/1, 117/4 , Mopa Airport Project Site , Via Dadachiwadi Road , Nagzer , Pernem Taluk , Goa – 403512 Approval Regarding.

महोदय

/Sir(s), कृपया आपके पत्र संख्या OIN990589 दिनांक 02/02/2022 का अवलोकन करें। Please refer to your letter No. OIN990589 dated 02/02/2022 Drawing(s) nos. HSD/GAP/01 dated 10/01/2022, HSD/GAP/01 dated 10/01/2022, अनुमोदित किया जाता है तथा एक आरेखण की एक प्रति विधिवत प्रेषित कर लौटाई जा रही है।

The Drawing(s) nos. HSD/GAP/01 dated 10/01/2022, HSD/GAP/01 dated 10/01/2022, showing the site and layout etc. of the specified installation is/are approved and one copy of the same is returned herewith in token of approval.

अनिवार्य कारणों हेतु इस कार्यालय को सूचित करें।

The following documents which are necessary for the grant of a licence in Form XV under Petroleum Rules, 2002 for the subject installation may please be submitted to this office for further action in the matter.

1. वृत्त IX (संलग्न) में विधिवत भरा 5आ एवं हस्ताक्षरित आवेदन।

An Application in Form IX (enclosed) duly filled in and signed.

2. पेट्रोलियम नियम 2002 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से अनुयोजित शुरु **₹ 5000/-**  
( प्रति वर्ष – अधिकतम 10 वर्ष तक) ऑनलाइन जमा किया जाना है ।  
A license fee of Rs. **5000/-** (per year - maximum upto 10 years) to be submitted online through e-payment facility available on online application portal under petroleum Rules, 2002.
3. अनुमोदित लान की ब्लू प्रिंट या सीएडी (CAD) प्रिंट में चार प्रतियाँ।  
Four copies of the approved plans in blue print or cad print incorporating the conditions, of approval if any, without any ink corrections, duly signed by the authorised signatory
4. इस संगठन द्वारा जारी 'अनापिक' माण-पा' की मूल प्रतियों के अंतर्गत नियम 130 और 126 में आवश्यक विधायक रूप (संलग्न) में सेवी और टेस्ट प्रमाण-पा।  
Safety and Test Certificate required under rule 130 and 126 of the Petroleum Rules, 2002 in the prescribed proforma (copies enclosed) issued by Competent person recognised by this organisation bearing his signature stamp.
5. पेट्रोलियम नियम के नियम 144 के अंतर्गत जिला अधिकारी द्वारा जारी 'अनापिक' माण-पा' की मूल प्रतियों के साथ उनके द्वारा विधिवत प्रमाणित एवं कार्यालय की मोहर लगा 5आ साईट प्रदान।  
Original copy of 'No Objection Certificate' from the District Authority under rule 144 of petroleum rules together with site plan duly endorsed by him with his office seal thereon.

This approval/permission, however, does not absolve from obtaining necessary permission/clearance from other authorities or under other statutes as applicable.

भवदीय /Yours faithfully,

(यु. एस. भंगे) (UJWAL SHANKAR BHANGE )

/ Controller of Explosives

कृते संयुक्त मुंबई विस्फोटक नियंत्रक

For Jt. Chief Controller of Explosives

चेन्नई / Mumbai

**Note:-This is system generated document does not require signature.**

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