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To,

The Additional Principal Chief Conservator of Forest (C)Ministry of Environment, Forest & Climate Change,Regional Office (SZ),Date: 29th November 20244th Floor, E&F Wing, Kendriya Sadan,Ref: GGIAL/MoEF&CC-EC/2024-2025/2344Koramangala, Bengaluru - 560034Koramangala, Bengaluru - 560034

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 April 2024 to September 2024.

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 16th January 2020
  - 3. Addendum to Original EC dated 13th 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 April 2024 to September 2024.

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 (<u>rosz.bng-mef@nic.in</u>).

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

Thanking you,

Yours Sincerely, for GMR Goa International Airport Limited

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**Chief Executive Officer** 

Enclosure: As above

Copy for kind information to:

- 1. The Director, MoEF&CC, GOI, Indira Paryavaran Bhawan, CGO Complex, 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



# HALF YEARLY ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

(Period: April 2024 to September 2024)



#### **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 MANOHAR INTERNATIONAL AIRPORT

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

AN VENKATA SHESHAN SHESHAN

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#### **Point-wise Compliance**

No.	Reference No.	Condition	Compliance
Condi	tions of EC, da	ted 28/10/2015	
Specif	ic Conditions		
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. Consent to Operate (CTO) is valid till 01/08/2027.
2.	4 (A) (ii)	The Project Proponent shall ensure the 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.	According to Directorate of Civil Aviation (DoCA), Government of Goa (GoG): "Complied. GoG has provided adequate land at the junction of the Mopa Airport road and Mumbai / Goa NH-66 (earlier NH-17) for traffic circulation / management. Dedicated 6 lane access control expressway connectivity (NH 166S) along with traffic interchanges and clover leaf is constructed & now operational."
3.	4 (A) (iii)	The approach and exit roads to the Airport shall be approved by the NHAI and should be according to IRC norms.	According to DoCA, GoG: "Complied. 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,





No.	Reference No.	Condition	Compliance
			vide Gazette Notification dated 23-09-2020. Dedicated 6 lane access control expressway connectivity (NH 166S) is constructed as per IRC norms & now operational."
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 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 outfall 2.	Complied. Storm water drainage management system is in operation, in compliance to the approved scheme from Water Resources Department (WRD) of GoG.
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 & Complied.
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.	Complied. Sewage and other liquid effluent is being treated in 625 KLD STP and 100% treated effluent is being reused and recycled. The treated sewage quality monitoring report is enclosed as <b>Annexure-2</b> . All treated effluent parameters are within the permissible norms prescribed by Goa State Pollution Control Board (GSPCB).
7.	4 (A) (vii)	The solid waste generated shall be properly collected, segregated, and disposed of according to the provisions of Solid Waste (Management and Handling) Rules, 2000. The project proponent shall make provisions for	Noted & Complied.





No.	Reference No.	Condition	Compliance
		drinking water at convenient places for passengers and also at the cafeterias as to reduce the generation of solid wastes including PET bottles.	
8.	4 (A) (viii)	Installation and operation of DG sets shall comply with the guidelines of CPCB.	Complied. CTO for the Airport consists of DG Sets as well, which is valid till 01/08/2027.
9.	4 (A) (ix)	Parking provision shall be provided according to the National Building Code of India, 2005.	Complied.
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.	Complied.
11.	4 (A) (xi)	Necessary permission shall be obtained for drawing of ground water from competent authority prior to construction / operation of the project.	No ground water is being drawn.
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.	According to DoCA, GoG: "Being Complied. GoG has constituted Mopa Airport Development Authority (MADA) as the designated regulatory body to control the unauthorized development around the Airport complex. GoG is addressing the same."
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.	Not applicable, as there are no hangers as of now.



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No.	Reference No.	Condition	Compliance
14.	4 (A) (xiv)	Rain water harvesting shall be provided to recharge the ground water.	Complied. Rainwater harvesting system, as approved by WRD, GoG is provided.
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 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.	Complied.
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.	According to DoCA, GoG: "Being Complied. Now, GoG has also constructed dedicated 6 lane access control expressway connectivity (NH 166S) as per IRC norms considering all these stated aspects <i>viz.</i> , increased vehicular traffic, safety features, prevention of encroachments, etc. NH1662 is operational now. Sections of existing PWD road approaching airport has also been widened with safety features ensuring no encroachment within ROW & no traffic congestion which is also addressed through Goa traffic police deployment."



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No.	Reference No.	Condition	Compliance
17.	4 (A) (xvii)	All the recommendations of the EMP shall be complied with	Complied.
		in letter and spirit. All the mitigation measures submitted	Compliance to the EIA mitigation measures in Matrix Format
		in the EIA report shall be prepared in a matrix format and	is attached as Annexure – 1A for Airport Construction –
		the compliance for each mitigation plan shall be submitted	Spine Road & Expansion and Annexure – 1B for Airport
		to RO, MoEF&CC along with half yearly compliance report.	Operation.
18.	4 (A) (xviii)	The responses / commitments made during public hearing	According to DoCA, GoG:
		shall be complied with in letter and spirit.	"Being Complied.
			Report on Compliance status of concerns raised during public
			hearing is attached as Annexure-3."
10	4 (4) (	Project Proponent shall install noise level display system.	Complied.
19.	4 (A) (xix)	Noise level shall be monitored regularly in all seasons	Ambient Noise levels monitoring reports are enclosed as
		(different meteorological conditions) within the compound	Annexure-2.
		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 the boundary shall be restricted	
		to the permissible levels to comply with the prevalent	
		regulations.	
20.	4 (A) (XX)	The location of monitoring stations and monitoring of noise	Complied.
		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	
1		on 25 <sup>th</sup> June, 2008.	



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No.	Reference No.	Condition	Compliance
21.	4 (A) (xxi)	Construction spoils, including bituminous material and	Complied.
		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.	
22.	4 (A) (xxii)	Any hazardous waste generated during construction phase,	Complied.
		should be disposed off as per applicable rules and norms	Hazardous waste generated during construction is being
		with necessary approval of the SPCB.	disposed-off through GSPCB authorized recycler.
23.	4 (A) (xxiii)	Under the provisions of Environment (Protection) Act,	Noted.
		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.	
24.	4 (A) (xxiv)	The project proponent will set up separate environmental	Complied.
		management cell for effective implementation of the	
		stipulated environmental safeguards under the supervision	
		of a Senior Executive.	
25.	4 (A) (xxv)	Corporate Environment Responsibility:	Complied.
		a) The Company shall have a well laid down Environment	
		Policy approved by the Board of Directors.	
		b) The Environment Policy shall prescribe for standard	Complied.
		operating process/procedures to bring into focus any	icos 10
		infringements/ deviation/violation of the	



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No.	Reference No.	Condition	Compliance
		environmental or forest norms/conditions.	
		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.
Genera	al Conditions		
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	Complied.
27.	4 (B) (ii)	A First Aid Room will be provided in the project both during construction and operation of the project.	Complied.
28.	4 (B) (iii)	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	Complied.





No.	Reference No.	Condition	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.	Complied.
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.	Complied.
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.	Complied.
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.	
33.	4 (B) (viii)	Ready mixed concrete must be used in building construction.	Complied.





No.	Reference No.	Condition	Compliance
34.	4 (B) (ix)	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Complied. Implemented as per the approved scheme of WRD, GoG.
35.	4 (B) (x)	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Complied.
36.	4 (B) (×i)	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Complied.
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.	Complied.
38.	4 (B) (xiii)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.	Complied.
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-conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.	Complied.



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No.	Reference No.	Condition	Compliance
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.	Complied meeting the safe operational requirements of the airport.
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.	According to DoCA, GoG; "Complied. GoG through Goa Traffic Police is ensuring that there is no traffic congestion near the entry and exit points from the PWD roads adjoining the Manohar International Airport and there is no public space is used for parking. Now, GoG has also constructed dedicated 6 lane access control expressway connectivity (NH 166S) as per IRC norms considering all these stated aspects <i>viz.</i> , increased vehicular traffic, safety features, prevention of encroachments, etc. NH1662 is operational now."
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.	Complied.
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.	Complied.



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No.	Reference No.	Condition	Compliance
44.	4 (B) (xix)	Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.	Complied.
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 action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	Complied.
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.	Complied. Six-monthly monitoring report on the environmental parameters shall be submitted as a part of the EC compliance report, which is being submitted regularly to MoEF&CC Regional Office.
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.	



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No.	Reference No.	Condition	Compliance
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.	Complied.
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.	Being complied. Environmental expenditure for the period from April 2024 to September 2024 is enclosed as <b>Annexure – 4</b> .



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No.	Reference No.	Condition	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.
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.
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 <u>http://www.envfor.nic.in</u> . The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be	Complied.



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No.	Reference No.	Condition	Compliance
		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.	Complied. Half Yearly EC Compliance Report is being uploaded on company website of GGIAL. https://www.gmrgroup.in/goa/
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.	Complied. Copy of Environmental Statement for FY 2023-2024 in Form- V submitted to Goa State Pollution Control Board is enclosed as <b>Annexure-5</b> .





No.	Reference No.	Condition	Compliance
Additio	onal NGT Con	ditions vide NGT order dated 21/08/2018	
(A)	Air Enviro	nment	
61.	1	Total Suspended Particulate Matter (SPM), Respirable Particulate Matter (RPM) during construction phase. Un- burnt and Hydro 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 GSPCB server and capable of monitoring all relevant and critical parameters and mitigation measures taken.	Complied. Ambient Air Quality Monitoring report is enclosed as <b>Annexure-2.</b>
62.	2	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	Complied. Ambient Air Quality Monitoring report for additional 3 locations in the State of Maharashtra is enclosed as Annexure-2.





No.	Reference No.	Condition	Compliance
		least 3 (three) more locations falling in the State of	
		Maharashtra be also monitored and documented.	
(B)	Water Env	vironment	
63.	1	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 pits at such locations so as to capture all the excess drainage for water re-charge.	Complied in line with the revised approved scheme of WRD, GoG.
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.	Complied. Monthly Water Quality Monitoring reports are enclosed as Annexure-2.
(C)	Noise Env	vironment	
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.	Complied. Ambient Noise levels monitoring reports for all locations is enclosed as <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.	Complied.



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No.	Reference No.	Condition	Compliance
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 in the area, at least 3 (three) more locations falling in the State of Maharashtra be also monitored and documented.	Complied. Ambient Noise Levels monitoring reports for additional 3 locations in the State of Maharashtra is enclosed as Annexure -2.
(D)	Land Envi		
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.	Complied.
69.	2	Debris and Muck Management Plan to be prepared and implemented so as to avoid spillage of muck and debris on the slopes.	Complied.
70.	3	Soil conservation and stabilization measures needs to be undertaken by deploying both mechanical and bio- engineering methods.	Complied.
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.



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No.	Reference No.	Condition	Compliance
(E)	Biological	Environment	
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.	No trees were required to be transplanted during April '24 - Sept '24 period.
73.	2	Efforts be made to plant indigenous species which are tall in size rather than small saplings.	Noted.
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.	According to DoCA, GoG: "Complied. Dipcadi Concanense is conserved in a forest conservatory by Forest Department, GoG."
(F)	Socio-eco	nomic Environment	
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	Complied.



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No.	Reference No.	Condition	Compliance
		to any disasters both man-made or natural.	
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.	Complied.
Adden		ted 23 <sup>rd</sup> March 2020	
(I)	Statut	ory Compliance	
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.	Complied.
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. CTO is valid till 01/08/2027.

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No.	Reference No.	Condition	Compliance
79.	(iii)	The project proponent shall obtain necessary permission from the competent authority for drawl of water from Tillari Irrigation Canal.	Complied.
(II	) Air Qua	ality Monitoring & Preservation	
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. $PM_{10}$ and $PM_{2.5}$ in reference to PM emission, and $SO_2$ and NOx in reference to $SO_2$ and NOx emissions) within and outside the airport area covering upwind and downwind directions.	Complied. Ambient Air Quality 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.	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	Complied.
83.	(iv)	The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.	Complied.

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No.	Reference No.	Condition	Compliance
84.	(v)	Excavated materials shall be handled and transported in a manner that they do not cause any air pollution.	Complied.
85.	(vi)	The soil/construction materials carried by the vehicle should be covered by impervious sheeting to avoid leaking of the dusty materials.	Complied.
(III	) Water	quality monitoring and preservation	
86.	(i)	Appropriate drainage channels need to be designed to take care of the water flow into the nearest water courses/rivers, etc.	Complied. Drainage channels have been provided as per approved scheme of WRD, GoG.
87.	(ii)	It should be ensured that sustainable water flow in the various channels of watershed in the plateau is maintained.	Complied, as per the approved scheme of 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. Domestic and industrial waste water shall not be allowed to be discharged into the storm water drains and directed to STP for treatment.	Complied.
89.	(iv)	Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.	Complied.
90.	(v)	The runoff from paved structures like Aprons can be routed through drains to oil separation tanks and sedimentation	Complied.



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No.	Reference No.	Condition	Compliance
		basins before being discharged into rainwater harvesting	
		structures.	
91.	(vi)	Run off from chemicals and other contaminants from	Complied.
		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.	
92.	(vii)	The project activity shall conform to the General Standards	Complied.
		for Discharge of Environmental Pollutants notified in the	
		Environment (Protection) Rules, 1986, and amended from	
		time to time.	*
93.	(viii)	Rain water harvesting for roof run-off and surface run-off,	Complied, as per approved scheme of WRD, GoG.
		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	8
		suspended matter, oil and grease.	
	-	*	
(IV	) Noise	Monitoring & Preservation	
94.	(i)	Notification G.S.R. 568(E) dated 18.06.2018 of MoEF&CC	Complied.
		regarding Ambient Air Quality Standards with respect to	The Airport Noise Zone details are available on the company
		Noise in Airport Noise Zone shall be complied with.	website. https://www.gmrgroup.in/goa/.
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No.	Reference No.	Condition	Compliance
95.	(ii)	Noise level survey shall be carried as per the prescribed	Complied.
		guidelines and report in this regard shall be submitted to	Ambient Noise levels monitoring reports are enclosed as
		Regional Officer of the Ministry as a part of six-monthly	Annexure-2.
		compliance report.	
96.	(iii)	Noise from vehicles, power machinery and equipment on-	Complied.
		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.	Compliad
97.	(iv)	Acoustic enclosures for DG sets, noise barriers for ground-	Complied.
		run bays, ear plugs for operating personnel shall be	
		implemented as mitigation measures for noise impact due to ground sources.	
98.	(1)	During airport operation period, noise should be controlled	Complied.
98.	(v)	to ensure that it does not exceed the prescribed standards.	Ambient Noise levels monitoring reports are enclosed as
		During night time the noise levels measured at the	Annexure-2.
		boundary of the building shall be restricted to the	
		permissible levels to comply with the prevalent regulations.	
99.	(vi)	Where construction activity is likely to cause noise nuisance	Complied.
		to nearby residents, restrict it to only during day time i.e.	
		between 7 am to 6 pm.	



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No.	Reference No.	Condition	Compliance
(V)	Energy	Conservation/climate change measures	
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.	Complied.
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 to be adopted to reduce its impact on climate change and Green House Gas (GHG) emissions as per environmental best practices governing greenfield airports.	Complied.
(VI	) Waste	Management	
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).	Complied.
103.	(ii)	The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.	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),	Complied. Solid Waste is handled at Integrated Solid Waste Management Facility through a dedicated Waste Management Agency.



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No.	Reference No.	Condition	Compliance
		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.	
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.	Complied. Solid Waste is handled at Integrated Solid Waste Management Facility through a dedicated Waste Management Agency.
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:	Complied. Solid Waste is handled at Integrated Solid Waste Management Facility through a dedicated Waste Management Agency.
	a.	Trash collected in flight and disposed at the airport including segregation, collection and disposed.	Hazardous waste is being disposed-off through GSPCB authorized recyclers.
	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 waste	]





No.	Reference No.	Condition	Compliance
(VI	I) Green	belt	
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 Airport.	Complied, meeting the safe operational requirements of the airport.
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.	Complied, meeting the safe operational requirements of the airport.
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 monoculture plantation should be avoided.	
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	According to DoCA, GoG: "Complied. GoG, through Goa State Biodiversity Board (GSBB) has carried out plantation of > 5 lakh tree saplings (native tree species, fruit bearing trees) as a compensatory afforestation





No.	Reference No.	Condition	Compliance
		proposed to be done by the village level Bio Diversity	plantation through village level bio-diversity committees,
		Committees, it is necessary to ensure that people are	etc. Its survival rate is monitored & mortality if any is
		largely given native species and/or fruit bearing saplings so	replenished.
		that they will be able to derive economic benefits from such	Further, GGIAL has planted 51,000 trees inside the airport
	8	fruit crops and also such trees will provide better biological	premises based on Miyawaki methodology."
		environment to birds.	
111.	(v)	Top soil shall be separately stored and used in the	Complied.
		development of green belt.	
(VI	II) Public	hearing and human health issue	
112.	(i)	Solution/management plan regarding redressal of all	According to DoCA, GoG:
	D-GAA	the concerns raised in the public hearing must be clearly	"Being Complied.
		spelt out in the EMP and shall be implemented in letter	Report on Compliance status of concerns raised during public
		and spirit. Compliance for each mitigation plan shall be	hearing is attached as Annexure-3"
		submitted to Regional Office, MoEF&CC along with half	
		yearly compliance report.	
113.	(ii)	Provision of Electro-mechanical doors for toilets meant for	Complied.
	60 ÷	disabled passengers shall be ensured. Children	
		nursing/feeding room shall be located conveniently near	
		arrival and departure gates.	
114.	(iii)	Emergency preparedness plan based on the	Complied.
		Hazard identification and Risk Assessment (HIRA) and	
		Disaster Management Plan shall be implemented.	20.





No.	Reference No.	Condition	Compliance
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.
116.	(v)	Occupational health surveillance of the workers shall be done on a regular basis.	Complied.
Condit	ions of Hon'b	le Supreme Court of India (SCI) Order dated 16/01/202	20
117.	(i)	Ref. No. 47: Adopt a Zero Carbon Programme during construction and operational phases of the Airport.	Complied.
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.

Note: For other relevant details, pervious Half Yearly EC Compliance Reports may be referred.



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### ANNEXURE - 1A

#### ENVIRONMENTAL MITIGATION MEASURES AS PER EIA REPORT AND COMPLIANCE STATUS (AIRPORT CONSTRUCTION – SPINE ROAD & EXPANSION) (April 2024 to September 2024)

No.	Mitigation Measures	Compliance Status			
	Mitigation Measures for Air Environment during Construction				
1	Ensure preventive maintenance of vehicles and equipment.	Complied.			
2	Ensure vehicles with valid Pollution Under Control certificates are used.	Complied.			
3	Implement dust control activities such as water sprinkling on unpaved sites.	Complied.			
4	Ensure vertical stacks with height sufficient for dispersion as per CPCB guideline for DG stacks.	Complied.			
5	Monitor water usage at construction camps to prevent wastage.	Complied.			
6	Ensure STP at construction camps/sites and the proposed facilities are properly designed to handle peak waste water load and properly maintained.	Complied.			
7	Ensure supply of temporary/portable toilets for construction staff.	Complied.			
	Mitigation Measures for Land Environment during Construction	on			
8	Avoiding rainy season for construction so as to avoid soil erosion.	Complied.			

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No.	Mitigation Measures	<b>Compliance Status</b>
9	Restricting all construction activities inside project boundary.	Complied.
10	Ensure top soil stock pile is not contaminated with any type of spills.	Complied.
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.	Complied.
	Mitigation Measures for Noise Environment during Construction	on
12	Ensure preventive maintenance of equipment and vehicles.	Complied.
13	Ensure DG sets are provided with acoustic enclosures and exhaust mufflers.	Complied.
14	Ensure vehicle movement is avoided at night, and close to sensitive receptors (such as schools, hospitals, place of worships).	Complied.
	Mitigation Measures for Biological Environment during Construct	tion
15	Keep a tally of trees cut.	No trees were cut.
16	Avoid cutting of trees wherever possible.	Complied.
17	Closing of trenches as soon as possible after pipeline laying, if any.	Complied.
	Mitigation Measures for Socio-economic Environment during Const	ruction
18	Prohibit use of firewood in project camps and making use of cooking gas is mandatory.	Complied.
19	Regulating speed limit of the vehicles	Complied.





### ANNEXURE - 1B

### ENVIRONMENTAL MITIGATION MEASURES AS PER EIA REPORT AND COMPLIANCE STATUS (AIRPORT OPERATION) (April 2024 to September 2024)

No.	Mitigation Measures	Compliance Status
	Mitigation Measures for Air Environment during Open	ration
1	Develop peripheral green belt in the proposed Airport premises.	Complied.
2	Ensure preventive maintenance of vehicles and equipment	Complied.
	Mitigation Measures for Water Environment during Op	eration
3	Tracking of raw water consumption through water meters	Complied.
4	Installation of rainwater harvesting structures	Complied.
5	Explore opportunities for drip irrigation system for greenbelt development	Complied.

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No.	Mitigation Measures	Compliance Status
	Mitigation Measures for Land Environment during Open	ration
6	Develop and maintain dedicated waste storage areas	Complied.
7	Ensure hazardous waste storage areas are provided with secondary containment	Complied.
	Mitigation Measures for Noise Environment during Ope	ration
8	On top of quota system, there is also an absolute limit on the number of flights permitted at the airport	Our operations are in compliance to DGCA approved Airport Noise Zone Mapping / MoEF&CC Notification GSR-568 (E).
9	The noisiest aircraft use 16 points of the quota and they are called QC16s (QC = Quota Count). The next noisiest have eight points - QC8s. As planes get quitter, their points get smaller until the quietest planes have just half a point or are exempt together.	Our operations are in compliance to DGCA approved Airport Noise Zone Mapping / MoEF&CC Notification GSR-568 (E).
10	During the night quota period the nosiest types of planes are not permitted to be scheduled. Because there is a limit on the airport's total quota of points for night time flying, this system encourages airlines who want to fly at night to use the quietest aircraft.	Our operations are in compliance to DGCA approved Airport Noise Zone Mapping / MoEF&CC Notification GSR-568 (E).
11	Pilots are encouraged not to use reverse thrust between 23:00 and 6:00 except in the interest of safety.	Complied.



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No.	Mitigation Measures	Compliance Status
	Mitigation Measures for Biological Environment during O	peration
12	Proper maintenance of green belt developed	Complied.
13	Regulating speeding of vehicles on approach road of Airport	Complied.
	Mitigation Measures for Socio-economic Environment durin	g Operation
14	Ensure implementation of disaster management plan	Complied.



# <u>ANNEXURE – 2</u>

### Environmental Quality Monitoring Report for the period of April 2024 to September 2024



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525. Tel. 1 (02362) 223519 . E-mail : info@gadark.in . Website : www.gadark.in

OFF. 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 · +91 93213 12367

### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/0	04/05/2024						
Name of Client	M/s	. GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Apri	April 2024						
		AMBIENT AIR	LOCATION					
pation of Ambient Air Sta	ation	Mopa Boundry - Goa St	ate (G-A1)					
Average Ambient Tempera	ture (°C)	33.5	Average Humidity (%)	60				
Average Wind Speed (km/l	nr)	92	Average Wind direction (Deg)	317				
Latitude		N 15º45'51.1"	Longitude	E 73°56'32.4"				
Instrument Used		FPS (APM - 550) RDS (APM - 460) GPS (APM -						
Sr. Date of			PARAMETERS					

Sr.	Sr. Date of Depart No.					PAR	AMETERS				_
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.04.2024	GA/24/0650	34.3	71.12	24.66	< 6.0	< 9.0	0.62	141.8	0.05	< 1.0
2	04.04.2024	GA/24/0670	36.4	74.10	26.11	< 6.0	< 9.0	0.42	133.6	0.05	< 1.0
3	08.04.2024	GA/24/0703	31.9	71.96	24.04	< 6.0	< 9.0	0.59	163.0	0.05	< 1.0
4	11.04.2024	GA/24/0717	39.1	74.46	26.82	< 6.0	< 9.0	0.56	164.3	0.09	< 1.0
5	15.04.2024	GA/24/0730	37.5	71.70	23.87	< 6.0	< 9.0	0.44	120.0	0.01	< 1.0
6	18.04.2024	GA/24/0741	34.4	67.91	26.11	< 6.0	< 9.0	0.51	151.3	0.05	< 1.0
7	22.04.2024	GA/24/0754	37.3	70.36	28.15	< 6.0	< 9.0	0.96	156.6	0.03	< 1.0
9	25.04.2024	GA/24/0767	43.5	73.57	32.19	< 6.0	< 9.0	0.61	130.0	0.04	< 1.0
-	29.04.2024	GA/24/0782	46.2	76.09	36.72	< 6.0	< 9.0	0.32	137.5	0.07	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	-	1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METH	OD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18
											-

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested.

Test Report shall not be reproduced except in full, without written approval of the laboratory.
 Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling

5. Customer complaint register is available at laboratory.

6 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 9	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 1256-L-22	08/01/2024	07/01/2025		
Respirable Dust Sampler Sr. No. 1544-DTJ-2019	08/10/2023	07/10/2024		
Gaseoue Sampler Sr. No. 210-B-2022	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/0	04/05/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Apr	April 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Shemecheadvan Goa	State (G-A2)					
, .erage Ambient Temperat	ture (°C)	33.0	Average Humidity (%)	65				
Average Wind Speed (km/h	ir)	87	Average Wind direction (Deg)	310				
Latitude		N 15º42'06.1"	Longitude	E 73°49'21.5"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PAR	AMETERS			1.000	
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.04.2024	GA/24/0649	34.7	63.09	24.08	< 6.0	< 9.0	0.27	124.8	0.05	< 1.0
2	04.04.2024	GA/24/0669	36.7	65.30	25.86	< 6.0	< 9.0	0.30	130.5	0.08	< 1.0
3	08.04.2024	GA/24/0702	34.2	63.30	22.50	< 6.0	< 9.0	0.41	122.0	0.05	< 1,0
4	11.04.2024	GA/24/0716	36.8	65.40	23.87	< 6.0	< 9.0	0.45	124.6	0.07	< 1.0
5	15.04.2024	GA/24/0729	38.9	57.29	25.99	< 6.0	< 9.0	0.55	138.0	0.01	< 1.0
6	18.04.2024	GA/24/0740	35.0	60.78	28.03	< 6.0	< 9.0	0.37	133.8	0.05	< 1.0
7	22.04.2024	GA/24/0753	36.4	63.06	26.36	< 6.0	< 9.0	0.33	124.3	0.04	< 1.0
8	25.04.2024	GA/24/0766	32.3	69.90	28.32	< 6.0	< 9.0	0.72	125.0	0.05	< 1.0
5	29.04.2024	GA/24/0781	32.3	71.06	30.15	< 6.0	< 9.0	0.59	120.2	0.04	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2	11.611	1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
6	METH	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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4. Test Results relate only to the conditions prevailing at the time of sampling. 5. Customer complaint register is available at laboratory.

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

PREDULA

CHECKED BY

Ambient Instrument No. 8	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 325-DTE-2015	13/02/2024	12/02/2025		
Respirable Dust Sampler Sr. No. 475-A-23	09/01/2024	08/01/2025		
Gaseoue Sampler Sr. No. 471-L-22	08/01/2024	07/01/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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## TEST REPORT

	~~~~	AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	04/0	04/05/2024							
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED							
Address of Client			PA INTERNATIONAL AIRPORT, DA MOPA, NORTH GOA 403512.	DACHIWADI ROAD,					
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	Apr	April 2024							
0		AMBIENT AIR	LOCATION						
Lucation of Ambient Air Stal	tion	Nagzar - Goa State (G-	A3)	1000 C					
Average Ambient Temperat	ure (°C)	34.0	Average Humidity (%)	58					
Average Wind Speed (km/h	r)	102.5	Average Wind direction (Deg)	322.8					
Latitude		N 15º45'37.3"	Longitude	E 73°53'14.22"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of					PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO2	NOx	co	CO2	Lead	VOC
1	01.04.2024	GA/24/0642	38.5	73.07	24.74	< 6.0	< 9.0	0.80	128.1	0.03	< 1.0
2	04.04.2024	GA/24/0662	39.9	74.40	27.03	< 6.0	< 9.0	0.73	154.9	0.05	< 1.0
3	08.04.2024	GA/24/0695	37.4	72.28	25.12	< 6.0	< 9.0	0.53	140.6	0.06	< 1.0
4	11.04.2024	GA/24/0709	43.7	75.25	28.73	< 6.0	< 9.0	0.60	143.6	0.04	< 1.0
5	15.04.2024	GA/24/0722	41.0	73.20	27.11	< 6.0	< 9.0	0.40	145.7	0.04	< 1.0
6	18.04.2024	GA/24/0733	39.2	72.86	25.12	< 6.0	< 9.0	0.77	120.1	0.02	< 1.0
7	22.04.2024	GA/24/0746	36.7	69.85	27.03	< 6.0	< 9.0	0.48	126.3	0.04	< 1.0
3	25.04.2024	GA/24/0759	57.0	76.39	37,92	< 6.0	< 9.0	0.85	152.7	0.04	< 1.0
9	29.04.2024	GA/24/0774	59.5	78.54	39.34	< 6.0	< 9.0	0.49	146.8	0.04	< 1.0
	NAAQS LIM	ITS *		100	60	80	80	2		1	
	UNITS	C	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	D	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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 Test Report shall not be reproduced except in full, without written approval of the laboratory.

3. Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling 5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]



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Recognised by Central Pollution Control Board (MoEF and CC, Govt. of India), under the EP Act, 1986. Page 39 of 200 valid upto 21st August 2025. ISO 9001 : 2015 and ISO 45001 : 2018 Certified.

Ambient Instrument No. 1	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 934-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 2832-DTB-2020	15/02/2024	14/02/2025		
Gaseoue Sampler Sr. No. 6888-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	04/0	04/05/2024							
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	Apri	1 2024							
2		AMBIENT AIR	LOCATION						
Location of Ambient Air Stat	ion	Purva Casarvarnem - G	ioa State (G-A4)						
Average Ambient Temperat	ure (°C)	32.5	Average Humidity (%)	68					
Average Wind Speed (km/h	r)	90.5	Average Wind direction (Deg)	270					
Latitude		N 15º41'41.9"	Longitude	E 73°50'16.6"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of					PAR	AMETERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.04.2024	GA/24/0643	33.3	71.09	21.54	< 6.0	< 9.0	0.30	146.1	0.03	< 1.0
2	04.04.2024	GA/24/0663	35.4	73.66	23.08	< 6.0	< 9.0	0.59	139.7	0.05	< 1.0
3	08.04.2024	GA/24/0696	33.7	71.02	21.62	< 6.0	< 9.0	0.56	152.0	0.04	< 1.0
4	11.04.2024	GA/24/0710	37.0	69.48	23.91	< 6.0	< 9.0	0.34	144.9	0.05	< 1.0
5	15.04.2024	GA/24/0723	39.0	71.11	24.41	< 6.0	< 9.0	0.30	123.4	0.02	< 1.0
6	18.04,2024	GA/24/0734	37.9	68.66	21.62	< 6.0	< 9.0	0.64	139.5	0.06	< 1.0
7	22.04.2024	GA/24/0747	34.8	66.35	20.71	< 6.0	< 9.0	0.44	143.5	0.05	< 1.0
3	25.04.2024	GA/24/0760	48.5	72.60	31.44	< 6.0	< 9.0	0.65	150.6	0.06	< 1.0
9	29.04.2024	GA/24/0775	50.1	74.36	33.85	< 6.0	< 9.0	0.58	126.7	0.05	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	÷	1	
	UNIT	S	µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested.

Test Report shall not be reproduced except in full, without written approval of the laboratory.
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- 4. Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory 5. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]



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Ambient Instrument No. 2	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 936-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 2842-DTB-2020	16/02/2024	15/02/2025		
Gaseoue Sampler Sr. No. 6896-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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# TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	04/0	04/05/2024							
Name of Client	M/s	. GMR GOA INTERNATION	AL AIRPORT LIMITED						
Address of Client	AD	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	Apr	1 2024							
		AMBIENT AIR	LOCATION						
cation of Ambient Air Sta	ation	Khajne Amere Porscode	em - Goa State (G-A5)						
Average Ambient Tempera	ture (°C)	33.0	Average Humidity (%)	61					
Average Wind Speed (km/	nr)	88.1	Average Wind direction (Deg)	322					
Latitude		N 15º40'38.0"	Longitude E 73						
Instrument Used	· · · · ·	FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of	-				PARA	METERS					
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC	
1	01.04.2024	GA/24/0644	14.0	56.47	17.17	< 6.0	< 9.0	0.79	156.8	0.06	< 1.0	
2	04.04.2024	GA/24/0664	17.1	57.04	20.63	< 6.0	< 9.0	0.74	140.4	0.03	< 1.0	
3	08.04.2024	GA/24/0697	15.9	56.31	18,17	< 6.0	< 9.0	0.93	169.5	0.05	< 1.0	
4	11.04.2024	GA/24/0711	17.3	57.27	20.63	< 6.0	< 9.0	0.37	136.0	0.07	< 1.0	
5	15.04.2024	GA/24/0724	18.5	56.05	18.92	< 6.0	< 9.0	0.64	154.8	0.01	< 1.0	
6	18.04.2024	GA/24/0735	19.9	57,81	16.30	< 6.0	< 9.0	0.52	124.7	0.06	< 1.0	
7	22.04.2024	GA/24/0748	18.6	60.88	18.38	< 6.0	< 9.0	0.58	163.9	0.04	< 1.0	
3	25.04.2024	GA/24/0761	14.0	58.50	13.56	< 6.0	< 9.0	0.58	145.7	0.04	< 1.0	
9	29.04.2024	GA/24/0776	16.4	60.50	15.68	< 6.0	< 9.0	0.61	133.5	0.03	< 1.0	
	NAAQS LI	MITS *		100	60	80	80	2	-	1		
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm	
	METH	OD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested

Test Report shall not be reproduced except in full, without written approval of the laboratory 2

3. Samples will be preserved for a period 15 days from the delivery of Test Report. Test Results relate only to the conditions prevailing at the time of sampling. 4

5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 3	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 942-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 670-E-23	18/10/2023	17/10/2024		
Gaseoue Sampler Sr. No. 6904-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04	04/05/2024						
Name of Client	M	s. GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Clien		DMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, AGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	G	LPL/QF/7.3/06	Page No.	1 of 1				
Sample Collecte	d By G	GLPL Representative						
Month of Samplin	Sampling April 2024							
		AMBIENT AIR	LOCATION					
pation of Ambi	ent Air Station	Rajvil Wada Torxem - 0	Goa State (G-A6)					
Average Ambien	t Temperature (°C)	33.5	Average Humidity (%)	57				
Average Wind S	peed (km/hr)	88.8	Average Wind direction (Deg)	292				
Latitude		N 15°48'40.0"	Longitude	E 73°52'50.2"				
Instrument Used		FPS (APM - 550) RDS (APM - 460) GPS (APM - 41						
Sr. Date of	1 Date state		PARAMETERS					
U. Date U	Report No.			The second se				

Sr. Date of Deport No.				PARAMETERS									
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.6	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC		
1	01.04.2024	GA/24/0647	33.3	62.18	23.54	< 6.0	< 9.0	0.32	130.0	0.05	< 1.0		
2	04.04.2024	GA/24/0667	35.0	64.12	25.62	< 6.0	< 9.0	0.46	159.8	0.02	< 1.0		
3	08.04.2024	GA/24/0700	31.9	63.09	23.58	< 6.0	< 9.0	0.62	137.5	0.04	< 1.0		
4	11.04.2024	GA/24/0714	29.2	61.67	21.54	< 6.0	< 9.0	0.28	134.3	0.07	< 1.0		
5	15.04.2024	GA/24/0727	30.1	63.07	22.95	< 6.0	< 9.0	0.68	150.4	0.01	< 1.0		
6	18.04.2024	GA/24/0738	27.6	65.43	24.33	< 6.0	< 9.0	0.56	142.3	0.03	< 1.0		
7	22.04.2024	GA/24/0751	28.7	67.22	22.66	< 6.0	< 9.0	0.62	157.4	0.05	< 1.0		
3	25.04.2024	GA/24/0764	34.5	70.64	29.61	< 6.0	< 9.0	0.51	145.0	0.04	< 1.0		
9	29.04.2024	GA/24/0779	36.7	72.14	31.15	< 6.0	< 9.0	0.64	128.4	0.04	< 1.0		
	NAAQS LI	MITS *		100	60	80	80	2		1	- 44		
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm		
	METHO	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18		

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 Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling.

Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 6	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 56-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1329-R-273-DTC-2015	15/02/2024	14/02/2025
Gaseoue Sampler Sr. No. 6773-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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### **TEST REPORT**

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/0	05/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	g April 2024							
		AMBIENT AIR	LOCATION					
cation of Ambient Air Sta	tion	Satarda - Maharashtra	State (M-A1)					
Average Ambient Temperat	ure (°C)	32.5	Average Humidity (%)	60				
Average Wind Speed (km/h	r)	101	Average Wind direction (Deg)	280				
Latitude		N 15º43'01.3"	Longitude	E 73°46'00.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr. Date of		Papart No.				PARA	METERS				-114
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.04.2024	GA/24/0645	31.5	62.26	21.87	< 6.0	< 9.0	0.43	141.7	0.05	< 1.0
2	04.04.2024	GA/24/0665	33.5	64.45	24.49	< 6.0	< 9.0	0.70	161.5	0.06	< 1.0
3	08.04.2024	GA/24/0698	31.9	62.59	22.46	< 6.0	< 9.0	0.42	132.3	0.04	< 1.0
4	11.04.2024	GA/24/0712	33.8	62.28	21.71	< 6.0	< 9.0	0.23	152.2	0.07	< 1.0
5	15.04.2024	GA/24/0725	31.9	60.85	23.04	< 6.0	< 9.0	0.69	143.1	0.02	< 1.0
6	18.04.2024	GA/24/0736	30.6	58.71	19.88	< 6.0	< 9.0	0.62	153.6	0.05	< 1.0
7	22.04.2024	GA/24/0749	30.6	63.32	21.50	< 6.0	< 9.0	0.42	122.1	0.06	< 1.0
8	25.04.2024	GA/24/0762	35.6	67.55	25.37	< 6.0	< 9.0	0.73	148.6	0.05	< 1.0
9	29.04.2024	GA/24/0777	37.0	69.17	28.11	< 6.0	< 9.0	0.55	126.3	0.05	< 1,0
	NAAQS LI	MITS .	-	100	60	80	80	2	-	1	-
	UNIT	s	µg/m³	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	σο	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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3. Samples will be preserved for a period 15 days from the delivery of Test Report.

Test Results relate only to the conditions prevailing at the time of sampling.
 Customer complete register is available at interaction.

Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 4	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1163-E-22	15/05/2023	15/05/2024
Respirable Dust Sampler Sr. No. 476-A-23	09/01/2024	08/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	04/0	04/05/2024							
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED						
Address of Client	AD	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	Apri	April 2024							
-		AMBIENT AIR	LOCATION						
cation of Ambient Air Sta	tion	Dingane – Maharashtra	State (M-A2)						
Average Ambient Temperat	ture (°C)	33.5	Average Humidity (%)	61					
Average Wind Speed (km/h	ir)	82.4	Average Wind direction (Deg)	272.4					
Latitude		N 15º46'12.3"	Longitude	E 73°49'20.5"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of	A Contractory	PARAMETERS								
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	01.04.2024	GA/24/0648	13.5	61.09	20.21	< 6.0	< 9.0	0.32	121.3	0.05	< 1.0
2	04.04.2024	GA/24/0668	15.7	62.90	22.16	< 6.0	< 9.0	0.32	126.1	0.03	< 1.0
3	08.04.2024	GA/24/0701	13.8	60.12	20.21	< 6.0	< 9.0	0.72	143.7	0.05	< 1.0
4	11.04.2024	GA/24/0715	12.1	58.58	18.30	< 6.0	< 9.0	0.33	143.8	0.06	< 1.0
5	15.04.2024	GA/24/0728	14.2	56.56	20.21	< 6.0	< 9.0	0.44	123.7	0.01	< 1.0
6	18.04.2024	GA/24/0739	13.0	54.88	23.20	< 6.0	< 9.0	0.83	143.5	0.04	< 1.0
7	22.04.2024	GA/24/0752	13.0	52.05	20.21	< 6.0	< 9.0	0.38	144.4	0.05	< 1.0
5	25.04.2024	GA/24/0765	16.6	57.31	19.05	< 6.0	< 9.0	0.81	122.5	0.05	< 1.0
9	29.04.2024	GA/24/0780	18.0	59.63	21.12	< 6.0	< 9.0	0.53	145.5	0.03	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METH	OD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested.

Test Report shall not be reproduced except in full, without written approval of the laboratory 2

3. Samples will be preserved for a period 15 days from the delivery of Test Report. Test Results relate only to the conditions prevailing at the time of sampling.

Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]



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Ambient Instrument No. 7	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 60-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1284-R-228-DTK-2014	15/02/2024	14/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



INDUSTRIAL ANALYSTS & CONSULTANTS

LAB.; H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525. Tel. : (02362) 223519 . E-mail : info@gadark.in . Website : www.gadark.in

OFF: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83, Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 · +91 93213 12367

# TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/0	05/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GL	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	PL Representative						
Month of Sampling	Apr	April 2024						
-		AMBIENT AIR	LOCATION					
_Jcation of Ambient Air Sta	tion	Netarde - Maharashtra	State (M-A3)					
Average Ambient Temperat	ure (°C)	32.5	Average Humidity (%)	64				
Average Wind Speed (km/h	r)	72.5	Average Wind direction (Deg)	288				
Latitude		N 15º46'11.7"	Longitude	E 73°53'47.0"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PAR	AMETERS		-	1.0	1.0
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.04.2024	GA/24/0646	17.6	55.72	18.50	< 6.0	< 9.0	0.38	151.0	0.06	< 1.0
2	04.04.2024	GA/24/0666	19.5	57.17	20.75	< 6.0	< 9.0	0.37	133.4	0.06	< 1.0
3	08.04.2024	GA/24/0699	18.7	54.70	17.47	< 6.0	< 9.0	0.26	124.8	0.04	< 1.0
4	11.04.2024	GA/24/0713	18.8	55.86	15.30	< 6.0	< 9.0	0.38	125.0	0.08	< 1.0
5	15.04.2024	GA/24/0726	17.7	53.04	17.05	< 6.0	< 9.0	0.76	157.1	0.01	< 1.0
6	18.04.2024	GA/24/0737	16.8	51.95	20.83	< 6.0	< 9.0	0.71	146.8	0.04	< 1.0
7	22.04.2024	GA/24/0750	18.0	53.87	18.30	< 6.0	< 9.0	0.39	126.5	0.05	< 1.0
3	25.04.2024	GA/24/0763	17.7	51.30	16.63	< 6.0	< 9.0	0.50	136.2	0.05	< 1.0
9	29.04.2024	GA/24/0778	20.0	53.81	19.88	< 6.0	< 9.0	0.78	153.6	0.04	< 1.0
1	NAAQS LI	MITS *		100	60	80	80	2		1	-
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

"N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested.

2 Test Report shall not be reproduced except in full, without written approval of the laboratory. 3. Samples will be preserved for a period 15 days from the delivery of Test Report.

Test Results relate only to the conditions prevailing at the time of sampling. 4

5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 5	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 940-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 477-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 470-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## **TEST REPORT**

Dat	e of Issue	02/0	5/2024					
-	me of Client					NAL AIRPORT LI	MITED	
				4.0.010.00	THE REAL PROPERTY OF	A THE MAKE THE FACE A		
Aad	dress of Clien						ONAL AIRPORT, NORTH GOA 403	
Sar	mpling Plan	GLF	L/QF/7.3/0	)6		Sampling Proced	ure No.	GLPL/SOP/AA/17
Sar	mple Collecte	d By GLF	L Represe	ntative	1			
			AMBIE	IT AIR	NOISE P	OLLUTION MONI	TORING	
Sr. No.	Date of Sampling	Report No.	Station	Zone	Sam	bling Location	Day Time Noise in dB(A)	Night Time Noise in dB(A)
140.	Sampling	125.26.2	10	1000	1000		Leq	L <sub>eq</sub>
1	12.04.2024	GA/24/0718	G-N1	- I - I	Mopa Bour	ndary	58.7	51.1
2	12.04.2024	GA/24/0719		1.1	Shemeche	advan	62.5	52.4
3	10.04.2024	GA/24/0707		С	Nagzar		58.3	52.3
4	10.04.2024	GA/24/0708		R	Purva Cas	arvarnem	47.8	37.8
5	18.04.2024	GA/24/0743		R	Chandel		52.9	40.9
6	16.04.2024	GA/24/0732		R	-	ere Porscodem	49.7	43.9
7	18.04.2024	GA/24/0742		R	Warkhand		52.9	41.6
8	23.04.2024	GA/24/0758		С	Rajvil Wad		58.0	52.4
9	23.04.2024	GA/24/0757		С	Village Pan – Mopa - Ug	chayant Tamboxem gvem	56.1	51.4
10	16.04.2024	GA/24/0731	M-N1	R	Satarda		50.8	41.3
11	09.04.2024	GA/24/0705	M-N2	R	Dingane		53.9	43.3
12	09.04.2024	GA/24/0706	M-N3	R	Netarde		46.4	31.4
	Area Code	24.1	Category	of Area	3	Day Time	Night Time	
	(A)	Indu	strial Area	1)		75	70	
	(F)		nmercial Are			65	55	
	(C)		idential Area			55	45	
ł	(D)		nce Zone (S			50	40	
2]	1-1			-	om and nigh		between 10:00 pm to	06:00 am
	*dB(A) Leq de	notes the tim	weighted a	verage c				
-	*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							
3]		eq, denotes t	ne frequency		ng in the me	asurement of noise a	and corresponds to fre	equency response
2] 3] 4] 5]	"A", in dB(A) L	eq, denotes t of the huma	ne frequency n ear.	weighti			and corresponds to fre	equency response
3] 4] 5] Note 1. Th 2. Te 3. Te 4. Cu 5. Ca For	"A", in dB(A) L characteristics Leq : It is the e eresults relate on est Report shall no est Report shall no est Results relate of stomer complaint alibration details of GADARK L	eq, denotes to of the human energy mean any to the sample t be reproduce only to the cond register is avail of the equipment <b>LAB PVT.</b>	ne frequency o ear. of the noise es tested. d except in full, itions prevailin able at labora 's used in mor LTD.	weightin weightin without v g at the ti tory.	er a specified written approv. me of samplin	al of the laboratory. g. is back side of analysis	s report.	)
3] 4] 5] Note 1. Th 2. Te 3. Te 4. Cu 5. Ca For	"A", in dB(A) L characteristics Leq : It is the e est results relate on est Report shall no est Results relate of stomer complaint alibration details of GADARK L	eq, denotes to of the human energy mean any to the sample to the reproduce only to the concern register is avail of the equipment AB PVT.	ne frequency o ear. of the noise es tested. d except in full, itions prevailin able at labora 's used in mor LTD.	weightin weightin without v g at the ti tory.	er a specified written approv me of samplin ad / or analysis	al of the laboratory. g. is back side of analysis	s report.	equency response

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 554067	16/05/2023	16/05/2024

Equipment Name	Calibrated On	Calibration Due Date	
Noise Level Meter Sr. No. 546176	23/06/2023	23/06/2024	



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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# TEST REPORT

	ANALYSIS	REPORT FOR	WATER SAMPLE					
Report No.	GW/24/0718		Report Date	27/04/2024		2024		
Client Name & Address	Administrative Block,	MR Goa International Airport Limited, dministrative Block, Mopa International Airport, Dadachiwadi Road, Nagzar, aluka Pernem, Mopa, North Goa - 403512						
Order / Deferrance	/ Reference As Per Dated Environmental Condition of				°C	Humidity %		
Order / Reference	22/04/2024	Environment	ai condition of Lab	31.0		71		
Sampling Plan	GLPL/QF/7.3/06	Sampling Pr	ocedure No.	APHA 1060				
Sampling Point	STP Outlet (A.C.F.)							
Sampling Details	STP Outlet (A.C.F.) V	Vater Sample	Date of Collection	22/04/		2024		
Sample Collected by	GLPL Representative		Sample Received	On 23/04/2		2024		
Analysis Started On	23/04/2024		Analysis Complete	d On 27/04/2024		2024		
Sample Container	Plastic Carboy + Glas	s Bottle	Sample Quantity	5	5 lit + 1.25 lit			

#### **Chemical Testing:**

Sr. No.	Parameters	Result	Unit	Limits	Method
1	pH	6.95	÷	5.5 - 9.0	APHA 4500 H*
2	Chemical Oxygen Demand (COD)	24	mg/lit	50.00	APHA 5220 B
3	Biochemical Oxygen Demand (27 <sup>o</sup> C day) (BOD)	9	mg/lit	10.00	IS 3025 (Part 44)
4	Total Suspended Solids (TSS)	24	mg/lit	20.00	APHA 2540 D
5	Oil & Grease (O & G)	2	mg/lit	10.00	APHA 5520 B
6	Ammonia	4.59	mg/lit	5.00	APHA 4500 NH3 B&C
7	Total Nitrogen (as N)	8.96	mg/lit	10.00	APHA 4500-Norg
8	Phosphorous	12.84	mg/lit		APHA 4500 P D

#### Microbiological Parameters:

9	Fecal Coliform at 44.5 <sup>0</sup> C for 24 hrs.	.94	MPN Index/100ml	100	APHA 9221 E
		-	End		

#### For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

Note:

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Sr.	and the second se		Certificate	Calibration Details		
No.	Equipment Name	Equipment Id	No.	Calibration Date	Next Calibration Due Date	
01.	pH Meter	GL/EQ/pH/01	l kort	In hous	se Calibration	
02	Hot Air Oven	GL/EQ/0/01	AVI/2306110	29/06/2023	28/06/2024	
03.	COD Digester	GL/EQ/COD/01	AVI/2306129	30/06/2023	29/06/2024	
04.	BOD Incubator	GL/EQ/1/02	AVI/2306122	30/06/2023	29/06/2024	
05.	Microbiological Incubator (35 ° C)	GL/EQ/1/03	AVI/2306127	30/06/2023	29/06/2024	
06.	Microbiological Incubator (44.5 ° C)	GL/EQ/I/01	AVI/2306126	30/06/2023	29/06/2024	
07.	Laminar Air Flow	GL/EQ/LAF/01	TECH/VAL/ 2024/02/107	15/02/2024	14/02/2025	
08.	Autoclave	GL/EQ/A/01	AVI/2306111	29/06/2023	28/06/2024	

#### Equipment Calibration Details



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## TEST REPORT

100 C		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	0.3/0	06/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client			PA INTERNATIONAL AIRPORT, DA MOPA, NORTH GOA 403512.	DACHIWADI ROAD,				
Sampling Plan	GLF	GLPL/QF/7.3/06 Page No.						
Sample Collected By	GLF	PL Representative						
Month of Sampling	May	2024						
		AMBIENT AIR	LOCATION					
cation of Ambient Air Sta	tion	Mopa Boundry - Goa St	ate (G-A1)					
Average Ambient Temperat	ure (°C)	34.0	Average Humidity (%)	62				
Average Wind Speed (km/h	r)	101	Average Wind direction (Deg)	311				
Latitude		N 15º45'51.1"	Longitude	E 73°56'32.4"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	Disco Ma				PAR	AMETERS	-		-	
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM <sub>2.6</sub>	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.05.2024	GA/24/0793	47.9	78.38	38.76	< 6.0	< 9.0	0.44	129.4	0.03	< 1.0
2	06.05.2024	GA/24/0845	45.6	76.27	35.18	< 6.0	< 9.0	0.50	125.0	0.06	< 1.0
3	09.05.2024	GA/24/0915	43.3	74.33	34.47	< 6.0	< 9.0	0.45	141.9	0.07	< 1.0
4	13.05.2024	GA/24/0931	46.8	76.27	36.18	< 6.0	< 9.0	0.22	125.9	0.05	< 1.0
5	16.05.2024	GA/24/0947	43.7	72.40	34.39	< 6.0	< 9.0	0.55	140.0	0.06	< 1.0
6	20.05.2024	GA/24/0982	41.4	70.31	32.48	< 6.0	< 9.0	0.60	140.0	0.05	< 1.0
7	23.05.2024	GA/24/1021	38.4	68.37	29.73	< 6.0	< 9.0	0.50	155.0	0.07	< 1.0
٩	27.05.2024	GA/24/1070	35.9	65.99	27.65	< 6.0	< 9.0	0.58	140.6	0.05	< 1.0
9	30.05.2024	GA/24/1107	38.1	69,36	29.23	< 6.0	< 9.0	0.38	124.1	0.05	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	-	1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2008	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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3. Samples will be preserved for a period 15 days from the delivery of Test Report. Test Results relate only to the conditions prevailing at the time of sampling.

4

Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 9	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1256-L-22	08/01/2024	07/01/2025
Respirable Dust Sampler Sr. No. 1544-DTJ-2019	08/10/2023	07/10/2024
Gaseoue Sampler Sr. No. 210-B-2022	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	03/0	03/06/2024							
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	May	/ 2024							
		AMBIENT AIR	LOCATION						
Location of Ambient Air Sta	tion	Shemecheadvan Goa	a State (G-A2)						
erage Ambient Temperat	ture (°C)	33.5	Average Humidity (%)	66					
Average Wind Speed (km/h	ir)	90	Average Wind direction (Deg)	304					
Latitude		N 15°42'06.1"	Longitude	E 73º49'21.5"					
Instrument Used		FPS (APM - 550)	(APM - 550) RDS (APM - 460)						

Sr.	Date of	Desire Alle	PARAMETERS								
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.05.2024	GA/24/0792	33.9	73.62	34.10	< 6.0	< 9.0	0.39	149.8	0.05	< 1.0
2	06.05.2024	GA/24/0844	31.8	71.40	29.98	< 6.0	< 9.0	0.34	144.5	0.04	< 1.0
3	09.05.2024	GA/24/0914	30.4	69.99	31.06	< 6.0	< 9.0	0.51	152.5	0.06	< 1.0
4	13.05.2024	GA/24/0930	33.0	73.12	34.02	< 6.0	< 9.0	0.58	133.7	0.06	< 1.0
5	16.05.2024	GA/24/0946	30.4	69.62	31.56	< 6.0	< 9.0	0.85	161.4	0.06	< 1.0
6	20.05.2024	GA/24/0981	28.2	29.52	67.55	< 6.0	< 9.0	0.47	138.4	0.07	< 1.0
7	23.05.2024	GA/24/1020	24.6	65.48	26.36	< 6.0	< 9.0	0.94	168.5	0.05	< 1,0
8	27.05.2024	GA/24/1069	21.8	63.26	24.99	< 6.0	< 9.0	0.56	138.4	0.05	< 1.0
T	30.05.2024	GA/24/1106	24.0	65.51	26.28	< 6.0	< 9,0	0.39	123.8	0.06	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	(a)	1	-
UNITS		S	µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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3. Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling. 5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 8	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 325-DTE-2015	13/02/2024	12/02/2025
Respirable Dust Sampler Sr. No. 475-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 471-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

## **TEST REPORT**

		AMBIENT AIR QUALITY M	NONITORING REPORT							
Report Date	03/0	03/06/2024								
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED							
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.								
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1						
Sample Collected By	GLF	GLPL Representative								
Month of Sampling	May	y 2024								
		AMBIENT AIR	LOCATION							
Location of Ambient Air Sta	tion	Nagzar – Goa State (G-A3)								
Average Ambient Temperat	ture (°C)	33.5	Average Humidity (%)	60						
Average Wind Speed (km/h	nr)	118	Average Wind direction (Deg)	321.2						
Latitude		N 15°45'37.3"	Longitude	E 73°53'14.22"						
Instrument Used	C	FPS (APM - 550)	FPS (APM - 550) RDS (APM - 460)							

Sr.	Date of		PARAMETERS								
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.05.2024	GA/24/0785	57.6	80.87	42,12	< 6.0	< 9.0	0.61	144.8	0.03	< 1.0
2	06.05.2024	GA/24/0837	55.6	78.64	39.80	< 6.0	< 9.0	0.58	143.6	0.04	< 1.0
3	09.05.2024	GA/24/0907	53.6	75.28	37.76	< 6.0	< 9.0	0.58	135.5	0.01	< 1.0
4	13.05.2024	GA/24/0923	55.5	77.01	39,13	< 6.0	< 9.0	0.46	120.1	0.02	< 1.0
5	16.05.2024	GA/24/0939	52.7	73.54	36.39	< 6.0	< 9.0	0.64	167,4	0.05	< 1.0
6	20.05.2024	GA/24/0974	49.3	71.26	34.02	< 6.0	< 9.0	0.50	147.4	0.06	< 1.0
7	23.05.2024	GA/24/1013	41.7	69.77	32.56	< 6.0	< 9.0	0.72	165.5	0.05	< 1.0
8	27.05.2024	GA/24/1062	39.5	67.68	30.11	< 6.0	< 9.0	0.30	121.9	0.06	< 1.0
9	30.05.2024	GA/24/1099	43.1	71.53	34.89	< 6.0	< 9.0	0.66	147.7	0.06	< 1.0
	NAAQS LIN	ITS *		100	60	80	80	2		1	
UNITS		µg/m³	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm	
	METHO	D	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part. XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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4 Test Results relate only to the conditions prevailing at the time of sampling

Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]



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Ambient Instrument No. 1	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 934-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 2832-DTB-2020	15/02/2024	14/02/2025
Gaseoue Sampler Sr, No. 6888-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	03/0	03/06/2024							
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GL	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLE	GLPL Representative							
Month of Sampling	May	/ 2024							
2		AMBIENT AIR	LOCATION						
Location of Ambient Air Sta	tion	Purva Casarvarnem - G	Purva Casarvarnem - Goa State (G-A4)						
Average Ambient Tempera	ture (°C)	32.0	Average Humidity (%)	72					
Average Wind Speed (km/h	nr)	104	Average Wind direction (Deg)	279					
Latitude		N 15°41'41.9"	Longitude	E 73°50'16.6"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of			PARAMETERS							
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	02.05.2024	GA/24/0786	52.0	76.11	35.51	< 6.0	< 9.0	0.57	128.6	0.05	< 1.0
2	06.05.2024	GA/24/0838	50.6	75.15	33.02	< 6.0	< 9.0	0.68	133.2	0.04	< 1.0
3	09.05.2024	GA/24/0908	47.6	73.46	35.39	< 6.0	< 9.0	0.53	131.1	0.04	< 1.0
4	13.05.2024	GA/24/0924	50.4	75.06	38.13	< 6.0	< 9.0	0.38	132.4	0.04	< 1.0
5	16.05.2024	GA/24/0940	48.7	71.60	35.10	< 6.0	< 9.0	0.47	125.6	0.05	< 1.0
6	20.05.2024	GA/24/0975	46.4	69.05	32.89	< 6.0	< 9.0	0.60	158.9	0.04	< 1.0
7	23.05.2024	GA/24/1014	38.9	66.41	29.07	< 6.0	< 9.0	0.62	137.0	0.05	< 1.0
8	27.05.2024	GA/24/1063	35.9	63.76	27.78	< 6.0	< 9.0	0.68	145.5	0.07	< 1.0
9	30.05,2024	GA/24/1100	40.4	64.65	29.86	< 6.0	< 9.0	0.51	166.3	0.05	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2	-	1	
UNITS		µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm	
	METHO	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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5 Customer complaint register is available at laboratory. 6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]



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Recognised by Central Pollution Control Board (MoEF and CC, Govt. of India), under the EP Act, 1986. Page 63 of 200 valid upto 21st August 2025. ISO 9001 : 2015 and ISO 45001 : 2018 Certified.

Ambient Instrument No. 2	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 936-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 2842-DTB-2020	16/02/2024	15/02/2025
Gaseoue Sampler Sr. No. 6896-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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### TEST REPORT

		AMBIENT AIR QUALITY I	MONITORING REPORT						
Report Date	03/0	03/06/2024							
Name of Client	M/s	. GMR GOA INTERNATION	AL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	May	/ 2024							
		AMBIENT AIR	LOCATION						
cation of Ambient Air Sta	tion	Khajne Amere Porscode	em - Goa State (G-A5)						
Average Ambient Temperat	ure (°C)	32.0	Average Humidity (%)	68					
Average Wind Speed (km/h	r)	91	Average Wind direction (Deg)	318					
Latitude		N 15°40'38.0"	Longitude	E 73°46'21.2"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of	Penart No.	PARAMETERS								
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.6	SO <sub>2</sub>	NOx	CO	CO <sub>2</sub>	Lead	voc
1	02.05.2024	GA/24/0787	17.9	62.87	17.63	< 6.0	< 9.0	0.72	152.7	0.03	< 1.0
2	06.05.2024	GA/24/0839	14.2	60.78	15,59	< 6.0	< 9.0	0.86	159.8	0.07	< 1.0
3	09.05.2024	GA/24/0909	13.1	58.72	20.96	< 6.0	< 9.0	0.46	153.7	0.05	< 1.0
4	13.05.2024	GA/24/0925	15.0	56.29	19.09	< 6.0	< 9.0	0.31	131.9	0.03	< 1.0
5	16.05.2024	GA/24/0941	13.7	52,64	17.63	< 6.0	< 9.0	0.52	132.0	0.06	< 1.0
6	20.05.2024	GA/24/0976	12.8	51.09	15.68	< 6.0	< 9.0	0.48	139.9	0.05	< 1.0
7	23.05.2024	GA/24/1015	10.4	48.24	13.81	< 6.0	< 9.0	0.49	136.9	0.04	< 1.0
3	27.05.2024	GA/24/1064	11.7	46.63	12.02	< 6.0	< 9.0	0,71	143.2	0.06	< 1.0
9	30.05.2024	GA/24/1101	13.4	49.10	14.43	< 6.0	< 9.0	0.37	131.4	0.05	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2		1	-
UNITS		s	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	OD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2005	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 3	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 942-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 670-E-23	18/10/2023	17/10/2024
Gaseoue Sampler Sr. No. 6904-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	03/0	03/06/2024							
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED							
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	May	May 2024							
		AMBIENT AIR	LOCATION						
cation of Ambient Air Sta	tion	Rajvil Wada Torxem - C	Goa State (G-A6)						
Average Ambient Temperat	ture (°C)	32.5	Average Humidity (%)	63					
Average Wind Speed (km/hr)		101.5	Average Wind direction (Deg)	300					
Latitude		N 15°48'40.0"	Longitude	E 73°52'50.2"					
Instrument Used		EPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of Sampling Report No	BOSS AND	PARAMETERS								
No.		Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	02.05.2024	GA/24/0790	38.8	73.04	33.39	< 6.0	< 9.0	0.52	137.8	0.04	< 1.0
2	06.05.2024	GA/24/0842	35.3	70.94	31.98	< 6.0	< 9.0	0.53	139.4	0.05	< 1.0
3	09.05.2024	GA/24/0912	33.0	59.60	29.61	< 6.0	< 9.0	0.33	124.7	0.06	< 1.0
4	13.05.2024	GA/24/0928	35.3	62.31	32.39	< 6.0	< 9.0	0.61	141.9	0.06	< 1.0
5	16.05.2024	GA/24/0944	32.9	58.35	34.47	< 6.0	< 9.0	0.71	130.5	0.05	< 1.0
6	20.05.2024	GA/24/0979	30.5	56.29	29.15	< 6.0	< 9.0	0.42	138.5	0.05	< 1.0
7	23.05.2024	GA/24/1018	26.0	54.87	26.36	< 6.0	< 9.0	0.58	135.4	0.05	< 1.0
8	27.05.2024	GA/24/1067	24.9	52.29	24.12	< 6.0	< 9.0	0.52	130.9	0.06	< 1.0
9	30.05.2024	GA/24/1104	27.6	54.53	22.29	< 6.0	< 9.0	0.69	166.8	0.05	< 1.0
NAAQS LIMITS *			100	60	80	80	2	-	1	-	
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm	
METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

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6 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 6	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 56-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1329-R-273-DTC-2015	15/02/2024	14/02/2025
Gaseoue Sampler Sr. No. 6773-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	03/0	03/06/2024							
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED							
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	PL Representative							
Month of Sampling	May	May 2024							
		AMBIENT AIR	LOCATION						
ocation of Ambient Air Sta	tion	Satarda - Maharashtra	State (M-A1)						
Average Ambient Tempera	ture (°C)	32.0	Average Humidity (%)	65					
Average Wind Speed (km/hr)		112	Average Wind direction (Deg)	288					
Latitude		N 15º43'01.3"	Longitude	E 73°46'00.2*					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of Sampling	Report No.	PARAMETERS								
No.			SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.05.2024	GA/24/0788	39.6	71.17	31.02	< 6.0	< 9.0	0.66	153.1	0.02	< 1.0
2	06.05.2024	GA/24/0840	36.9	68.90	28.86	< 6.0	< 9.0	0.75	131.0	0.1	< 1.0
3	09.05.2024	GA/24/0910	33.8	68.01	27.07	< 6.0	< 9.0	0.64	121.9	0.07	< 1.0
4	13.05.2024	GA/24/0926	32.0	66.42	24.70	< 6.0	< 9.0	0.35	151.2	0.05	< 1.0
5	16.05.2024	GA/24/0942	28.4	62.76	22.04	< 6.0	< 9.0	0.70	154.9	0.04	< 1.0
6	20.05.2024	GA/24/0977	25.1	60.60	20.29	< 6.0	< 9.0	0.56	147.7	0.05	< 1.0
7	23.05.2024	GA/24/1016	21.0	58.12	18.55	< 6.0	< 9.0	0.91	155.6	0.09	< 1.0
8	27.05.2024	GA/24/1065	19.1	55.70	15.80	< 6.0	< 9.0	0.73	160.3	0.06	< 1.0
9	30.05.2024	GA/24/1102	23.4	57.13	17.22	< 6.0	< 9.0	0.44	143.5	0.04	< 1.0
NAAQS LIMITS *			100	60	80	80	2		1		
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm	
METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2008	IS 5182 (Part X) 1998	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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Test Results relate only to the conditions prevailing at the time of sails.
 Customer complaint register is available at laboratory.

Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

seconda



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Ambient Instrument No. 4	Galibrated On	Calibration Due Date		
Fine Particulate Sampler S. No. 1163-E-22	18/05/2024	17/05/2025		
Respirable Dust Sampler Sr. No. 476-A-23	09/01/2024	08/01/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

LAB .: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525. Tel. : (02362) 223519 . E-mail : info@gadark.in . Website : www.gadark.in

OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83, Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 · +91 93213 12367

### TEST REPORT

		AMBIENT AIR QUALITY M	MONITORING REPORT					
Report Date	03/0	03/06/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	May	y 2024						
		AMBIENT AIR	LOCATION					
cation of Ambient Air Stat	tion	Dingane – Maharashtra	State (M-A2)					
Average Ambient Temperat	ure (°C)	32	Average Humidity (%)	66				
Average Wind Speed (km/h	r)	91.5	Average Wind direction (Deg)	278.6				
Latitude		N 15º46'12.3"	Longitude	E 73°49'20.5"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of		1			PAR	AMETERS	1			
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.05.2024	GA/24/0791	19.5	22.87	61.26	< 6.0	< 9.0	0.29	124.3	0.03	< 1.0
2	06.05.2024	GA/24/0843	17.7	59.76	20.04	< 6.0	< 9.0	0.43	170.9	0.04	< 1.0
3	09.05.2024	GA/24/0913	19.7	58.04	22.83	< 6.0	< 9.0	0.74	138.7	0.04	< 1.0
4	13.05.2024	GA/24/0929	22.3	60.00	24.45	< 6.0	< 9.0	0.46	126.4	0.05	< 1.0
5	16.05.2024	GA/24/0945	19.9	55.73	20.13	< 6.0	< 9.0	0.74	156.0	0.05	< 1.0
6	20.05.2024	GA/24/0980	18.5	52.87	19,00	< 6.0	< 9.0	0.53	144.6	0.06	< 1.0
7	23.05.2024	GA/24/1019	14.6	50.57	16.84	< 6.0	< 9.0	0.79	144.8	0.07	< 1.0
8	27.05.2024	GA/24/1068	12.8	48.20	14.76	< 6.0	< 9.0	0.39	135.3	0.05	< 1.0
9	30.05.2024	GA/24/1105	14.7	50.05	16.09	< 6.0	< 9.0	0.52	161.6	0.05	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	-	1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METH	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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Note :

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5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

Seconda

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]



CHECKED BY

Ambient Instrument No. 7	Calibrated On	Calibration Due Date	
Fine Particulate Sampler S. No. 60-C-22	15/12/2023	14/12/2024	
Respirable Dust Sampler Sr. No. 1284-R-228-DTK-2014	15/02/2024	14/02/2025	
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024	
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025	



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OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

### TEST REPORT

			AMBIE	NT AIR QU	ALITY MO	NITORING	REPORT					
Repor	t Date		03/06/2024									
Name	of Client		M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED									
Addre	ss of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						D,			
Sampl	ling Plan		GLPL/QF/7.3/06				Page No.			1 of 1		
Sampl	le Collected B	y	GLPL Repre	sentative								
Month of Sampling May 2024												
				AMBIE	NT AIR LO	OCATION						
cati	on of Ambient	Air Station	Netar	de - Maha	rashtra St	ate (M-A3)						
Avera	ge Ambient Te	emperature (°C	3)	31.5		Average Humidity (%) 71						
Averag	ge Wind Spee	d (km/hr)	-	80.8		Average Wind direction (Deg)				290		
Latitud	de			N 15º46'11	.7"	Longitude			E	73°53'47.	0"	
Instrur	Instrument Used			FPS (APM - 550) RDS (APM - 460) GPS (APM						S (APM - 4	411)	
Sr.	Date of		1			PAR	AMETERS	K.				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	Voo	
		-	-									

Sr. Date of Depart Ma											
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.6	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.05.2024	GA/24/0789	22.5	55.35	21.04	< 6.0	< 9.0	0.41	129.3	0.02	< 1.0
2	06.05.2024	GA/24/0841	20.6	53.66	19.29	< 6.0	< 9.0	0.64	157.8	0.04	< 1.0
3	09.05.2024	GA/24/0911	18.8	55.07	17.88	< 6.0	< 9.0	0.45	140.7	0.04	< 1.0
4	13.05.2024	GA/24/0927	15.3	52.86	15,14	< 6.0	< 9.0	0.57	126.7	0.04	< 1.0
5	16.05.2024	GA/24/0943	13.3	48.57	13.35	< 6.0	< 9.0	0.66	144.5	0.04	< 1.0
6	20.05.2024	GA/24/0978	11.5	46.00	11.89	< 6.0	< 9.0	0.43	126.8	0.05	< 1.0
7	23.05.2024	GA/24/1017	10.5	44.26	10.40	< 6.0	< 9.0	0.84	162.7	0.07	< 1.0
3	27.05.2024	GA/24/1066	9.0	42.99	11.98	< 6.0	< 9.0	0.90	168.5	0.05	< 1.0
9	30.05.2024	GA/24/1103	10.8	44.37	13.10	< 6.0	< 9.0	0.43	149.0	0.05	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2		1	
	UNIT	S	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	מכ	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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For GADARK LAB PVT. LTD.

Slewula

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]



CHECKED BY

Ambient Instrument No. 5	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 940-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 477-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 470-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## **TEST REPORT**

	e of Issue		01/06	2024						
Nar	ne of Client		M/s.	GMR GO	AINTE	RNATION	AL AIRPORT LIN	IITED		
	ress of Clien		ADMI	NISTRAT	IVE B	LOCK, MC	PA INTERNATIO RNEM, MOPA, NO	NAL AIRPORT,		
San	pling Plan		GLPL	QF/7.3/0	6		Sampling Procedu	re No.	GLPL/SOP/AA/17	
	ple Collecte	dBv	GLPL	Represe	ntative					
	1						DLLUTION MONIT	ORING		
Sr. No.	Date of Sampling	Repo	rt No.	Station	Zone	1.1	pling Location	Day Time Noise in dB(A)	Night Time Nois in dB(A)	
_				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1			Leq	Leq	
1	05.05.2024	GA/24		G-N1		Mopa Bour		66.3	57.2	
2	05.05.2024	GA/24		G-N2	1	Shemeche	advan	68.9	57.5	
3	04.05.2024	GA/24		G-N3	C	Nagzar	Page 20	51.6	51.9	
4	04.05.2024	GA/24		G-N4 G-N5	R	Purva Casa Chandel	arvarnem	51.1 52.0	43.2	
5	13.05.2024	GA/24 GA/24		G-N5 G-N6	R		ere Porscodem	52.0	42.6	
6	13.05.2024	GA/24 GA/24		G-N6 G-N7	R	Warkhand	ere Poiscodem	49.1	38.3	
7 8	13.05.2024	GA/24 GA/24		G-N7 G-N8	C	Rajvil Wad	Torvem	49.1 52.3	44.7	
9	14.05.2024		1/0936	G-N9	c	and the second second second	chayant Tamboxem -	62.0	42.8	
10	10.05.2024	GA/24	/0919	M-N1	R	Satarda		53.1	42.6	
11	03.05.2024	GA/24	/0800	M-N2	R	Dingane		49.6	41.1	
12	03.05.2024	GA/24	1/0801	M-N3	R	Netarde		50.2	41.2	
	Noise Limits as	A	lequie i		1.000					
	Area Code	A	lequie i	Category	1.000		Limits in dE Day Time			
<u>,</u>	100 100 100 100	A			of Area		Limits in de	B(A) Leq		
	Area Code	A	Indust	Category	of Area		Limits in dE Day Time	3(A) Leq Night Time		
<u>ין</u>	Area Code (A)	- 1 D	Indus Comn	Category	of Area I) a (C)		Limits in dE Day Time 75	3(A) Leq Night Time 70		
<u>'</u>	Area Code (A) (B)	- 1 D	Indus Comn Resid	Category trial Area ( nercial Are	of Area I) a (C) (R)		Limits in dB Day Time 75 65	B(A) Leq Night Time 70 55		
	Area Code (A) (B) (C) (D) Day time to re	ckoned	Indus Comn Resid Silenc in betw	Category trial Area ( nercial Area ential Area the Zone (S een 6:00 a	r of Area 1) a (C) (R) i) m to 10	a pm and nigh	Limits in dE Day Time 75 65 55 50 t time is reckoned in b	B(A) Leq           Night Time           70           55           45           40           etween 10:00 pm to	and the second sec	
2]	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a	ckoned enotes th a unit in	Indus Comn Resid Silenc in betwo he time v which r	Category trial Area ( nercial Area ential Area ce Zone (S een 6:00 a weighted a noise is me	r of Area 1) a (C) (R) i) m to 10 verage c asured.	pm and nigh of the level o	Limits in dE Day Time 75 65 55 50 t time is reckoned in b f sound in decibels on	B(A) Leq Night Time 70 55 45 40 etween 10:00 pm to scale A which is rela	atable to human hearing	
2] 3] 4]	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a "A", in dB(A) L characteristics	ckoned enotes th a unit in .eq, denotes of the h	Indus Comn Resid Silenc in betwo the time v which r otes the numan e	Category trial Area ( nercial Area ential Area ce Zone (S een 6:00 an weighted a noise is me e frequency ear.	a (C) (R) (R) (R) (r) (R) (r) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R	pm and nigh of the level o ng in the me	Limits in dB Day Time 75 65 55 50 t time is reckoned in b f sound in decibels on asurement of noise an	B(A) Leq Night Time 70 55 45 40 etween 10:00 pm to scale A which is rela	atable to human hearing	
2] 3] 4]	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a "A", in dB(A) L characteristics Leq : It is the d	ckoned enotes th a unit in .eq, denotes of the h	Indus Comn Resid Silenc in betwo the time v which r otes the numan e	Category trial Area ( nercial Area ential Area ce Zone (S een 6:00 an weighted a noise is me e frequency ear.	a (C) (R) (R) (R) (r) (R) (r) (R) (R) (R) (R) (R) (R) (R) (R) (R) (R	pm and nigh of the level o ng in the me	Limits in dB Day Time 75 65 55 50 t time is reckoned in b f sound in decibels on asurement of noise an	B(A) Leq Night Time 70 55 45 40 etween 10:00 pm to scale A which is rela	atable to human hearing	
2] 3] 4] 5] Note 1. Th 2. Te 4. Cu 5. Cz	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a "A", in dB(A) L characteristics Leq : It is the d : e results relate or st Report shall no st Results relate or st Results rel	ckoned enotes the a unit in .eq, denotes the s of the h energy n nly to the to be repro- only to the t register f the equi	Indus Comn Resid Silenci in betwee which r otes the numan e nean of samples oduced e e conditi is availal ipment's	Category trial Area ( nercial Area ential Area e Zone (S een 6:00 a weighted a noise is me e frequency ear. the noise I tested. except in full, ons prevailin ole at labora used in mor	v of Area I) a (C) (R) m to 10 verage c asured. veighti evel over without v g at the ti tory.	pm and nigh of the level o ng in the me er a specified written approve me of samplin ad / or analysis	Limits in dE Day Time 75 65 55 50 t time is reckoned in b f sound in decibels on asurement of noise an asurement of noise an period.	B(A) Leq Night Time 70 55 45 40 etween 10:00 pm to scale A which is related id corresponds to free	atable to human hearing	

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 554067	16/05/2023	16/05/2024

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 546176	23/06/2023	23/06/2024



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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## TEST REPORT

	ANALYSIS F	REPORT FOR	WATER SAMPLE		_		
Report No.	GW/24/0980		Report Date	24/05/2024		2024	
Client Name & Address	GMR Goa Internation Administrative Block, Taluka Pernem, Mopa	Mopa Internatio	onal Airport, Dadachi	wadi Roa	ad, Na	gzar,	
Online / Deferrers	As Per Dated	Equirenmental Condition of Lob		Temp	0C	Humidity %	
Order / Reference	18/05/2024	/05/2024 Environmental Condition of Lab				70	
Sampling Plan	GLPL/QF/7.3/06	Sampling Pr	ocedure No.	APHA	1060		
Sampling Point	STP Outlet (A.C.F.)						
Sampling Details	STP Outlet (A.C.F.) W	Vater Sample	Date of Collection		18/05/2024		
Sample Collected by	GLPL Representative		Sample Received On		20/05/2024		
Analysis Started On	20/05/2024						
Sample Container	Plastic Carboy + Glas	s Bottle	Sample Quantity		5 lit +	1.25 lit	

#### Chemical Testing:

Sr. No.	Parameters	Result	Unit	Limits	Method
1	pH	6.92	4	5.5 - 9.0	APHA 4500 H*
2	Chemical Oxygen Demand (COD)	44	mg/lit	50.00	APHA 5220 B
3	Biochemical Oxygen Demand (27 <sup>0</sup> C day) (BOD)	8	mg/lit	10.00	IS 3025 (Part 44)
4	Total Suspended Solids (TSS)	18	mg/lit	20.00	APHA 2540 D
5	Oil & Grease (O & G)	3	mg/lit	10.00	APHA 5520 B
6	Ammonia	4.26	mg/lit	5.00	APHA 4500 NH3 B&C
7	Total Nitrogen (as N)	7.28	mg/lit	10.00	APHA 4500-Norg
8	Phosphorous	17.55	mg/lit		APHA 4500 P D

#### **Microbiological Parameters:**

9	Fecal Coliform at 44.5°C for 24 hrs.	70	MPN Index/100ml	100	APHA 9221 E
			End		

KUDA

200010-1-0

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#### For GADARK LAB PVT. LTD.

Seconda AUTHORISED SIGNATORY

AUTHORISED SIGNATOR



1. Results relate only to the sample tested.

- 2. Test Report shall not be reproduced except in full, without written approval of the laboratory.
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- 4. Customer complaint register is available at laboratory.
- 5. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

Sr.	the second second second	and an and a second sec	Certificate	Calibration Details			
No.	Equipment Name	Equipment Id	No.	Calibration Date	Next Calibration Due Date		
01	pH Meter	GL/EQ/pH/01	4	In house Calibration			
02.	Hot Air Oven	GL/EQ/O/01	AVI/2306110	29/06/2023	28/06/2024		
03.	COD Digester	GL/EQ/COD/01	AVI/2306129	30/06/2023	29/06/2024		
04.	BOD Incubator	GL/EQ/1/02	AVI/2306122	30/06/2023	29/06/2024		
05.	Microbiological Incubator (35 ° C)	GL/EQ/I/03	AVI/2306127	30/06/2023	29/06/2024		
06.	Microbiological Incubator (44.5 ° C)	GL/EQ/I/01	AVI/2306126	30/06/2023	29/06/2024		
07.	Laminar Air Flow	GL/EQ/LAF/01	TECH/VAL/ 2024/02/107	15/02/2024	14/02/2025		
08.	Autoclave	GL/EQ/A/01	AVI/2306111	29/06/2023	28/06/2024		

#### **Equipment Calibration Details**



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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## TEST REPORT

			AMBIE	NT AIR QU	ALITY MON	NITORING R	EPORT						
Report	Date		01/07/2024										
Name	of Client		A POINT A POINT	N/S. GMR GOA INTERNATIONAL AIRPORT LIMITED									
Addres	ss of Client		ADMINISTR NAGZAR, T	ATIVE BLO ALUKA PER	CK, MOPA	INTERNAT PA, NORTH	GOA 403	RPORT, D 3512.	DADACHIWA	DIROA	э,		
Sampl	ing Plan		GLPL/QF/7.	PL/QF/7.3/06 Page No.						of 1	_		
Sampl	e Collected By	0	GLPL Repre	sentative									
Month	of Sampling		June 2024										
				AMBIE	NT AIR LO	CATION					_		
L )rti	on of Ambient	Air Station	Mopa	Boundry -	Goa State	(G-A1)							
Average Ambient Temperature (°C)			C)	32.5		Average Hu	umidity (%	)		72			
Average Wind Speed (km/hr)				152		Average Wind direction (Deg) 318				318	18		
Latitude				N 15º45'51	.1*	Longitude			E 73	3°56'32.4	*		
Instrument Used				PS (APM -	550)	RDS	(APM - 4	60)	GPS (	APM - 4	11)		
Sr.	Date of	Sec. 10		PARAMETERS									
No.	Sampling	Report No	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC		
1	03.06.2024	GA/24/113	39 35.9	67.80	25.07	< 6.0	< 9.0	0.78	155.03	0.04	< 1,0		
2	06.06.2024	GA/24/116	38 32.5	64.98	28.82	< 6.0	< 9.0	0.65	155.0	0.06	< 1.0		
3	10.06.2024	GA/24/120	31.3	63.72	26.07	< 6.0	< 9.0	0.48	126.9	0.04	< 1.0		
4	13.06.2024	GA/24/123	37 27.8	60.37	24.95	< 6.0	< 9.0	0.50	167.0	0.03	< 1.0		
5	17.06.2024	GA/24/125	54 25.9	58.98	22.29	< 6.0	< 9.0	0.56	140.1	0.05	< 1.(		
6	20.06.2024	GA/24/127	73 28.8	60.70	25.24	< 6.0	< 9.0	0.57	167.7	0.06	< 1.0		
7	24.06.2024	GA/24/128	36 30.1	58.35	20.75	< 6.0	< 9.0	0.34	133.0	0.08	< 1.0		
$\sim$	27.06.2024	GA/24/129	28.0	56,93	18.55	< 6.0	< 9.0	0.55	132.7	0.04	< 1.0		
	NAAQS LI	MITS *		100	60	80	80	2		1			
-	UNIT	S	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm		
	METHOD			IS 5182 (Part XXIII) 2006	IS 5182 (Par XXIV) 2006		IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Metho 18		

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested.

The results relate only to the samples tested.
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 Samples will be preserved for a period 15 days from the delivery of Test Report.

a samples will be preserved for a period to days from the delivery of test Report.
 Test Results relate only to the conditions prevailing at the time of sampling.
 Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Calibration		
	Calibration Due Date	
08/01/2024	07/01/2025	
08/10/2023	07/10/2024	
	and the second sec	
	11/02/2025	
16/09/2023	15/09/2024	
10/01/2024	09/01/2025	
	Calibrated On 08/01/2024 08/10/2023 12/02/2024 16/09/2023 10/01/2024	



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 · +91 93213 12367

## TEST REPORT

			AMBIEN	IT AIR QUA	LITY MO	NITORING R	EPORT	_		_				
Report	Date		01/07/2024			-					_			
Name	of Client		M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED											
Addres	s of Client		ADMINISTRA NAGZAR, TA	MINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, AGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.										
Sampling Plan GL			GLPL/QF/7.3/	06		P	age No.		1	1 of 1	_			
Sample	e Collected By		GLPL Repres	entative				_	_		_			
			June 2024				_							
				AMBIE	NT AIR LC	OCATION								
Lonion of Ambient Air Station Shemecheadvan Goa					Goa Sta	ite (G-A2)			-		_			
Averag	Average Ambient Temperature (°C)			32		Average Humidity (%)			76					
Average Wind Speed (km/hr)				111		Average Wi	nd direction	on (Deg)	-	315				
Latitude				N 15º42'06.	1"	Longitude				'3°49'21.5	1			
Instrur	strument Used			FPS (APM - 550) RDS (APM - 460)				GPS	(APM - 4	11)				
Sr.	Date of	manhor		PARAMETERS										
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	voo			
1	03.06.2024	GA/24/1138	3 21,1	62.01	24.24	< 6.0	< 9.0	0.71	140.3	0.06	< 1.0			
2	06.06.2024	GA/24/1167	7 17.7	60.13	22.70	< 6.0	< 9.0	0.63	141.3	0.06	< 1.0			
3	10.06.2024	GA/24/1206	6 15.2	58.12	20.63	< 6.0	< 9.0	0.76	173.4	0.04	< 1.0			
4	13.06.2024	GA/24/1236	5 13.4	55.34	18.75	< 6.0	< 9.0	0.52	157.8	0.03	< 1.0			
5	17.06.2024	GA/24/125	3 12.5	53.96	16.72	< 6.0	< 9.0	0.77	144.4	0.08	< 1.0			
6	20.06.2024	GA/24/127	2 17.2	55.01	15.59	< 6.0	< 9.0	0.50	146.4	0.07	< 1.			
7	24.06.2024	GA/24/128	5 19.1	54.02	14.14	< 6.0	< 9.0	0.38	127.5	0,06	< 1.0			
1.1	27.06.2024	GA/24/129	7 18.4	53,29	13.02	< 6.0	< 9.0	0.44	112.7	0.05	< 1.			
-	NAAQS LI	MITS *		100	60	80	80	2	e	1				
-	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppn			

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested.

METHOD

2. Test Report shall not be reproduced except in full, without written approval of the laboratory

Samples will be preserved for a period 15 days from the delivery of Test Report. 3

4 Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory 5. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

IS 5182

(Part 4)

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [KAILAS V. CHITALKAR]



IS 5182 (Part

XXIV) 2006

IS 5182

(Part XXIII)

2006

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IS 5182

(Parl X)

1999

GC Method

IS 5182

(Part VI)

2006

IS 5182

(Part II)

2001

**FPA** 

Method

18

IS 5182

(Part

XXII)

2004

Calibrated On	0.10.11.1	
	Calibration Due Date	
07/10/2023	06/10/2024	
09/01/2024	08/01/2025	
	07/01/2025	
16/09/2023	15/09/2024	
10/01/2024	09/01/2025	
	Calibrated On 07/10/2023 09/01/2024 08/01/2024 16/09/2023 10/01/2024	



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### **TEST REPORT**

		AMBIENT AIR QUALITY	MONITORING REPORT								
Report Date	01/0	01/07/2024									
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED									
Address of Client	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.										
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1							
Sample Collected By	GLF	GLPL Representative									
Month of Sampling	Jun	e 2024									
		AMBIENT AIR	LOCATION								
ocation of Ambient Air Sta	tion	Nagzar - Goa State (G-	A3)								
Average Ambient Temperat	ture (ºC)	32.5	Average Humidity (%)	64							
Average Wind Speed (km/h	nr)	120	Average Wind direction (Deg)	328							
Latitude		N 15º45'37.3"	Longitude	E 73°53'14.22"							
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)							

Sr.	Date of	Description				PARA	METERS				
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	03.06.2024	GA/24/1131	40.9	68.15	32.93	< 6.0	< 9.0	0.81	163.5	0.07	< 1.0
2	06.06.2024	GA/24/1160	37.6	66.28	30.40	< 6.0	< 9.0	0.41	146.9	0.05	< 1.0
3	10.06.2024	GA/24/1199	35.8	64.87	28.78	< 6.0	< 9.0	0.57	154.1	0.04	< 1.0
4	13.06.2024	GA/24/1229	31.9	62.66	25.57	< 6.0	< 9.0	0.36	138.2	0.03	< 1.0
5	17.06.2024	GA/24/1246	30.4	59.27	22.66	< 6.0	< 9.0	0.46	138.8	0.04	< 1.0
6	20.06.2024	GA/24/1265	32.3	61.76	19.34	< 6.0	< 9.0	0.31	124.2	0.05	< 1.0
7	24.06.2024	GA/24/1278	33.9	59.32	17.59	< 6.0	< 9.0	0.77	164.7	0.03	< 1.0
8	27.06.2024	GA/24/1290	31.5	57.99	16.13	< 6.0	< 9.0	0.86	127.2	0.05	< 1.0
)	NAAQS LIN	IITS *	-	100	60	80	80	2	-	1	
	UNITS		µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHOD			IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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3. Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 1	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 934-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 2832-DTB-2020	15/02/2024	14/02/2025		
Gaseoue Sampler Sr. No. 6888-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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## **TEST REPORT**

			AMBIE	ENT AIR QU	ALITY MC	NITORING	REPORT						
Repor	t Date	(	)1/07/2024										
Name	of Client	1	W/s. GMR G	OA INTERN	ATIONAL	AIRPORT L	IMITED	-					
Addre	ss of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.								D,		
Sampling Plan GLI			GLPL/QF/7.	3/06			Page No.	_		1 of 1			
Samp	le Collected By	(	GLPL Repre	sentative									
Month	of Sampling		June2024	ie2024									
3				AMBIE	NT AIR LO	DCATION	-						
Locati	on of Ambient	Air Station	Purva	Purva Casarvarnem - Goa State (G-A4)									
Avera	ge Ambient Te	mperature (°C	).	31.5 Average Hum			erage Humidity (%)			79			
Avera	ge Wind Speed	d (km/hr)	1.	122		Average Wind direction (Deg)			268.5				
Latitud	le			N 15º41'41	.9"	Longitude			E	E 73°50'16.6"			
Instru	ment Used		F	PS (APM -	550)	RDS (APM - 460)			GPS	GPS (APM - 411)			
Sr.	Date of					PAR	AMETERS						
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC		
1	03.06.2024	GA/24/1132	38.1	62.64	27.49	< 6.0	< 9.0	0.68	141.2	0.07	< 1.0		
2	06 06 2024	GA/24/1161	35.3	60.12	25.32	< 6.0	< 9.0	0.58	156.5	0.05	< 1.0		

	METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18
UNITS			UNITS µg/m³ µg	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	NAAQS LI	MITS *		100	60	80	80	2		1	
8	27.06.2024	GA/24/1291	26.0	54,99	13.56	< 6.0	< 9.0	0.68	143.9	0.05	< 1.0
7	24.06.2024	GA/24/1279	27.0	56.01	15.47	< 6.0	< 9.0	0.41	124.0	0.06	< 1.0
6	20.06.2024	GA/24/1266	25.0	57.25	17.09	< 6.0	< 9.0	0.28	131.5	0.04	< 1.0
5	17.06.2024	GA/24/1247	22.6	54.85	19.42	< 6.0	< 9.0	0.49	142.1	0.05	< 1.0
4	13.06.2024	GA/24/1230	25.9	56.55	21.54	< 6.0	< 9.0	0.48	168.4	0.03	< 1.0
3	10.06.2024	GA/24/1200	32.8	58.05	23.00	< 6.0	< 9.0	0.85	166.2	0.04	< 1.0
2	06.06.2024	GA/24/1161	35.3	60.12	25.32	< 6.0	< 9.0	0.58	156.5	0.05	< 1.0

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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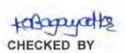
Test Results relate only to the conditions prevailing at the time of sampling.
 Customer complaint register is available at laboratory.

Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 2	Calibrated On	Calibration Due Date		
Fine Particulate Sampler S. No. 936-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 2842-DTB-2020	16/02/2024	15/02/2025		
Gaseoue Sampler Sr. No. 6896-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	01/0	01/07/2024							
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED							
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	Jun	June 2024							
)		AMBIENT AIR	LOCATION						
Location of Ambient Air Sta	tion	Khajne Amere Porscodem - Goa State (G-A5)							
Average Ambient Temperat	ure (°C)	32.0	Average Humidity (%)	70					
Average Wind Speed (km/h	r)	118	Average Wind direction (Deg)	328.5					
Latitude		N 15º40'38.0"	Longitude	E 73º46'21.2"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of	a second				PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.6	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	03.06.2024	GA/24/1133	12.0	47.45	12.02	< 6.0	< 9.0	0.63	163.5	0.02	< 1.0
2	06.06.2024	GA/24/1162	10.5	45.40	10.89	< 6.0	< 9.0	0.75	174.8	0.05	< 1.0
3	10.06.2024	GA/24/1201	9.1	44.03	12.02	< 6.0	< 9.0	0.55	135.9	0.05	< 1.0
4	13.06.2024	GA/24/1231	8.1	42.48	10.27	< 6.0	< 9.0	0.35	135.7	0.02	< 1.0
5	17.06.2024	GA/24/1248	9.1	41.01	9.02	< 6.0	< 9.0	0.68	157.8	0.06	< 1.0
6	20.06.2024	GA/24/1267	10.1	44.0	8.19	< 6.0	< 9.0	0,49	157.7	0.07	< 1.0
7	24.06.2024	GA/24/1280	9.3	42.94	9.02	< 6.0	< 9.0	0.47	135.0	0.06	< 1.0
8	27.06.2024	GA/24/1292	8.6	42.01	8.90	< 6.0	< 9.0	0.35	125.6	0.04	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METH	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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 Test Results relate only to the conditions prevailing at the time of sampling.

Customer complaint register is available at laboratory
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 3	Calibrated On	Calibration Due Date		
Fine Particulate Sampler S. No. 942-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 670-E-23	18/10/2023	17/10/2024		
Gaseoue Sampler Sr. No. 6904-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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### TEST REPORT

-			AMBIE		ALITY MO	NITORING P	REPORT					
Repor	t Date	C	1/07/2024	1								
Name	of Client	1	/s. GMR G	. GMR GOA INTERNATIONAL AIRPORT LIMITED								
Addre	ss of Client		DMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, IAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.								D,	
Samp	ling Plan	(	GLPL/QF/7.3/06				Page No.			1 of 1		
Samp	le Collected By	/ (	GLPL Representative									
Month	of Sampling		une 2024									
				AMBIE	NT AIR LO	OCATION						
Locati	on of Ambient	Air Station	Rajvil	Wada Tor	xem - Go	Goa State (G-A6)						
Vera	ge Ambient Te	mperature (°C)		32.0		Average H	umidity (%	71				
Avera	ge Wind Spee	d (km/hr)		132.5		Average Wind direction (Deg)			11	312		
Latitu	de			N 15º48'40	.0"	Longitude	1.00		E	73°52'50.	2"	
Instrument Used			F	PS (APM -	550)	RDS	(APM – 4	60)	GPS	S (APM - 4	411)	
Sr. Date of						PAR	AMETERS	1				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC	
1	03 06 2024	GA/24/1136	25.8	53.03	20.75	< 6.0	< 9.0	0.38	154.4	0.06	< 1.0	

ŝ	METHO	סכ	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2008	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18
	UNIT	S	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
)	NAAQS LI	MITS *		100	60	80	80	2		1	-
8	27.06.2024	GA/24/1295	18.6	46.05	12.97	< 6.0	< 9.0	0.27	125.8	0.03	< 1.0
7	24.06.2024	GA/24/1283	20.0	46.99	14.01	< 6.0	< 9.0	0.67	147.6	0.05	< 1.0
6	20.06.2024	GA/24/1270	18.0	47.22	14.26	< 6.0	< 9.0	0.77	177.9	0.04	< 1.0
5	17.06.2024	GA/24/1251	15.9	43.22	12.72	< 6.0	< 9.0	0.25	126.4	0.08	< 1.0
4	13.06.2024	GA/24/1234	18.4	44.69	14.39	< 6.0	< 9.0	0.59	141.4	0.03	< 1.0
3	10.06.2024	GA/24/1204	21.2	47.02	16.38	< 6.0	< 9.0	0.71	138.8	0.06	< 1.0
2	06.06.2024	GA/24/1165	23.3	49.95	18.26	< 6.0	< 9.0	0.39	140.7	0.06	< 1.0
1	03.06.2024	GA/24/1136	25.8	53.03	20.75	< 6.0	< 9.0	0.38	154.4	0.06	< 1.0

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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 Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

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Ambient Instrument No. 6	Calibrated On	Calibration Due Date		
Fine Particulate Sampler S. No. 56-C-22	15/12/2023	14/12/2024		
Respirable Dust Sampler Sr. No. 1329-R-273-DTC-2015	15/02/2024	14/02/2025		
Gaseoue Sampler Sr. No. 6773-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



INDUSTRIAL ANALYSTS & CONSULTANTS

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## **TEST REPORT**

	- X -	AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	01/0	01/07/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLE	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Jun	June 2024						
		AMBIENT AIR	LOCATION					
ocation of Ambient Air Sta	tion	Satarda - Maharashtra	State (M-A1)					
Average Ambient Temperat	ture (°C)	32,5	Average Humidity (%)	64				
Average Wind Speed (km/h	r)	121	Average Wind direction (Deg)	300.4				
Latitude		N 15º43'01.3"	Longitude	E 73°46'00.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	Danast No.				PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.6	SO <sub>2</sub>	NOx	со	CO2	Lead	VOC
1	03.06.2024	GA/24/1134	21.1	54.53	14.80	< 6.0	< 9.0	0.48	120.0	0.05	< 1.0
2	06.06.2024	GA/24/1163	18.6	52.18	12.64	< 6.0	< 9.0	0.51	130.4	0.05	< 1.0
3	10.06.2024	GA/24/1202	15.9	50.04	14.55	< 6.0	< 9.0	0.52	151.0	0.05	< 1.0
4	13.06.2024	GA/24/1232	13.4	48.47	13.02	< 6.0	< 9.0	0.37	133.2	0.03	< 1.0
5	17.06.2024	GA/24/1249	12.1	46.31	11.98	< 6.0	< 9.0	0.67	172.5	0.07	< 1.0
6	20.06.2024	GA/24/1268	16.8	48.97	13.89	< 6.0	< 9.0	0.72	158.3	0.06	< 1.0
7	24.06.2024	GA/24/1281	18.5	48.01	12.39	< 6.0	< 9.0	0.37	143.1	0.06	< 1.0
8	27.06.2024	GA/24/1293	16.2	46.96	12.02	< 6.0	< 9.0	0.63	138.9	0.09	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2	-	1	
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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2 Test Report shall not be reproduced except in full, without written approval of the laboratory

3. Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling

5. Customer complaint register is available at laboratory

Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

Fleiter





Ambient Instrument No. 4	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1344-G-23	17/10/2023	17/10/2024
Respirable Dust Sampler Sr. No. 194-E-22	17/05/2024	16/05/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025





**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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### **TEST REPORT**

		AMBIENT AIR QUALITY M	MONITORING REPORT						
Report Date	01/(	07/2024							
Name of Client	M/s	M/s, GMR GOA INTERNATIONAL AIRPORT LIMITED							
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	GLPL Representative							
Month of Sampling	Jun	June 2024							
		AMBIENT AIR	LOCATION						
Location of Ambient Air Stat	tion	Dingane – Maharashtra	State (M-A2)						
Average Ambient Temperati	ure (°C)	31.5	Average Humidity (%)	73					
Average Wind Speed (km/h	(r)	102	Average Wind direction (Deg)	298					
Latitude		N 15º46'12.3"	Longitude	E 73º49'20.5"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of		1000			PAR	AMETERS	-			
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	03.06.2024	GA/24/1137	12.9	48.69	14.68	< 6.0	< 9.0	0.56	161.6	0.05	< 1.0
2	06.06.2024	GA/24/1166	11.2	46.71	12.02	< 6.0	< 9.0	0.62	150.2	0.06	< 1.0
3	10.06.2024	GA/24/1205	13.9	45.07	13.89	< 6.0	< 9.0	0.58	138.3	0.05	< 1.0
4	13.06.2024	GA/24/1235	11.6	43.06	11.64	< 6.0	< 9.0	0.49	129.6	0.03	< 1.0
5	17.06.2024	GA/24/1252	10.6	41.03	10.60	< 6.0	< 9.0	0.35	139.5	0.08	< 1.0
6	20.06.2024	GA/24/1271	12.2	45.06	9.86	< 6.0	< 9.0	0.70	156.6	0.06	< 1.0
7	24.06.2024	GA/24/1284	10.9	44.88	9.94	< 6.0	< 9.0	0.54	135.4	0.08	< 1.0
8	27.06.2024	GA/24/1296	9.5	43.95	9.02	< 6.0	< 9.0	0.34	123.1	0.04	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2	-	1	
	UNIT	s	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METH	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

Kleeter





Ambient Instrument No. 7	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 60-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1284-R-228-DTK-2014	15/02/2024	14/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## TEST REPORT

-												
		1.000	AMBIE	NT AIR QU	ALITY MC	NITORING	REPORT	-				
Repor	t Date	0	1/07/2024								_	
Name	of Client	M	I/s. GMR GOA INTERNATIONAL AIRPORT LIMITED									
Addres	ss of Client			MINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAI AGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							D,	
Sampl	ling Plan	G	LPL/QF/7.3	3/06			Page No.			1 of 1		
Sampl	le Collected By	G	LPL Repre	sentative								
Month	of Sampling	JL	une 2024									
				AMBIE	NT AIR LO	OCATION						
ocati	on of Ambient	Air Station	Netarde - Maharashtra State (M-A3)									
Averag	ge Ambient Te	mperature (°C)	1.1	31.5		Average Humidity (%)			1	75		
Averag	ge Wind Spee	d (km/hr)		101.5		Average W	1.1	298				
Latitud	le			N 15º46'11	.7"	Longitude			E	73°53'47.	0"	
Instrur	ment Used		F	PS (APM -	550)	RDS	(APM – 4	460)	GPS	GPS (APM - 411)		
Sr.	Date of					PAR	AMETERS	1				
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC	
		1043-012-3449-3-010		1				- 1-				

SI. Date UI D.	Photo and Aller										
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	03.06.2024	GA/24/1135	8.9	42.99	10.10	< 6.0	< 9.0	0.49	167.2	0.05	< 1.0
2	06.06.2024	GA/24/1164	7.8	40.39	9.90	< 6.0	< 9.0	0.60	143.6	0.04	< 1.0
3	10.06.2024	GA/24/1203	8.9	42.25	10.40	< 6.0	< 9.0	0.56	146.1	0.05	< 1.0
4	13.06.2024	GA/24/1233	7.6	38.90	9.02	< 6.0	< 9.0	0.67	141.9	0.02	< 1.0
5	17.06.2024	GA/24/1250	8.7	40.00	8.36	< 6.0	< 9.0	0.28	133.2	0.08	< 1.0
6	20.06.2024	GA/24/1269	10.5	42.66	10.02	< 6.0	< 9.0	0.47	129.3	0.07	< 1.0
7	24.06,2024	GA/24/1282	8.9	42.43	9.02	< 6.0	< 9.0	0.48	137.4	0.06	< 1.0
8	27.06.2024	GA/24/1294	8.0	41.97	8.69	< 6.0	< 9.0	0.47	129.8	0.06	< 1.0
	NAAQS LI	MITS *	**	100	60	80	80	2		1	
	UNIT	S	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

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5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

Kleeter





Ambient Instrument No. 5	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 940-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 477-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 470-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## **TEST REPORT**

	e of Issue		29/06	2024									
Nar	ne of Client		M/s.	GMR GO	AINTE	RNATION	AL AIRPORT LI	AITED					
	Iress of Clien	t	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.										
San	npling Plan			QF/7.3/0			Sampling Procedu		GLPL/SOP/AA/17				
	nple Collecte	d By	- C	Represe			1 3						
Jui	ipic concore	<u>u by</u>	02.12				DLLUTION MONIT	ORING					
Sr.	Date of	Repo	ort No.	Station	Zone		pling Location	Day Time Nois in dB(A)	e Night Time Noise in dB(A)				
No.	Sampling		1000	ID			1	Leq	Leq				
1	18.06.2024	GA/24	4/1263	G-N1		Mopa Boundary		72.1	64.6				
2	18.06.2024	GA/24	4/1264	G-N2	= (1) =	Shemeche	advan	64.9	51.7				
3	11.06.2024	GA/24	4/1216	G-N3	С	Nagzar		61.2	51.2				
4	11.06.2024	GA/24	4/1215	G-N4	R	Purva Casa	arvarnem	51.4	41.8				
5	12.06.2024	GA/24	4/1227	G-N5	R	Chandel		47.7	40.5				
6	25.06.2024	GA/24	4/1289	G-N6	R	Khajne Am	ere Porscodem	50.0	41.5				
7	12.06.2024	GA/24	4/1228	G-N7	R	Warkhand	A	53.2	42.9				
8	21.06.2024	GA/24	4/1275	G-N8	С	Rajvil Wada		50.2	48.7				
9	25.06.2024	GA/24	4/1288	G-N9	С	Village Pane Mopa - Ugv	chayant Tamboxem – em	54.0	46.9				
10	21.06.2024	GA/24	4/1274	M-N1	R	Satarda		51.5	41.4				
11	07.06.2024	GA/24	4/1175	M-N2	R	Dingane		52.6	41.2				
12	07.06.2024	GA/24	4/1176	M-N3	R	Netarde		50.3	44.6				
	Area Code	•		Category	of Area	1	Limits in d Day Time	Night Time	2				
	(A)		Indus	trial Area	(1)			70					
			Comr	nercial Are	a (C)		65 55						
				ontial Area	(R)		55	45					
	(B)		Resid	ential Alea									
	(B) (C)		Resid		5)		50						
21	(B) (C) (D)	ckoned	Resid Silend	ce Zone (S	(D)       Silence Zone (S)       50       40         Day time to reckoned in between 6:00 am to 10 pm and night time is reckoned in between 10:00 pm to 06:00 am         *dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.								
1.5	(B) (C) (D) Day time to re	notes th	Resid Silend in betw	ce Zone (S een 6:00 a weighted a	m to 10 verage d		t time is reckoned in I						
2] 3] 4]	(B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a	enotes th a unit in .eq, der	Resid Silend in betw he time which r notes the	ce Zone (S een 6:00 a weighted a noise is me e frequency	m to 10 verage o asured.	of the level o	t time is reckoned in I	between 10:00 pm t in scale A which is re	elatable to human hearing				
3] 4]	(B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a "A", in dB(A) L	enotes th a unit in .eq, der s of the	Resid Silend in betw he time which r hotes the human	ce Zone (S een 6:00 a weighted a noise is me e frequency ear.	m to 10 verage c asured. veighti	of the level o	t time is reckoned in I f sound in decibels or asurement of noise a	between 10:00 pm t in scale A which is re	elatable to human hearin				
3] 4] 5] Note 1. Th 2. Te 3. Te 4. Ci 5. Ci	(B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a "A", in dB(A) L characteristics Leq : It is the e e: ne results relate or set Report shall no est Results relate or ustomer complaint	enotes the a unit in .eq, der s of the energy r nly to the only to the t register f the equ	Resid Silence in betw he time to which r notes the human of reason of e samples roduced of the conditi r is availa	ce Zone (S een 6:00 a weighted a hoise is me e frequency ear. the noise stested. except in full ons prevailin ble at labora used in more	m to 10 verage c asured. / weighti level ove , without v ag at the ti tory.	of the level or ng in the me er a specified written approve ime of samplin nd / or analysis	t time is reckoned in I f sound in decibels or asurement of noise a period.	between 10:00 pm t a scale A which is re nd corresponds to f	elatable to human hearing				

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 554067	16/05/2024	15/05/2025

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 546176	20/06/2024	19/06/2025



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## TEST REPORT

	ANALYSIS	REPORT FOR	WATER SAMPLE			
Report No.	GW/24/1124		Report Date	24/0	24/06/2024	
Client Name & Address	GMR Goa Internation Administrative Block, Taluka Pernem, Mop	Mopa Internatio	onal Airport, Dadachi	wadi Road,	Nagzar,	
Outre / Deferrers	As Per Dated			Temp <sup>o</sup> C	Humidity %	
Order / Reference	18/06/2024	Environmental Condition of Lab		30.04	76	
Sampling Plan	GLPL/QF/7.3/06	Sampling Pr	ocedure No.	APHA 1060		
Sampling Point	STP Outlet (A.C.F.)	100 m				
Sampling Details	STP Outlet (A.C.F.) V	Vater Sample	Date of Collection	18/06/2024		
Sample Collected by	GLPL Representative	3	Sample Received	On 19/	06/2024	
Analysis Started On	19/06/2024		Analysis Complete	d On 24/	24/06/2024	
Sample Container	Plastic Carboy + Glas	ss Bottle	Sample Quantity	5 lit	5 lit + 1.25 lit	

#### Chemical Testing:

Sr. No.	Parameters	Result	Unit	Limits	Method
1	pH.	7.45		5.5 - 9.0	APHA 4500 H*
2	Chemical Oxygen Demand (COD)	32	mg/lit	50.00	APHA 5220 B
3	Biochemical Oxygen Demand (27ºC day) (BOD)	8	mg/lit	10.00	IS 3025 (Part 44)
4	Total Suspended Solids (TSS)	3	mg/lit	20.00	APHA 2540 D
5	Oil & Grease (O & G)	< 0.1	mg/lit	10.00	APHA 5520 B
6	Ammonia	4.59	mg/lit	5.00	APHA 4500 NH3 B&C
7	Total Nitrogen (as N)	7.95	mg/lit	10.00	APHA 4500-Norg
8	Phosphorous	6.84	mg/lit		APHA 4500 P D

#### **Microbiological Parameters:**

9	Fecal Coliform at 44.5°C for 24 hrs.	79	MPN Index/100ml	100	APHA 9221 E
-			End		

#### For GADARK LAB PVT. LTD.

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#### AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

#### Note:

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- 2. Test Report shall not be reproduced except in full, without written approval of the laboratory
- 3. Samples will be preserved for a period 15 days from the delivery of Test Report.
- 4. Customer complaint register is available at laboratory.
- 5. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.



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### Equipment Calibration Details

			a mar	Calibrati	on Details	
Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Date	Next Calibration Due Date	
01.	pH Meter	GL/EQ/pH/01		In house Calibration		
02.	Hot Air Oven	GL/EQ/0/01	AVI/2306110	29/06/2023	28/06/2024	
03,	COD Digester	GL/EQ/COD/01	AVI/2306129	30/06/2023	29/06/2024	
04.	BOD Incubator	GL/EQ/I/02	AVI/2306122	30/06/2023	29/06/2024	
05	Microbiological Incubator (35 ° C)	GL/EQ/I/03	AVI/2306127	30/06/2023	29/06/2024	
06,	Microbiological Incubator (44.5 ° C)	GL/EQ/I/01	AVI/2306126	30/06/2023	29/06/2024	
07.	Laminar Air Flow	GL/EQ/LAF/01	TECH/VAL/ 2024/02/107	15/02/2024	14/02/2025	
08.	Autoclave	GL/EQ/A/01	AVI/2306111	29/06/2023	28/06/2024	



INDUSTRIAL ANALYSTS & CONSULTANTS

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OFF. 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg. Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

### TEST REPORT

		AMBIENT AIR QUALITY N	MONITORING REPORT					
Report Date	03/0	08/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client			PA INTERNATIONAL AIRPORT, DA MOPA, NORTH GOA 403512.	DACHIWADI ROAD,				
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	PL Representative						
Month of Sampling	Jun	e 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Mopa Boundry - Goa St	ate (G-A1)					
Average Ambient Temperat	ture (°C)	30.5	Average Humidity (%)	81				
Average Wind Speed (km/h	nr)	199	Average Wind direction (Deg)	322				
Latitude		N 15º45'51.1"	Longitude	E 73°56'32.4"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	Report No.	PARAMETERS								
No.	Sampling		SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	COz	Lead	VOC
1	01.07.2024	GA/24/1316	24.6	52.13	14.80	< 6.0	< 9.0	0.57	136.4	0.06	< 1.0
2	04.07.2024	GA/24/1336	22.6	50.22	12.48	< 6.0	< 9.0	0.92	159.6	0:06	< 1.0
3	08.07.2024	GA/24/1347	21.8	49.86	11.85	< 6.0	< 9.0	0.28	141.0	0.07	< 1.0
4	11.07.2024	GA/24/1371	22.9	51.06	13.10	< 6.0	< 9.0	0.75	162.7	0.07	< 1.0
5	15.07.2024	GA/24/1386	19.9	48.34	11.98	< 6.0	< 9.0	0.57	136.1	0.06	< 1.0
6	18.07.2024	GA/24/1397	19.2	48.13	11.27	< 6.0	< 9.0	0.74	177.7	0.04	< 1.0
7	22.07.2024	GA/24/1419	20.4	50.75	12.56	< 6.0	< 9.0	0.63	150.0	0.05	< 1.0
8	25.07.2024	GA/24/1432	19.9	50.05	12.02	< 6.0	< 9.0	0.61	163.6	0.05	< 1.0
9	29.07.2024	GA/24/1448	18.4	47.83	10.35	< 6.0	< 9,0	0.59	139.1	0.08	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2		1	-
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2005	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	1S 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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3. Samples will be preserved for a period 15 days from the delivery of Test Report

Test Results relate only to the conditions prevailing at the time of sampling.
 Customer comptaint register is available at laboratory
 Calibration details of the equipment's used in monitoring and / or analysis is

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

Ambient Instrument No. 9	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1256-L-22	08/01/2024	07/01/2025
Respirable Dust Sampler Sr. No. 1544-DTJ-2019	08/10/2023	07/10/2024
Gaseoue Sampler Sr. No. 210-B-2022	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83, Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 · +91 93213 12367

## TEST REPORT

			AMBIENT AIR QUALITY I	MONITORING REPORT					
Report Date 03/08/2024									
Name of	f Client	M/:	. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address	of Client			PA INTERNATIONAL AIRPORT, DA MOPA, NORTH GOA 403512.	DACHIWADI ROAD,				
Samplin	g Plan	GL	PL/QF/7.3/06	Page No.	1 of 1				
Sample	Collected B	y GL	PL Representative						
Month o	f Sampling	Ju	ine 2024						
~			AMBIENT AIR	LOCATION					
cation	of Ambient	Air Station	Shemecheadvan Goa	State (G-A2)					
Average	Ambient Te	emperature (°C)	30	Average Humidity (%)	86				
Average	Wind Spee	d (km/hr)	158	Average Wind direction (Deg)	323				
Latitude			N 15°42'06.1"	Longitude	E 73°49'21.5"				
Instrument Used			FPS (APM - 550) RDS (APM - 460) GPS (APM						
Sr.	Date of		PARAMETERS						
01.	Date of	Ronart No.							

Sr.	Date of Sampling	Report No.	PARAMETERS									
No.			SPM	PM <sub>10</sub>	PM2.6	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC	
1	01.07.2024	GA/24/1315	13.0	50.03	11.39	< 6.0	< 9.0	0.50	139.3	0.07	< 1.0	
2	04.07.2024	GA/24/1335	12.0	48.04	10.73	< 6.0	< 9.0	0.74	154.7	0.06	< 1.0	
3	08.07.2024	GA/24/1346	11.7	47.22	10.48	< 6.0	< 9.0	0.37	136.6	0.07	< 1.0	
4	11.07.2024	GA/24/1370	13.0	48.98	12.02	< 6.0	< 9.0	0.78	168.2	0.05	< 1.0	
5	15.07.2024	GA/24/1385	11.7	45.41	11.19	< 6.0	< 9.0	0.78	137.4	0.06	< 1.0	
6	18.07.2024	GA/24/1396	11.0	45.04	10.98	< 6.0	< 9.0	0.46	129.0	0.06	< 1.0	
7	22.07.2024	GA/24/1418	12.0	47.01	11.85	< 6.0	< 9.0	0.59	133.2	0.06	< 1.0	
5	25.07.2024	GA/24/1431	11.7	46.63	11.23	< 6.0	< 9.0	0.56	143.4	0.05	< 1.0	
9	29.07.2024	GA/24/1447	10.3	45.04	10.27	< 6.0	< 9.0	0.70	160.1	0.06	< 1.0	
NAAQS LIMITS *			100	60	80	80	2	-	1	-		
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm		
METHOD			IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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4. Test Results relate only to the conditions prevailing at the time of sampling

5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 8	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 847-DTJ-2019	07/10/2023	06/10/2024
Respirable Dust Sampler Sr. No. 475-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 471-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## TEST REPORT

			AMBIE	NT AIR QUA	ALITY MO	NITORING R	EPORT						
Report	Date	1	03/08/2024										
Name of	of Client		M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED										
Addres	is of Client			MINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, GZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.									
Sampling Plan GLP			GLPL/QF/7.3	.PL/QF/7.3/06			age No.	1	1 of 1				
Sample	e Collected By	3	GLPL Representative										
Month	of Sampling		une 2024										
			_	AMBIEN	NT AIR LO	CATION							
catio	on of Ambient A	Air Station	Nagza	r – Goa Sta	ate (G-A3	3)							
Averag	e Ambient Ter	mperature (°C	)	30.5			Average Humidity (%)						
Averag	e Wind Speed	(km/hr)		160			Average Wind direction (Deg)						
Latitude				N 15º45'37.3"			Longitude				2"		
Instrument Used			F	FPS (APM - 550)			RDS (APM – 460)				11)		
Sr.	Date of	Description				PARA							
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2,5	SO <sub>2</sub>	NOx	со	CO <sub>2</sub>	Lead	VOC		
1	01.07.2024	GA/24/1308	27.0	53.45	13.39	< 6.0	< 9.0	0.38	147.2	0.06	< 1.0		

METHOD			IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18
	NAAQS LIMITS * UNITS		hð\w <sub>3</sub>	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
			25	100	60	80	80	2		1	-
9	29.07.2024	GA/24/1440	20.9	48.18	11.10	< 6.0	< 9.0	0.71	166.3	0.06	< 1.0
3	25.07.2024	GA/24/1424	20.8	50.81	12.81	< 6.0	< 9.0	0.73	179.4	0.03	< 1.0
7	22.07.2024	GA/24/1411	21.8	51.05	13.02	< 6.0	< 9.0	0.46	138.0	0.07	< 1.0
6	18.07.2024	GA/24/1389	20.6	49.04	11.00	< 6.0	< 9.0	0.30	124.4	0.08	< 1.0
5	15.07.2024	GA/24/1378	20.9	49.25	12.39	< 6.0	< 9.0	0.74	142.2	0.06	< 1.0
4	11.07.2024	GA/24/1363	24.7	51.99	14.93	< 6.0	< 9.0	0.65	137.8	0.08	< 1.0
3	08.07.2024	GA/24/1339	24.0	50.33	13.10	< 6.0	< 9.0	0.57	135.0	0.04	< 1,0
2	04.07.2024	GA/24/1328	25.4	51.13	14.18	< 6.0	< 9.0	0.70	141.2	0.04	< 1.0
1	01.07.2024	GA/24/1308	27.0	53.45	13.39	< 6.0	< 9.0	0,38	147.2	0.06	< 1.0

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 1	Calibrated On	<b>Galibration Due Date</b>
Fine Particulate Sampler S. No. 934-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 2832-DTB-2020	15/02/2024	14/02/2025
Gaseoue Sampler Sr. No. 6888-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



INDUSTRIAL ANALYSTS & CONSULTANTS

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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	03/08/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Jun	June2024						
~		AMBIENT AIR	LOCATION					
. cation of Ambient Air Sta	tion	Purva Casarvarnem - G	oa State (G-A4)					
Average Ambient Temperal	ture (°C)	29.5	Average Humidity (%)	87				
Average Wind Speed (km/h	nr)	185	Average Wind direction (Deg)	278.5				
Latitude		N 15º41'41.9"	Longitude	E 73°50'16.6"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	Descent Mar				PAR	AMETERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.07.2024	GA/24/1309	22.4	50.48	11.85	< 6.0	< 9.0	0.61	143.6	0.05	< 1.0
2	04.07.2024	GA/24/1329	20.8	48.50	11,77	< 6.0	< 9.0	0.73	161.0	0.06	< 1.0
3	08.07.2024	GA/24/1340	18.7	47.05	10.60	< 6.0	< 9.0	0.65	158.3	0.06	< 1.0
4	11.07.2024	GA/24/1364	19.9	49.01	12.02	< 6.0	< 9.0	0.73	144.4	0.06	< 1.0
5	15.07.2024	GA/24/1379	17.8	47.38	10.69	< 6.0	< 9.0	0.43	128.7	0.05	< 1.0
6	18.07.2024	GA/24/1390	17.0	46.95	10.02	< 6.0	< 9.0	0.47	137.7	0.05	< 1.0
7	22.07.2024	GA/24/1412	18.6	47.99	11.02	< 6.0	< 9.0	0.63	178.7	0.06	< 1.0
5	25.07.2024	GA/24/1425	17.4	47.05	10.89	< 6.0	< 9.0	0.44	136.2	0.04	< 1.0
9	29.07.2024	GA/24/1441	17.4	45.52	9.65	< 6.0	< 9.0	0.98	177.3	0.05	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2		1	- 1 <del>.</del>
	UNIT	S	µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	OD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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4. Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 2	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 936-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 2842-DTB-2020	16/02/2024	15/02/2025		
Gaseoue Sampler Sr. No. 6896-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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## TEST REPORT

		AMBIENT AIR QUALITY I	MONITORING REPORT					
Report Date	03/0	08/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		DMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, IAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Jun	June 2024						
		AMBIENT AIR	LOCATION					
Cation of Ambient Air Sta	ition	Khajne Amere Porscode	em - Goa State (G-A5)					
Average Ambient Tempera	ture (°C)	30	Average Humidity (%)	80				
Average Wind Speed (km/hr)		148	Average Wind direction (Deg)	338				
Latitude		N 15º40'38.0"	Longitude	E 73º46'21.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411				

Sr.	Date of	Desert No.				PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.07.2024	GA/24/1310	7.0	40.39	9.19	< 6.0	< 9.0	0.65	157.6	0.05	< 1.0
2	04.07.2024	GA/24/1330	8.1	42.06	8.03	< 6.0	< 9.0	0.63	141.7	0.06	< 1.0
3	08.07.2024	GA/24/1341	7.0	40.95	7.69	< 6.0	< 9.0	0.61	167.8	0.06	< 1.0
4	11.07.2024	GA/24/1365	8.1	41.90	8.94	< 6.0	< 9.0	0.66	149.2	0.09	< 1.0
5	15.07.2024	GA/24/1380	9.9	40.53	9.40	< 6.0	< 9.0	0.65	150.1	0.02	< 1.0
6	18.07.2024	GA/24/1391	9.0	41.01	9.02	< 6.0	< 9.0	0.54	143.4	0.04	< 1.0
7	22.07.2024	GA/24/1413	9.8	43.00	10.27	< 6.0	< 9.0	0.38	126.6	0.05	< 1.0
1	25.07.2024	GA/24/1426	9.0	42.75	9.94	< 6.0	< 9.0	0.99	186.5	0.05	< 1.0
9	29.07.2024	GA/24/1442	7.8	40.04	8.19	< 6.0	< 9.0	0.90	172.0	0.07	< 1.0
	NAAQS LI	MITS *	0.40	100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METH	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested.

Test Report shall only to the reproduced except in full, without written approval of the laboratory
 Samples will be preserved for a period 15 days from the delivery of Test Report.

 Samples will be preserved for a period 15 days from the delivery of Test Report 4. Test Results relate only to the conditions prevailing at the time of sampling.

 Test Results relate only to the conditions prevailing at the time of samp 5. Customer complaint register is available at laboratory.

Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD. ecoula

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

B KUDA 4

CHECKED BY

Ambient Instrument No. 3	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 942-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 670-E-23	18/10/2023	17/10/2024
Gaseoue Sampler Sr. No. 6904-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525, Tel.: (02362) 223519 • E-mail : info@gadark.in • Website : www.gadark.in

OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

## **TEST REPORT**

			AMBIE	NT AIR QU	ALITY MC	NITORING P	REPORT					
Report	t Date		03/08/2024	/2024								
Name	of Client		M/s. GMR G	OA INTERN	ATIONAL	AIRPORT L	IMITED					
Addres	ss of Client			IINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWAD ZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							۹D,	
Sampl	ling Plan	GLPL/QF/7.3/06 Page No				Page No.	1.1		1 of 1			
Sampl	le Collected By	/	GLPL Repre	sentative								
Month	of Sampling		une 2024									
				AMBIE	NT AIR LO	OCATION						
Incatio	on of Ambient	Air Station	Rajvil	Rajvil Wada Torxem - Goa State (G-A6)								
Averag	ge Ambient Te	mperature (°C	:)	30			Average Humidity (%)			83		
Averag	ge Wind Spee	d (km/hr)		158.5			Average Wind direction (Deg)			318		
Latitud	le			N 15°48'40.0"			Longitude			E 73°52'50.2"		
Instrument Used		F	PS (APM -	550)	RDS	RDS (APM – 460) GPS (APM – 411)			411)			
Sr.	Date of					PAR	AMETERS					
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	CO	CO2	Lead	VOC	

No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	CO	CO2	Lead	VOC
1	01.07.2024	GA/24/1313	14.1	43.11	10.65	< 6.0	< 9.0	0.80	157.2	0.05	< 1.0
2	04.07.2024	GA/24/1333	12.6	41.86	9.23	< 6.0	< 9.0	0.58	152.9	0.03	< 1.0
3	08.07.2024	GA/24/1344	12.0	42.05	10.02	< 6.0	< 9.0	0.50	156.8	0.04	< 1.0
4	11.07.2024	GA/24/1368	12.9	44.88	11.19	< 6.0	< 9.0	0.68	150.5	0.08	< 1.0
5	15.07.2024	GA/24/1383	11.6	42.03	10.06	< 6.0	< 9.0	0.69	169.1	0.04	< 1.0
6	18.07.2024	GA/24/1394	10.9	41.99	9.73	< 6.0	< 9.0	0.73	156.9	0.06	< 1.0
7	22.07.2024	GA/24/1416	11.7	44.00	10.89	< 6.0	< 9.0	0.62	188.6	0.04	< 1.0
8	25.07.2024	GA/24/1429	10.9	43.56	10.27	< 6.0	< 9.0	0.81	158.8	0.04	< 1.0
9	29.07.2024	GA/24/1445	9.9	40.51	8.90	< 6.0	< 9.0	0.56	131.4	0.02	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2	-	1	
1	UNIT	S	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	סכ	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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Note :

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2. Test Report shall not be reproduced except in full, without written approval of the laboratory

3. Samples will be preserved for a period 15 days from the delivery of Test Report

Test Results relate only to the conditions prevailing at the time of sampling
 Customer complaint register is available at laboratory.

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

A.B KUDA



Ambient Instrument No. 6	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 56-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1329-R-273-DTC-2015	15/02/2024	14/02/2025
Gaseoue Sampler Sr. No. 6773-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## TEST REPORT

		AMBIENT AIR QUALITY I	MONITORING REPORT					
Report Date	03/0	03/08/2024						
Name of Client	M/s	. GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Jun	June 2024						
the second second		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Satarda - Maharashtra	State (M-A1)					
, erage Ambient Tempera	ture (°C)	30.5	Average Humidity (%)	77				
Average Wind Speed (km/h	nr)	132	Average Wind direction (Deg)	312.6				
Latitude		N 15º43'01.3"	Longitude	E 73°46'00.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	Descent Ma				PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.07.2024	GA/24/1311	13.3	43.53	10.19	< 6.0	< 9.0	0.70	144.5	0.07	< 1.0
2	04.07.2024	GA/24/1331	12.5	41.89	9.27	< 6.0	< 9.0	0.95	175.3	0.06	< 1.0
3	08.07.2024	GA/24/1342	10.6	41.04	8.94	< 6.0	< 9.0	0.64	159.4	0.04	< 1.0
4	11.07.2024	GA/24/1366	11.7	42.95	10.06	< 6.0	< 9.0	0.74	153.4	0.06	< 1.0
5	15.07.2024	GA/24/1381	10.3	42.24	8.23	< 6.0	< 9.0	0.60	130.6	0.06	< 1.0
6	18.07.2024	GA/24/1392	9.8	41.94	8.03	< 6.0	< 9.0	0.69	160.3	0.04	< 1.0
7	22.07.2024	GA/24/1414	10.6	43.77	10.44	< 6.0	< 9.0	0.73	157.8	0.04	< 1.0
8	25.07.2024	GA/24/1427	10.0	43.09	9.98	< 6.0	< 9.0	0.54	122.6	0.07	< 1.0
5	29.07.2024	GA/24/1443	8.4	41.49	8.36	< 6.0	< 9.0	0.82	151.5	0.06	< 1.0
-	NAAQS LI	MITS *		100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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3. Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling. 5. Customer complaint register is available at laboratory.

Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 4	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1344-G-23	17/10/2023	17/10/2024
Respirable Dust Sampler Sr. No. 194-E-22	17/05/2024	16/05/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



INDUSTRIAL ANALYSTS & CONSULTANTS

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### TEST REPORT

			AMBIE	NT AIR QU	ALITY MO	NITORING I	REPORT						
Repor	t Date		03/08/2024	/08/2024									
Name	of Client		M/s. GMR G	GMR GOA INTERNATIONAL AIRPORT LIMITED									
Addre	ss of Client			MINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, SZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.									
Sampling Plan GL			GLPL/QF/7.3	3/06			Page No.		1.000	1 of 1			
Sample Collected By GLPL Representative								_					
Month	of Sampling		June 2024	ne 2024									
				AMBIE	NT AIR LO	OCATION							
Locati	on of Ambient	Air Station	Dinga	ne – Maha	rashtra S	tate (M-A2)				-			
Avera	ge Ambient Te	mperature (°C	)	29.5			Average Humidity (%)			86			
Avera	ge Wind Spee	d (km/hr)		118		Average W	ind directi	on (Deg)	[]	302			
Latitud	de		-	N 15º46'12	.3"	Longitude			E	E 73°49'20.5"			
Instrument Used			F	FPS (APM - 550)			RDS (APM - 460)			GPS (APM - 411)			
Sr.	Date of	Demand Mr.				PAR	AMETERS	1					
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SOz	NOx	co	CO <sub>2</sub>	Lead	VOC		
				10.00	10.00				100.0	0.07			

No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SOz	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.07.2024	GA/24/1314	8.0	40.39	10.02	< 6.0	< 9.0	0.51	120,8	0.07	< 1.0
2	04.07.2024	GA/24/1334	7.1	38.49	8.82	< 6.0	< 9.0	0.77	157.4	0.06	< 1.0
3	08.07.2024	GA/24/1345	6.9	37.60	8.86	< 6.0	< 9.0	0.82	146.4	0.07	< 1.0
4	11.07.2024	GA/24/1369	7.8	39.01	9.40	< 6.0	< 9.0	0.80	167.9	0.07	< 1.0
5	15.07.2024	GA/24/1384	6.7	37.14	8.65	< 6.0	< 9.0	0.36	146.5	0.05	< 1.0
6	18.07.2024	GA/24/1395	6.2	36.90	8.11	< 6.0	< 9.0	0.60	141.3	0.06	< 1.0
7	22.07.2024	GA/24/1417	7.8	38.74	9.73	< 6.0	< 9.0	0.34	135.4	0.06	< 1.0
8	25.07.2024	GA/24/1430	7.1	38.14	9.15	< 6.0	< 9.0	0.86	173.4	0.05	< 1.0
9	29.07.2024	GA/24/1446	6.2	37.04	7.73	< 6.0	< 9.0	0.64	186.9	0.08	< 1.0
	NAAQS LI	MITS *	14	100	60	80	80	2	-	1	-
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2005	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

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 Customer complaint register is available at laboratory.

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

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For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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CALIBRATION	DETAILS	OF	FOUIPMENT	USED	FOR	SAMPLING
CALIDITATION	DETAILO	01	LOON WENT	OOLD	TOK	SAME LING

Ambient Instrument No. 7	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 60-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1284-R-228-DTK-2014	15/02/2024	14/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



# **GADARK LAB PVT. I**

INDUSTRIAL ANALYSTS & CONSULTANTS

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### TEST REPORT

			AMBIENT AIR QUALITY	MONITORING REPORT					
Report Da	ite	03	/08/2024						
Name of C	Client	M/	. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address o	of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan GLF			PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By GL			PL Representative						
Month of Sampling June 2024									
			AMBIENT AIR	LOCATION					
Location of	of Ambient	Air Station	Netarde - Maharashtra	State (M-A3)					
Average A	Ambient Te	mperature (°C)	30	Average Humidity (%)	88				
Average V	Wind Speed	d (km/hr)	122.5	Average Wind direction (Deg)	301				
Latitude			N 15º46'11.7"	Longitude	E 73°53'47.0"				
Instrument Used			FPS (APM - 550)	GPS (APM - 411)					
Sr.	Date of		PARAMETERS						
	in the second	Report No.			102 I				

Sr.	Date of	Description	PARAMETERS									
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.6	SOz	NOx	CO	CO2	Lead	VOC	
1	01.07.2024	GA/24/1312	6.4	38.16	8.11	< 6.0	< 9.0	0.67	170.5	0.06	< 1.0	
2	04.07.2024	GA/24/1332	7.8	36.64	9.77	< 6.0	< 9.0	0.70	140.5	0.06	< 1.0	
3	08.07.2024	GA/24/1343	5.9	35.00	7.03	< 6.0	< 9.0	0.60	160.1	0.06	< 1.0	
4	11.07.2024	GA/24/1367	7.0	37.23	8.07	< 6.0	< 9.0	0.62	145.6	0.04	< 1.0	
5	15.07.2024	GA/24/1382	6.5	37.24	8.23	< 6.0	< 9.0	0.53	125.2	0.08	< 1.0	
6	18.07.2024	GA/24/1393	6.1	36.72	7.98	< 6.0	< 9.0	0.78	155.9	0.04	< 1.0	
7	22.07.2024	GA/24/1415	7.0	37.95	8.77	< 6.0	< 9.0	0.68	140.9	0.06	< 1.0	
8	25.07.2024	GA/24/1428	6.4	37.13	8.11	< 6.0	< 9.0	0.74	157.3	0.04	< 1.0	
9	29.07.2024	GA/24/1444	5.2	35,66	7.40	< 6.0	< 9.0	0.69	173.5	0.04	< 1.0	
	NAAQS LI	MITS *	1.42	100	60	80	80	2	-	1		
	UNIT	s	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm	
	METH	מכ	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2005	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

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Note :

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 Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory.

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD Repulle

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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CALIBRATION	DETAILS	OF	EQUIPMENT	USED	FOR	SAMPLING
	and the second sec					and there want to the

Ambient Instrument No. 5	Calibrated On	Calibration Due Date		
Fine Particulate Sampler S. No. 940-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 477-A-23	09/01/2024	08/01/2025		
Gaseoue Sampler Sr. No. 470-L-22	08/01/2024	07/01/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 • +91 93213 12367

## **TEST REPORT**

Date	e of Issue	02/	8/2024			NITORING REPO			
-					DNATIO	NAL AIRPORT LI	WITED		
	ne of Client							-	
Add	ress of Clien					DPA INTERNATIC RNEM, MOPA, N			ACHIWADI
San	npling Plan	GL	PL/QF/7.3/0	06	11	Sampling Procedu	ire No.	GL	PL/SOP/AA/17
San	nple Collecte	d By GL	L Represe	entative				Sec. 1	1
			AMBIE	NT AIR	NOISE P	OLLUTION MONIT	TORING		Design of the second second
Sr. No.	Date of Sampling	Report No	Station	Zone	Sa	mpling Location	Day Time No in dB(A)		Night Time Nois in dB(A)
			- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1.00			Leq		Leq
1	30.07.2024	GA/24/145			Mopa Bou		67.7	2	55.5
2	30.07.2024	GA/24/145		1	Shemeche	aavan	58.2		50.0 47.2
3	24.07.2024	GA/24/142		C	Nagzar Bupis Cas	00/07000	52.6		47.2
4	24.07.2024 31.07.2024	GA/24/142 GA/24/145		R	Purva Cas Chandel	aivament	49.9		41.4
5	16.07.2024	GA/24/145 GA/24/138		R		nere Porscodem	51.2		41.2
7	31.07.2024	GA/24/136		R	Warkhand		51.7		41.1
8	26.07.2024	GA/24/143		C	Rajvil Wad		58.4		49.0
9	16.07.2024	GA/24/138		C	the second se	chayant Tamboxem -	51.1		41.3
10	26.07.2024	GA/24/143	3 M-N1	R	Satarda				41.9
11	23.07.2024	GA/24/142	) M-N2	R	Dingane		50.9		41.7
12	23.07.2024	GA/24/142	1 M-N3	R	Netarde		50.3		40.2
	Area Code		Categor	100.000	a	Day Time Night Time		1	
	(A)	Ind	ustrial Area	(1)		75	70	1	
1	(B)	Co	mmercial Are	a (C)		65	55		
1	(C)	Re	sidential Area	a (R)		55	45		
-1	(D)	Sil	ence Zone (	S)		50	40		
2]	Day time to re	ckoned in be	tween 6:00 a	m to 10	pm and nigh	nt time is reckoned in I	between 10:00 pm	to 06:0	0 am
3]		notes the tin	e weighted a	average o		of sound in decibels or			
4]	"A", in dB(A) L characteristics			y weighti	ing in the me	easurement of noise a	and corresponds to	frequer	icy response
5]	Leq : It is the	energy mean	of the noise	level over	er a specifie	d period.			
2. Te	e results relate or est Report shall no est Results relate ustomer complain alibration details o	t be reproduce only to the con t register is ava f the equipment	ed except in ful ditions prevaili ilable at labora it's used in mo	ng at the t atory.	ime of sampli	ral of the laboratory. ng. s is back side of analysis	report.	2	
5. Ca	GADARK I	<u> </u>	8		AND KI	JDAL	C	D	1
5. Ca For	GADARK I		Y		ANDAR KI	JDAL T	CH	ECKE	D BY

Page 119 of 200

Equipment Name	Calibrated On	Calibration Due Date		
Noise Level Meter Sr. No. 554067	16/05/2024	15/05/2025		

Equipment Name	Calibrated On	Calibration Due Date		
Noise Level Meter Sr. No. 546176	20/06/2024	19/06/2025		



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## **TEST REPORT**

	ANALYSIS RE	PORT FOR	WATER SAMPLE	_		
Report No.	GW/24/1336	Report Date		22/07/	2024	
Client Name & Address	GMR Goa International Administrative Block, M Taluka Pernem, Mopa,	opa Internatio	onal Airport, Dadachi	wadi Ro	ad, Na	igzar,
Order / Reference	As Per Dated	Environmental Condition of Lab		Temp	D <sup>o</sup> C	Humidity %
	17/07/2024 Environment		al condition of Lab	27.5		77
Sampling Plan	GLPL/QF/7.3/06	Sampling Pr	ocedure No.	APHA	A 1060	
Sampling Point	STP Outlet (A.C.F.)					
Sampling Details	STP Outlet (A.C.F.) Wa	iter Sample	Date of Collection		17/07/	2024
Sample Collected by	GLPL Representative		Sample Received On		18/07/2024	
Analysis Started On	18/07/2024		Analysis Completed On		)n 22/07/2024	
Sample Container	Plastic Carboy + Glass	Bottle	Sample Quantity		5 lit + 1.5 lit	

#### **Chemical Testing:**

Sr. No.	Parameters	Result	Unit	Limits	Method
1	pH	6.99	-	5.5 - 9.0	APHA 4500 H+
2	Chemical Oxygen Demand (COD)	44	mg/lit	50,00	APHA 5220 B
3	Biochemical Oxygen Demand (27ºC day) (BOD)	7	mg/lit	10.00	IS 3025 (Part 44)
4	Total Suspended Solids (TSS)	4	mg/lit	20.00	APHA 2540 D
5	Oil & Grease (O & G)	< 0.1	mg/lit	10.00	APHA 5520 B
6	Ammonia	4.26	mg/lit	5.00	APHA 4500 NH3 B&C
7	Total Nitrogen (as N)	6.61	mg/lit	10.00	APHA 4500-Norg

#### Microbiological Parameters:

9	Fecal Coliform at 44.5°C for 24 hrs.	27	MPN Index/100ml	100	APHA 9221 E
			End		

#### For GADARK LAB PVT. LTD.

secondu

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

#### Note:

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#### Equipment Calibration Details

	1			Calibration Details		
Sr. No.	Equipment Name	Equipment Id	Certificate No.	Calibration Date	Next Calibration Due Date	
01	pH Meter	GL/EQ/pH/02		In house (	Calibration	
02.	pH Meter	GL/EQ/pH/03		In house (	Calibration	
03.	Hot Air Oven	GL/EQ/O/01	AVI 2406053	28/06/2024	27/06/2025	
04	COD Digester	GL/EQ/COD/01	AVI 2406054	28/06/2024	27/06/2025	
05.	COD Digester	GL/EQ/COD/02	AVI 2406055	28/06/2024	27/06/2025	
06.	BOD Incubator	GL/EQ/I/02	AVI 2406052	28/06/2024	27/06/2025	
07.	Microbiological Incubator (35 ° C)	GL/EQ/I/03	AVI 2406080	29/06/2024	28/06/2025	
08.	Microbiological Incubator (44.5 ° C)	GL/EQ/I/01	AVI 2406081	29/06/2024	28/06/2025	
09	Laminar Air Flow	GL/EQ/LAF/01	TECH/VAL/ 2024/02/107	15/02/2024	14/02/2025	
10	Autoclave	GL/EQ/A/01	AVI 2406070	29/06/2024	28/06/2025	



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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	03/09/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	1 of 1					
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Aug	ust 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Mopa Boundry - Goa St	ate (G-A1)					
erage Ambient Tempera	ture (°C)	30.5	Average Humidity (%)	78				
Average Wind Speed (km/h	ר)	210	Average Wind direction (Deg)	320				
Latitude N 15°45'51.1" Longitude E 73°56'								
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PAR	AMETERS			_	21.54
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	CO	CO2	Lead	VOC
1	01.08.2024	GA/24/1463	17.7	47.10	9.94	< 6.0	< 9.0	0.38	135.7	0.06	< 1.0
2	05.08.2024	GA/24/1503	15.9	45.61	8.94	< 6.0	< 9.0	0.49	143.4	0.07	< 1.0
3	08.08.2024	GA/24/1555	18.0	49.69	10.27	< 6.0	< 9.0	0.68	172.8	0.06	< 1.0
4	12.08.2024	GA/24/1582	20.8	52.24	13.39	< 6.0	< 9.0	0.80	144.5	0.04	< 1.0
5	15.08.2024	GA/24/1609	22.9	54.62	16.76	< 6.0	< 9.0	0.62	152.2	0.04	< 1.0
6	19.08.2024	GA/24/1638	24.2	56.01	18.38	< 6.0	< 9.0	0.48	147.2	0.06	< 1.0
7	22.08.2024	GA/24/1684	23.8	55.84	17.05	< 6.0	< 9.0	0.69	153.6	0.07	< 1.0
8	26.08.2024	GA/24/1720	20.5	53.38	15.76	< 6.0	< 9.0	0.46	149.5	0.01	< 1.0
9	29.08.2024	GA/24/1731	22.0	54.86	17.34	< 6.0	< 9.0	0.25	149,2	0.06	< 1.0
<u></u>	NAAQS LI	MITS *		100	60	80	80	2	-	1	~
	UNIT	S	µg/m <sup>3</sup>	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>	ppm	µg/m <sup>3</sup>	ppm
	METHO	DD	(S 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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 Gustomer complaint register is available at laboratory.

Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 9	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1256-L-22	08/01/2024	07/01/2025
Respirable Dust Sampler Sr. No. 1544-DTJ-2019	08/10/2023	07/10/2024
Gaseoue Sampler Sr. No. 210-B-2022	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## **TEST REPORT**

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	03/09/2024						
Name of Client	M/s	. GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Aug	ust 2024						
		AMBIENT AIR	LOCATION					
pcation of Ambient Air Sta	tion	Shemecheadvan Goa	State (G-A2)					
Average Ambient Temperat	ure (°C)	30.5	Average Humidity (%)	81				
Average Wind Speed (km/h	r)	160	Average Wind direction (Deg)	316				
Latitude		N 15º42'06.1"	Longitude	E 73º49'21.5"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PAR	AMETERS				
No. Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	CO	CO <sub>2</sub>	Lead	VOC	
1	01.08.2024	GA/24/1462	9.7	44.74	9.90	< 6.0	< 9.0	0.46	130.0	0.06	< 1.0
2	05.08.2024	GA/24/1502	8.4	43.68	8.52	< 6.0	< 9.0	0.55	124.7	0.06	< 1.0
3	08.08.2024	GA/24/1554	10.3	46.01	10.98	< 6.0	< 9.0	0.62	145.7	0.02	< 1.0
4	12.08.2024	GA/24/1581	12.6	49.24	13.72	< 6.0	< 9.0	0.45	141.6	0.04	< 1.0
5	15.08.2024	GA/24/1608	14.5	51.30	15.43	< 6.0	< 9.0	0.63	156.1	0.03	< 1.0
6	19.08.2024	GA/24/1637	16.1	52.93	17.01	< 6.0	< 9.0	0.50	142.5	0.05	< 1.0
7	22.08.2024	GA/24/1683	15.3	51.22	15.97	< 6.0	< 9.0	0.43	146.9	0.07	< 1.0
8	26.08.2024	GA/24/1719	13.1	48.37	14.18	< 6.0	< 9.0	0.68	165.1	0.04	< 1.0
9	29.08.2024	GA/24/1730	14.4	50.01	15.30	< 6.0	< 9.0	0.47	150.3	0.04	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	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>	ppm	µg/m³	ppm
	METHO	DC	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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Note :

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4. Test Results relate only to the conditions prevailing at the time of sampling

Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD. renoute

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

CHECKED BY

KUDAL

Ambient Instrument No. 8	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 847-DTJ-2019	07/10/2023	06/10/2024
Respirable Dust Sampler Sr. No. 475-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 471-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	03/09/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	PL Representative						
Month of Sampling	Aug	ust 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Nagzar - Goa State (G-	A3)					
. verage Ambient Temperat	ture (°C)	31.0	Average Humidity (%)	82				
Average Wind Speed (km/h	ır)	165	Average Wind direction (Deg)	370				
Latitude		N 15º45'37.3"	Longitude	E 73°53'14.22"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.08.2024	GA/24/1455	20.3	47.96	10.98	< 6.0	< 9.0	0.72	168.6	0.05	< 1.0
2	05.08.2024	GA/24/1495	17.7	47.27	10.19	< 6.0	< 9.0	0.57	173.6	0.04	< 1.0
3	08.08.2024	GA/24/1547	19.2	50.91	12.97	< 6.0	< 9.0	0.63	166.2	0.05	< 1.0
4	12.08.2024	GA/24/1574	23.1	53.38	15.05	< 6.0	< 9.0	0.76	159.4	0.07	< 1.0
5	15.08.2024	GA/24/1601	25.5	55.43	17.63	< 6.0	< 9.0	0.36	141.3	0.03	< 1.0
6	19.08.2024	GA/24/1630	27.4	57.07	20.00	< 6.0	< 9.0	0.71	143.2	0.04	< 1.0
7	22.08.2024	GA/24/1676	26.2	56.71	19,05	< 6.0	< 9.0	0.89	151.4	0.05	< 1.0
8	26.08.2024	GA/24/1712	23.5	54.52	17.42	< 6.0	< 9.0	0.62	155.5	0.04	< 1.0
9	29.08.2024	GA/24/1723	24.9	55.78	19.17	< 6.0	< 9.0	0.52	165.1	0.01	< 1.0
	NAAQS LIM	ITS *		100	60	80	80	2	1.1.4	1	
	UNITS		µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	D	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

CHECKED BY

Recognised by Central Pollution Control Board (MoEF and CC, Govt. of India), under the EP Act, 1986, valid upto 21st August 2025. ISO 9001 : 2015 and ISO 45001 : 2018 Certified.

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Ambient Instrument No. 1	Calibrated On	Calibration Due Dat	
Fine Particulate Sampler S. No. 934-DTA-2020	14/02/2024	13/02/2025	
Respirable Dust Sampler Sr. No. 2832-DTB-2020	15/02/2024	14/02/2025	
Gaseoue Sampler Sr. No. 6888-DTB-2020	12/02/2024	11/02/2025	
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024	
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025	



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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date 03/09/2024								
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.							
Sampling Plan	GLPL/QF/7.3/06		Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Aug	ust 2024						
		AMBIENT AIR	LOCATION					
pcation of Ambient Air Sta	tion	Purva Casarvarnem - G	oa State (G-A4)					
Average Ambient Temperat	ture (°C)	30.5	Average Humidity (%)	80				
Average Wind Speed (km/h	ir)	190	Average Wind direction (Deg)	260.5				
Latitude		N 15º41'41.9"	Longitude	E 73°50'16.6"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PAR	AMETERS	(			
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.08.2024	GA/24/1456	16.6	44.90	9.23	< 6.0	< 9.0	0.65	186.6	0.05	< 1.0
2	05.08.2024	GA/24/1496	14.9	44.24	8.94	< 6.0	< 9.0	0.55	160.7	0.05	< 1.0
3	08.08.2024	GA/24/1548	16.0	47.00	9.98	< 6.0	< 9.0	0.53	149.6	0.08	< 1.0
4	12.08.2024	GA/24/1575	18.4	50.37	11.14	< 6.0	< 9.0	0.61	131.2	0.07	< 1.0
5	15.08.2024	GA/24/1602	20.8	52.52	13.89	< 6.0	< 9.0	0.27	166.3	0.06	< 1.0
6	19.08.2024	GA/24/1631	21.7	54.00	15.05	< 6.0	< 9.0	0.72	142.9	0.04	< 1.0
7	22.08.2024	GA/24/1677	20.9	53.05	14.14	< 6.0	< 9.0	0,78	141.9	0.04	< 1.0
8	26.08.2024	GA/24/1713	17.4	50.04	12.68	< 6.0	< 9.0	0.74	163.3	0.05	< 1.0
9	29.08.2024	GA/24/1724	18.7	51.00	14.43	< 6.0	< 9.0	0.60	162.4	0.04	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	1S 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 2	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 936-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 2842-DTB-2020	16/02/2024	15/02/2025		
Gaseoue Sampler Sr. No. 6896-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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OFF. 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 + +91 93213 12367

## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	09/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Aug	just 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Khajne Amere Porscode	em - Goa State (G-A5)					
. verage Ambient Temperat	ure (°C)	30	Average Humidity (%)	76				
Average Wind Speed (km/h	r)	132	Average Wind direction (Deg)	328.5				
Latitude		N 15º40'38.0"	Longitude	E 73°46'21.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PARA	METERS					
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC	
1	01.08.2024	GA/24/1457	7.0	39.88	7.98	< 6.0	< 9.0	0.60	173.9	0.05	< 1.0	
2	05.08.2024	GA/24/1497	6.4	38.73	6.82	< 6.0	< 9.0	0.66	154.8	0.07	< 1.0	
3	08.08.2024	GA/24/1549	8.4	40.78	7.98	< 6.0	< 9.0	0.52	173.2	0.05	< 1.0	
4	12.08.2024	GA/24/1576	10.5	43.55	9.65	< 6.0	< 9.0	0.89	167.1	0.03	< 1.0	
5	15.08.2024	GA/24/1603	12.3	45.66	12.52	< 6.0	< 9.0	0.67	179.4	0.05	< 1.0	
6	19.08.2024	GA/24/1632	13.3	47.51	13.93	< 6.0	< 9.0	0.58	152.0	0.05	< 1.0	
7	22.08.2024	GA/24/1678	11.4	46.10	12.52	< 6.0	< 9.0	0.60	138.1	0.05	< 1.0	
8	26.08.2024	GA/24/1714	10.8	44.79	10.85	< 6.0	< 9.0	0.69	165.3	0.04	< 1.0	
)	29.08.2024	GA/24/1725	11.8	45.97	11.93	< 6.0	< 9.0	0.57	158.0	0.07	< 1,0	
	NAAQS LI	MITS *		100	60	80	80	2	-	1		
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm	
	METH	סכ	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested

Test Report shall not be reproduced except in full, without written approval of the laboratory
 Samples will be preserved for a period 15 days from the delivery of Test Report.

Test Results relate only to the conditions prevailing at the time of sampling.
 Customer complaint register is available at laboratory.

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

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For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 3	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 942-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 670-E-23	18/10/2023	17/10/2024		
Gaseoue Sampler Sr. No. 6904-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 · +91 93213 12367

### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	09/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client	AD	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	ling Plan GLPL/QF/7.3/06		Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Aug	August 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Rajvil Wada Torxem - 0	Goa State (G-A6)					
erage Ambient Temperal	ture (°C)	31.0	Average Humidity (%)	79				
Average Wind Speed (km/h	nr)	162.5	Average Wind direction (Deg)	301				
Latitude		N 15º48'40.0"	Longitude	E 73º52'50.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	2530.040				PAR	METERS				
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	01.08.2024	GA/24/1460	9.1	40.15	8.32	< 6.0	< 9.0	0.50	160.4	0.04	< 1.0
2	05.08.2024	GA/24/1500	8.0	38.93	7.11	< 6.0	< 9.0	0.80	162.8	0.07	< 1.0
3	08.08.2024	GA/24/1552	10.2	41.10	9.23	< 6.0	< 9.0	0.64	153.2	0.05	< 1.0
4	12.08.2024	GA/24/1579	12.4	44.71	11.56	< 6.0	< 9.0	0.39	130.0	0.05	< 1.0
5	15.08.2024	GA/24/1606	13.6	46,90	13.27	< 6.0	< 9.0	0.48	169.3	0.04	< 1.0
6	19.08.2024	GA/24/1635	14.8	48.05	15.22	< 6.0	< 9.0	0.85	166.0	0.04	< 1.0
7	22.08.2024	GA/24/1681	13.3	47.78	14.51	< 6.0	< 9.0	0.73	172.9	0.04	< 1.0
8	26.08.2024	GA/24/1717	12.6	45.28	13.35	< 6.0	< 9.0	0.84	173.4	0.01	< 1.0
9	29.08.2024	GA/24/1728	13.9	46.98	14.76	< 6.0	< 9.0	0.38	156.0	0.06	< 1.0
-	NAAQS LI	MITS *	(++)	100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METH	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 51B2 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

1. The results relate only to the samples tested

Test Report shall not be reproduced except in full, without written approval of the laboratory. Samples will be preserved for a period 15 days from the delivery of Test Report. 2

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Test Results relate only to the conditions prevailing at the time of sampling 4

Customer complaint register is available at laboratory. б 6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Recognised by Central Pollution Control Board (MoEF and CC, Govt. of India), under the EP Act. 1986. valid upto 21st August 2025. ISO 9001 : 2015 and ISO 45001 : 2018 Certified.

Ambient Instrument No. 6	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 56-C-22	15/12/2023	14/12/2024		
Respirable Dust Sampler Sr. No. 1329-R-273-DTC-2015	15/02/2024	14/02/2025		
Gaseoue Sampler Sr. No. 6773-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	9/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client			PA INTERNATIONAL AIRPORT, DA MOPA, NORTH GOA 403512.	DACHIWADI ROAD,				
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Aug	ust 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Satarda - Maharashtra	State (M-A1)					
verage Ambient Tempera	ture (°C)	31.5	Average Humidity (%)	83				
Average Wind Speed (km/h	nr)	122	Average Wind direction (Deg)	310.5				
Latitude		N 15º43'01.3"	Longitude	E 73°46'00.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	voc
1	01.08.2024	GA/24/1458	7.9	41.02	8.03	< 6.0	< 9.0	0.63	169.6	0.06	< 1.0
2	05.08.2024	GA/24/1498	6.9	40.39	7.61	< 6.0	< 9.0	0.72	162.5	0.05	< 1.0
3	3 08.08.2024 GA/24/1550		9.1	42.97	9.94	< 6.0	< 9.0	0.61	132.0	0.08	< 1.0
4	12.08.2024 GA/24/1577		11.6	44.26	11.73	< 6.0	< 9.0	0.66	137.4	0.07	< 1.0
5	15.08.2024 GA/24/1604		13.0	46.33	12.77	< 6.0	< 9.0	0.53	182.7	0.05	< 1.0
6	19.08.2024			47.98	14.01	< 6.0	< 9.0	0.61	155.0	0.05	< 1.0
7	22.08.2024			47.02	13.27	< 6.0	< 9.0	0.61	164.6	0.05	< 1.0
8	26.08.2024	GA/24/1715	11.8	45.43	12.10	< 6.0	< 9.0	0.81	177.0	0.03	< 1.0
3	29.08.2024	GA/24/1726	12.8	46.11	14.26	< 6.0	< 9.0	0.69	160.4	0.03	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	-	1	
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm	
METHOD			IS 5182 (Part 4)	IS 5182 (Pari XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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3. Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling 5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 4	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1344-G-23	17/10/2023	17/10/2024
Respirable Dust Sampler Sr. No. 194-E-22	17/05/2024	16/05/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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RDS (APM - 460)

## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT				
Report Date	03/0	03/09/2024					
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED				
Address of Client		DMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROA AGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.					
Sampling Plan	GLE	PL/QF/7.3/06	Page No.	1 of 1			
Sample Collected By	GLI	GLPL Representative					
Month of Sampling	Aug	just 2024					
		AMBIENT AIF	RLOCATION				
Cation of Ambient Air Sta	tion	Dingane - Maharashtra	tra State (M-A2)				
Average Ambient Temperat	ture (°C)	30.5	Average Humidity (%)	76			
Average Wind Speed (km/h	nr)	112	Average Wind direction (Deg)	296			
Latitude		N 15º46'12.3"	Longitude	E 73°49'20.5"			
and the second s							

FPS (APM - 550)

Sr.	Date of	6 months				PARA	AMETERS									
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC					
1	01.08.2024	GA/24/1461	5.9	36.86	7.19	< 6.0	< 9.0	0.54	148.4	0.05	< 1.0					
2	05.08.2024	GA/24/1501	4.8	35.08	6.53	< 6.0	< 9.0	0.59	155.9	0.08	< 1.0					
3	12.08.2024 GA/24/1580		08.08.2024 GA/24/1553	08.08.2024 GA/24/1553	08.08.2024 GA/24/1553	08.08.2024 GA/24/1553	08.08.2024 GA/24/1553 7.	7.0	38.69	8.32	< 6.0	< 6.0 < 9.0	0.77	157.1	0.06	< 1.0
4			9.7	41.67	10.89	< 6.0	.0 < 9.0	0.42	139.6	0.05	< 1.0					
5			11.0	43.48	12.56	< 6.0	< 9.0	0.58	155.5	0.05	< 1.0					
6	19.08.2024	GA/24/1636	12.9	45.88	14.01	< 6.0	< 9.0	0.79	156.0	0.04	< 1.0					
7	22.08.2024	GA/24/1682	12.0	44.97	13.31	< 6.0	< 9.0	0.57	169.1	0.06	< 1.0					
)	26.08.2024	GA/24/1718	10.2	42.68	11.02	< 6.0	< 9.0	0.81	168.9	0.04	< 1.0					
9	29.08.2024	GA/24/1729	11.4	43,72	12.06	< 6.0	< 9.0	0.96	153.1	0.05	< 1.0					
	NAAQS LI	MITS *	-	100	60	80	80	2	100	1	-					
	UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm					
	METHOD		IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18					

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

Instrument Used

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 Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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GPS (APM - 411)

Ambient Instrument No. 7	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 60-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1284-R-228-DTK-2014	15/02/2024	14/02/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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### TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	03/0	03/09/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client	ADI	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan GLP		PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	PL Representative						
Month of Sampling	Aug	August 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Netarde - Maharashtra State (M-A3)						
verage Ambient Tempera	ture (°C)	29.5	Average Humidity (%)	74				
Average Wind Speed (km/h	nr)	118.5	Average Wind direction (Deg)	299				
Latitude		N 15º46'11.7"	Longitude	E 73°53'47.0"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of		· · · · · ·			PAR	AMETERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	CO	CO <sub>2</sub>	Lead	VOC
1	01.08.2024	GA/24/1459	5.0	35.06	7.19	< 6.0	< 9.0	0.72	174.3	0.07	< 1.0
2	05.08.2024	GA/24/1499	4.5	32.34	6,78	< 6.0	< 9.0	0.75	159.7	0.03	< 1.0
3	3 08.08.2024 GA/24/1551		6.9	35.10	8.03	< 6.0	< 9.0	0.51	126.7	0.07	< 1.0
4	12.08.2024 GA/24/1578		9.7	38.76	10.23	< 6.0	< 9.0	0,60	143.0	0.04	< 1.0
5	15.08.2024	GA/24/1605	10.4	40.61	11.27	< 6.0	< 9.0	0.59	178.6	0.06	< 1.0
6	19.08.2024	GA/24/1634	11.4	42.02	12.02	< 6.0	< 9.0	0.64	169.1	0.02	< 1.0
7	22.08.2024	GA/24/1680	10.6	41.21	11.19	< 6.0	< 9.0	0.52	129.2	0.03	< 1.0
8	26.08.2024	GA/24/1716	9.5	40.39	10.19	< 6.0	< 9.0	0.77	171.2	0.02	< 1.0
9	29.08.2024	GA/24/1727	10.4	41.44	11.56	< 6.0	< 9.0	0.34	140.5	0.03	< 1.0
_	NAAQS LIMITS *			100	60	80	80	2		1	-
	UNITS		µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHOD			IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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4. Test Results relate only to the conditions prevailing at the time of sampling

5. Customer complaint register is available at laboratory 6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

CHECKED BY

KUDAL

Ambient Instrument No. 5	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 940-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 477-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 470-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. Equiptronics EQ 826	16/09/2023	15/09/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525. Tel. : (02362) 223519 • E-mail : info@gadark.in • Website : www.gadark.in

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## **TEST REPORT**

Dat	e of Issue		03/09/	/2024				Section and the section of the secti				
Var	ne of Client		M/s.	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED								
Add	lress of Clien	t	ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.									
San	npling Plan			/QF/7.3/0								
	nple Collecte	dBy		Represe			, ,		1			
Jun		40)	01.1				OLLUTION MON	ITORING				
-	Day Time Nois								Voise	Night Time Nois		
Sr. No.	Date of Sampling	Repo	rt No.	Station	Zone	Sa	ampling Location	in dB(A		in dB(A)		
								Leq	-	Leq		
1	21.08.2024		4/1666	G-N1	1	Mopa Bour		67.2		59.0		
2	21.08.2024		4/1667	G-N2	1	Shemeche	advan	58.9		52.2		
3	16.08.2024		4/1611	G-N3	С	Nagzar	100 million (100 m	57.6		49.8		
4	16.08.2024		4/1610	G-N4	R	Purva Cas	arvarnem	53.8		43.3		
5	30.08.2024		4/1732	G-N5	R	Chandel		51.0	-	41.7		
6	20.08.2024		4/1665	G-N6	R		ere Porscodem	49.4	11.000	41.2		
7	30.08.2024		4/1733	G-N7	R	Warkhand		52.0	1.1	42.4		
8	27.08.2024		4/1722	G-N8	С	Rajvil Wad		53.4		45.2		
9	20.08.2024	GA/24	4/1664	G-N9	С	Village Pan - Ugvem	chayant Tamboxem – I	Mopa 51.7		42.6		
10	27.08.2024	GA/24	4/1721	M-N1	R	Satarda		49.3		42.4		
11	23.08.2024	GA/24	4/1689	M-N2	R	Dingane		52.5		40.4		
12	23.08.2024	GA/24	4/1690	M-N3	R	Netarde		51.1		43.9		
			I - Ind	ustrial Zo	one, C	- Comme	rcial Zone, R-	<b>Residential Zone</b>				
1]	Noise Limits as	per Sc	hedule I	II of "The B	Invironm	nent (Protect	tion) Rules, 1986" ar	e as follows				
	1.1.1.2.2.2						Limits in	dB(A) Leq				
	Area Code (A)		Category of Area Industrial Area (I)			а	Day Time Night Time					
							75	70				
	(B)	1.0	Commercial Area (C) Residential Area (R) Silence Zone (S)				65	55				
	(C)						55	45	1			
	(D)						50	40	1			
2]	• •	ckoned			· · · · · · · · · · · · · · · · · · ·	om and nigh	t time is reckoned in	between 10:00 pm	to 06:0	0 am		
								on scale A which is r				
3]	A "decibel" is	a unit in	which r	noise is me	asured.		· · · · · · · · · · · · · · · · · · ·		- antega			
41						ing in the me	asurement of noise	and corresponds to	frequer	ncy response		
4]	characteristics							S				
5]	Leq : It is the	energy i	mean of	the noise	level ove	er a specified	d period.					
2. Te 3. Te 4. Cu 5. Ca For	e results relate or est Report shall no est Results relate ustomer complain	the reprised only to the register of the equilation of the equilat	roduced e ne conditi is availa uipment's PVT. L	except in full ons prevailir ble at labora used in mo	ng at the t itory.	ime of samplir	al of the laboratory. ng. s is back side of analys					

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 554067	16/05/2024	15/05/2025

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 546176	20/06/2024	19/06/2025



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# **TEST REPORT**

	ANALYSIS REP	PORT FOR	WATER SAMPLE			
Report No.	GW/24/01908	Report Date		23/08/2024		
Client Name & Address	GMR Goa International A Administrative Block, Mo Taluka Pernem, Mopa, N	pa Internatio	onal Airport, Dadachi	wadi Ro	ad, Na	ıgzar,
Order / Reference	As Per Dated	Environmental Condition of Lab		Temp <sup>o</sup> C		Humidity %
Order / Reference	17/08/2024			27.6		75
Sampling Plan	GLPL/QF/7.3/06 \$	Sampling Pr	ocedure No.	APHA 1060		
Sampling Point	STP Outlet (A.C.F.)			-		
Sampling Details	STP Outlet (A.C.F.) Wate	er Sample	Date of Collection	17/08/2024		2024
Sample Collected by	GLPL Representative		Sample Received (	Dn 19/08/2024		2024
Analysis Started On	19/08/2024			d On	n 23/08/2024	
Sample Container	Plastic Carboy + Glass B	lottle	Sample Quantity		5 lit + 1.5 lit	

#### **Chemical Testing:**

Sr. No.	Parameters	Result	Unit	Limits	Method
1	рН	7.04	÷	5.5 - 9.0	APHA 4500 H+
2	Chemical Oxygen Demand (COD)	48	mg/lit	50.00	APHA 5220 B
3	Biochemical Oxygen Demand (27°C day) (BOD)	8	mg/lit	10.00	IS 3025 (Part 44)
4	Total Suspended Solids (TSS)	6	mg/lit	20.00	APHA 2540 D
5	Oil & Grease (O & G)	< 0.1	mg/lit	10.00	APHA 5520 B
6	Ammonia	3.92	mg/lit	5.00	APHA 4500 NH3 B&C
7	Total Nitrogen (as N)	6.05	mg/lit	10.00	APHA 4500-Norg

#### Microbiological Parameters:

9 Fecal Coliform at 44.5°C for 33 24 hrs.	MPN Index/100ml	100	APHA 9221 E
----------------------------------------------	--------------------	-----	-------------

#### For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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- 2. Test Report shall not be reproduced except in full, without written approval of the laboratory.
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- 5. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.



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### **Equipment Calibration Details**

Sr.			Certificate	Calibration Details		
No.	Equipment Name	Equipment Name Equipment Id No.		Calibration Date	Next Calibration Due Date	
01.	pH Meter	GL/EQ/pH/02	-	In hous	se Calibration	
02	pH Meter	GL/EQ/pH/03	-	In house Calibration		
03.	Hot Air Oven	GL/EQ/0/01	AVI 2406053	28/06/2024	27/06/2025	
04.	COD Digester	GL/EQ/COD/01	AVI 2406054	28/06/2024	27/06/2025	
05.	COD Digester	GL/EQ/COD/02	AVI 2406055	28/06/2024	27/06/2025	
06.	BOD Incubator	GL/EQ/I/02	AVI 2406052	28/06/2024	27/06/2025	
07.	Microbiological Incubator (35 ° C)	GL/EQ/I/03	AVI 2406080	29/06/2024	28/06/2025	
08.	Microbiological Incubator (44.5 ° C)	GL/EQ/I/01	AVI 2406081	29/06/2024	28/06/2025	
09.	Laminar Air Flow	GL/EQ/LAF/01	TECH/VAL/ 2024/02/107	15/02/2024	14/02/2025	
10.	Autoclave	GL/EQ/A/01	AVI 2406070	29/06/2024	28/06/2025	



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## TEST REPORT

	-	AMBIENT AIR QUALITY I	MONITORING REPORT					
Report Date	04/	04/10/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED	The second				
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GL	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLI	GLPL Representative						
Month of Sampling	Sep	September 2024						
		AMBIENT AIR	LOCATION					
cation of Ambient Air Sta	tion	Mopa Boundry - Goa St	ate (G-A1)					
Average Ambient Temperat	ture (°C)	30.5	Average Humidity (%)	81				
Average Wind Speed (km/h	ir)	211	Average Wind direction (Deg)	322				
Latitude		N 15°45'51.1"	Longitude	E 73°56'32.4"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PARAMETERS					
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	02.09.2024	GA/24/1747	21.8	52.88	16.67	< 6.0	< 9.0	0.61	130.8	0.04	< 1.0
2	05.09.2024	GA/24/1770	20.6	52.09	15.14	< 6.0	< 9.0	0.55	151.4	0.05	< 1,0
3	09.09.2024	GA/24/1781	22.0	54.58	18.01	< 6.0	< 9.0	0.78	183.2	0.02	< 1.0
4	12.09.2024	GA/24/1795	21.8	53.88	17.34	< 6.0	< 9.0	0.82	178.9	0.09	< 1.0
5	16.09.2024	GA/24/1815	23.2	55.65	19.34	< 6.0	< 9.0	0.92	164.1	0.03	< 1.0
6	19.09.2024	GA/24/1834	21.6	51.28	17.88	< 6.0	< 9.0	0.40	126.3	0.04	< 1.0
7	23.09.2024	GA/24/1847	18.2	47.50	15.39	< 6.0	< 9.0	0.79	145.6	0.05	< 1.0
8	26.09.2024	GA/24/1860	17.6	46.95	14.06	< 6.0	< 9.0	0.78	179.4	0.05	< 1.0
-5	30.09.2024	GA/24/1875	18.4	48.28	16.05	< 6.0	< 9.0	0.79	180.0	0.06	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2		1	
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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3. Samples will be preserved for a period 15 days from the delivery of Test Report

4. Test Results relate only to the conditions prevailing at the time of sampling

5. Customer complaint register is available at laboratory. 6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 9	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 1256-L-22	08/01/2024	07/01/2025		
Respirable Dust Sampler Sr. No. 1544-DTJ-2019	08/10/2023	07/10/2024		
Gaseoue Sampler Sr. No. 210-B-2022	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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## **TEST REPORT**

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/	04/10/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED	1000 C				
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GL	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLI	GLPL Representative						
Month of Sampling	Sep	September 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	ation	Shemecheadvan Goa S	State (G-A2)					
erage Ambient Tempera	ture (°C)	31.0	Average Humidity (%)	83				
Average Wind Speed (km/l	nr)	180	Average Wind direction (Deg)	328				
Latitude		N 15º42'06.1"	Longitude	E 73°49'21.5"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411				

Sr.	Date of					PAR	AMETERS	í			
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.6	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	02.09.2024	GA/24/1746	13.1	48.03	13.02	< 6.0	< 9.0	0.77	159.0	0.03	< 1.0
2	05.09.2024	GA/24/1769	12.4	47.82	11.98	< 6.0	< 9.0	0.51	147.8	0.05	< 1.0
3	09.09.2024	GA/24/1780	14.3	49.50	14.01	< 6.0	< 9.0	0.60	172.0	0.04	< 1.0
4	12.09.2024	GA/24/1794	13.5	48.94	13.31	< 6.0	< 9.0	0.72	173.0	0.09	< 1.0
5	16.09.2024	GA/24/1814	14.8	50.46	15.30	< 6.0	< 9.0	0.77	120.8	0.04	< 1.0
6	19.09.2024	GA/24/1833	13.9	48.75	13.68	< 6.0	< 9.0	0.46	140.9	0.02	< 1.0
7	23.09.2024	GA/24/1846	11.3	44.44	12.35	< 6.0	< 9.0	0.84	172.8	0.04	< 1.0
8	26.09.2024	GA/24/1859	10.7	43.02	11.39	< 6.0	< 9.0	0.70	180.9	0.04	< 1.0
).	30.09.2024	GA/24/1874	11.4	44.97	12.14	< 6.0	< 9.0	0.71	167.7	0.05	< 1.0
_	NAAQS LI	MITS *		100	60	80	80	2	1	1	
	UNIT	S	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

#### \*N.A.A.Q.S. - National Ambient Air Quality Standards

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Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 8	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 847-DTJ-2019	07/10/2023	06/10/2024
Respirable Dust Sampler Sr. No. 475-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 471-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/	04/10/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GL	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	GLPL Representative						
Month of Sampling	Sep	September 2024						
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	tion	Nagzar - Goa State (G-	A3)					
Jerage Ambient Temperat	ure (°C)	30.5	Average Humidity (%)	80				
Average Wind Speed (km/h	r)	168	Average Wind direction (Deg)	375				
Latitude		N 15º45'37.3"	Longitude	E 73°53'14.22"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	Desirent	PARAMETERS									
No.	Sampling	Report No.	SPM	PM10	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC	
1	02.09.2024	GA/24/1739	24.0	53.94	17.96	< 6.0	< 9.0	0.62	165.2	0.02	< 1.0	
2	05.09.2024	GA/24/1762	23.1	53.02	17.05	< 6.0	< 9.0	0.60	163.0	0.06	< 1.0	
3	09.09.2024	GA/24/1773	25.5	55.20	19.05	< 6.0	< 9.0	0.97	171.4	0.04	< 1.0	
4	12.09.2024	GA/24/1787	24.7	54.72	18.71	< 6.0	< 9.0	0.59	146.5	0.03	< 1.0	
5	16.09.2024	GA/24/1807	26.5	56.45	20.42	< 6.0	< 9.0	0.53	186.3	0.04	< 1.0	
6	19.09.2024	GA/24/1826	25.0	52.01	19.09	< 6.0	< 9.0	0.83	161.8	0.01	< 1.0	
7	23.09.2024	GA/24/1839	21.2	49.19	17.38	< 6.0	< 9.0	0.76	158.8	0.03	< 1.0	
8	26.09.2024	GA/24/1852	19.9	48.79	16.43	< 6.0	< 9.0	0.54	170.2	0.06	< 1.0	
Э	30.09.2024	GA/24/1867	21.0	49.02	18,01	< 6.0	< 9.0	0.66	152.2	0.03	< 1.0	
	NAAQS LIM	ITS *	-	100	60	80	80	2		1	-	
	UNITS	-	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm	
	METHO	D	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18	

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

B

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Ambient Instrument No. 1	Calibrated On	Calibration Due Date		
Fine Particulate Sampler S. No. 934-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 2832-DTB-2020	15/02/2024	14/02/2025		
Gaseoue Sampler Sr. No. 6888-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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## TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/	04/10/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLI	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GL	PL Representative						
Month of Sampling	Sep	otember 2024	*** ····					
		AMBIENT AIR	LOCATION					
Location of Ambient Air Sta	ition	Purva Casarvarnem - G	oa State (G-A4)					
erage Ambient Tempera	ture (°C)	30.0	Average Humidity (%)	72				
Average Wind Speed (km/hr)		202	Average Wind direction (Deg)	256				
Latitude		N 15º41'41.9"	Longitude	E 73°50'16.6"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PAR	AMETERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	02.09.2024	GA/24/1740	16.9	50.15	13.06	< 6.0	< 9.0	0.50	129.4	0.06	< 1.0
2	05.09.2024	GA/24/1763	15.9	48.88	12.77	< 6.0	< 9.0	0.53	160.4	0.04	< 1.0
3	09.09.2024	GA/24/1774	17.0	50.07	14.93	< 6.0	< 9.0	0.82	184.3	0.01	< 1.0
4	12.09.2024	GA/24/1788	16.6	49.74	13.27	< 6.0	< 9.0	0.55	149.1	0.06	< 1.0
5	16.09.2024	GA/24/1808	17.7	51.87	15.01	< 6.0	< 9.0	0.49	184.0	0.06	< 1.0
6	19.09.2024	GA/24/1827	15.9	49.88	13.93	< 6.0	< 9.0	0.45	133.6	0.03	< 1.0
7	23.09.2024	GA/24/1840	13.3	45.03	12.52	< 6.0	< 9.0	0.79	145.9	0.02	< 1.0
8	26.09.2024	GA/24/1853	12,4	44.49	11.06	< 6.0	< 9.0	0.62	166.2	0.08	< 1.0
)	30.09.2024	GA/24/1868	13.3	45.97	12.85	< 6.0	< 9.0	0.56	149.0	0.04	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2		1	÷
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	DC	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

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2 Test Report shall not be reproduced except in full, without written approval of the laboratory

3 Samples will be preserved for a period 15 days from the delivery of Test Report.

4. Test Results relate only to the conditions prevailing at the time of sampling 5. Customer complaint register is available at laboratory.

6 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 2	Calibrated On	Calibration Due Date
Fine Particulate Sampler S, No. 936-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 2842-DTB-2020	16/02/2024	15/02/2025
Gaseoue Sampler Sr. No. 6896-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

LAB.: H-54, Additional M.I.D.C. Kudal, Taluka - Kudal, District - Sindhudurg - 416 525. Tel. : (02362) 223519 . E-mail : info@gadark.in . Website : www.gadark.in

OFF.: 15, Hindustan Kohinoor Industrial Complex, L.B.S. Marg, Vikhroli (West), Mumbai - 83. Tel.: (022) 2577 7069 / 2577 7070 / 2085 0091 · +91 93213 12367

## **TEST REPORT**

		AMBIENT AIR QUALITY	MONITORING REPORT						
Report Date	04/	04/10/2024							
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED							
Address of Client			PA INTERNATIONAL AIRPORT, DA MOPA, NORTH GOA 403512.	DACHIWADI ROAD,					
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1					
Sample Collected By	GLF	PL Representative							
Month of Sampling	Sep	tember 2024							
		AMBIENT AIR	LOCATION						
Location of Ambient Air Sta	tion	Khajne Amere Porscode	em - Goa State (G-A5)						
Average Ambient Temperat	ture (°C)	30.5	Average Humidity (%)	70					
Average Wind Speed (km/hr)		162	Average Wind direction (Deg)	320.5					
Latitude		N 15º40'38.0"	Longitude	E 73°46'21.2"					
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)					

Sr.	Date of	Design Mar	1			PARA	METERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SOz	NOx	CO	CO <sub>2</sub>	Lead	VOC
1	02.09.2024	GA/24/1741	10.6	43.95	10.31	< 6.0	< 9.0	0.39	140.9	0.01	< 1.0
2	05.09.2024	GA/24/1764	9.7	42.53	9.61	< 6.0	< 9.0	0.53	151.3	0.05	< 1.0
3	09.09.2024	GA/24/1775	11.2	44.56	11.02	< 6.0	< 9.0	0.75	180.0	0.03	< 1.0
4	12.09.2024	GA/24/1789	10.5	44.05	10.69	< 6.0	< 9.0	0.63	161.0	0.07	< 1.0
5	16.09.2024	GA/24/1809	12.3	46.69	12.14	< 6.0	< 9.0	0.65	174.4	0.08	< 1.0
6	19.09.2024	GA/24/1828	11.5	44.99	11.02	< 6.0	< 9.0	0.49	145.2	0.05	< 1.0
7	23.09.2024	GA/24/1841	10.5	41.42	10.23	< 6.0	< 9.0	0.80	150.2	0.04	< 1.0
8	26.09.2024	GA/24/1854	9.8	40.54	9.77	< 6.0	< 9.0	0.75	177.3	0.05	< 1.0
5	30.09.2024	GA/24/1869	10.6	42.03	10.94	< 6.0	< 9.0	0.48	153.9	0.03	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	1-6	1	-
	UNIT	S	µg/m <sup>3</sup>	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>	ppm	µg/m <sup>3</sup>	ppm
	METHO	סכ	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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 Customer complaint register is available at laboratory.

6. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT. LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 3	Calibrated On	Calibration Due Dat		
Fine Particulate Sampler S. No. 942-DTA-2020	14/02/2024	13/02/2025		
Respirable Dust Sampler Sr. No. 670-E-23	18/10/2023	17/10/2024		
Gaseoue Sampler Sr. No. 6904-DTB-2020	12/02/2024	11/02/2025		
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024		
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025		



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# **TEST REPORT**

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/*	04/10/2024						
Name of Client	M/s	GMR GOA INTERNATION	AL AIRPORT LIMITED					
Address of Client		ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWADI ROAD, NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.						
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	PL Representative						
Month of Sampling	Sep	tember 2024						
		AMBIENT AIR	LOCATION					
cation of Ambient Air Sta	tion	Rajvil Wada Torxem - 0	Goa State (G-A6)					
Average Ambient Temperat	ture (°C)	30.5	Average Humidity (%)	80				
Average Wind Speed (km/h	r)	181.5	Average Wind direction (Deg)	318				
Latitude		N 15º48'40.0"	Longitude	E 73°52'50.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of		PARAMETERS								
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.09.2024	GA/24/1744	13.1	46.02	13.06	< 6.0	< 9.0	0.29	137.8	0.01	< 1.0
2	05.09.2024	GA/24/1767	12.0	45.09	12.10	< 6.0	< 9.0	0.59	162.3	0.05	< 1.0
3	09.09.2024	GA/24/1778	13.0	46.80	14.22	< 6.0	< 9.0	0.64	176.9	0.05	< 1.0
4	12.09.2024	GA/24/1792	12.5	46.00	13.18	< 6.0	< 9.0	0.77	175.0	0.09	< 1.0
5	16.09.2024	GA/24/1812	13.8	48.66	14.68	< 6.0	< 9.0	0.83	148.6	0.08	< 1.0
6	19.09.2024	GA/24/1831	12.2	47.00	12.52	< 6.0	< 9.0	0.41	166.2	0.05	< 1.0
7	23.09.2024	GA/24/1844	10,3	43.31	11.56	< 6.0	< 9.0	0.88	173.5	0.04	< 1.0
3	26.09.2024	GA/24/1857	9.5	42.83	10.23	< 6.0	< 9.0	0.86	183.4	0.07	< 1.0
9	30.09.2024	GA/24/1872	10.9	44.05	11.06	< 6.0	< 9.0	0.67	120.8	0.06	< 1.0
	NAAQS LI	MITS *	-	100	60	80	80	2	-	1	-
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	סכ	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

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 Customer complaint register is available at laboratory.
 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.

For GADARK LAB PVT, LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 6	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 56-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1329-R-273-DTC-2015	15/02/2024	14/02/2025
Gaseoue Sampler Sr. No. 6773-DTB-2020	12/02/2024	11/02/2025
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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# TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/1	10/2024						
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client ADMINISTRATIVE BLOCK, MOPA INTERNATIONAL AIRPORT, DADACHIWAI NAGZAR, TALUKA PERNEM, MOPA, NORTH GOA 403512.								
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	LPL Representative						
Month of Sampling	Sep	ptember 2024						
		AMBIENT AIR	LOCATION					
cation of Ambient Air Sta	tion	Satarda - Maharashtra	State (M-A1)					
Average Ambient Temperat	ture (°C)	31.0	Average Humidity (%)	85				
Average Wind Speed (km/h	r)	132	Average Wind direction (Deg)	318.5				
Latitude		N 15º43'01.3"	Longitude	E 73º46'00.2"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of					PARA	METERS	1			
No.	Sampling	Report No.	SPM	PM10	PM2.5	SO <sub>2</sub>	NOx	co	CO2	Lead	VOC
1	02.09.2024	GA/24/1742	11.3	45.03	12.93	< 6.0	< 9.0	0.45	178.1	0.04	< 1.0
2	05.09.2024	GA/24/1765	10.4	44.38	11.77	< 6.0	< 9.0	0.46	151.2	0.06	< 1.0
3	09.09.2024	GA/24/1776	12.8	46.36	13.06	< 6.0	< 9.0	0.70	174.2	0.03	< 1.0
4	12.09.2024	GA/24/1790	12.0	46.62	12.02	< 6.0	< 9.0	0.66	159.6	0.05	< 1.0
5	16.09.2024	GA/24/1810	13.0	47.52	14.64	< 6.0	< 9.0	0.81	171.8	0.04	< 1.0
6	19.09.2024	GA/24/1829	12.3	45.82	12.89	< 6.0	< 9.0	0.44	157.1	0.05	< 1.0
7	23.09.2024	GA/24/1842	11.0	42.50	11.44	< 6.0	< 9.0	0.74	146.6	0.06	< 1.0
8	26.09.2024	GA/24/1855	10,7	41.75	10.19	< 6.0	< 9.0	0.71	172.0	0.08	< 1.0
9	30.09.2024	GA/24/1870	12.0	43.28	12.10	< 6.0	< 9.0	0.61	154.1	0.02	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	-	1	*
	UNIT	s	µg/m <sup>3</sup>	µg/m³	µg/m³	µg/m³	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METH	ac	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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6 Calibration details of the equipment's used in monitoring and or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

Scapula AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 4	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 1344-G-23	17/10/2023	17/10/2024
Respirable Dust Sampler Sr. No. 194-E-22	17/05/2024	16/05/2025
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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# TEST REPORT

		AMBIENT AIR QUALITY	MONITORING REPORT					
Report Date	04/*	10/2024	for the second sec					
Name of Client	M/s	M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client		PA INTERNATIONAL AIRPORT, DA MOPA, NORTH GOA 403512.	DACHIWADI ROAD,					
Sampling Plan	GLF	PL/QF/7.3/06	Page No.	1 of 1				
Sample Collected By	GLF	PL Representative						
Month of Sampling	Sep	otember 2024	at and an					
Market Contraction		AMBIENT AIR	LOCATION					
cation of Ambient Air Sta	tion	Dingane - Maharashtra	State (M-A2)					
Average Ambient Temperat	ture (°C)	31.0	Average Humidity (%)	78				
Average Wind Speed (km/h	nr)	129	Average Wind direction (Deg)	300				
Latitude		N 15º46'12.3*	Longitude	E 73°49'20.5"				
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)				

Sr.	Date of	Design of the				PAR	AMETERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	CO	CO <sub>2</sub>	Lead	VOC
1	02.09.2024	GA/24/1745	9.4	42.00	11.02	< 6.0	< 9.0	0.68	185.4	0.01	< 1.0
2	05.09.2024	GA/24/1768	8.6	41.37	10.35	< 6.0	< 9.0	0.65	167.2	0.06	< 1.0
3	09.09.2024	GA/24/1779	10.8	43.82	12.48	< 6.0	< 9.0	0.62	179.6	0.02	< 1.0
4	12.09.2024	GA/24/1793	9.3	43.01	11.14	< 6.0	< 9.0	0.68	172.5	0.10	< 1.0
5	16.09.2024	GA/24/1813	10.7	45.38	12.72	< 6.0	< 9.0	0.74	145.9	0.05	< 1.0
6	19.09.2024	GA/24/1832	10.1	43.53	11.89	< 6.0	< 9.0	0.64	163.7	0.04	< 1.0
7	23.09.2024	GA/24/1845	9.40	40.22	10.35	< 6.0	< 9.0	0.92	169.5	0.03	< 1.0
.)	26.09.2024	GA/24/1858	8.5	39.48	9.48	< 6.0	< 9.0	0.66	173.0	0.06	< 1.0
9	30.09.2024	GA/24/1873	10.2	40.97	10.98	< 6.0	< 9.0	0.59	172.6	0.06	< 1.0
_	NAAQS LI	MITS *	1991	100	60	80	80	2	- e-c - 1	1	10. <del>4</del> .0
	UNIT	S	µg/m³	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m³	mg/m <sup>3</sup>	ppm	µg/m³	ppm
	METHO	DC	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

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- 4. Test Results relate only to the conditions prevailing at the time of sampling.

5. Customer complaint register is available at laboratory

Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.
 For GADARK LAB PVT, LTD.

AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Recognised by Central Pollution Control Board (MoEF and CC, Govt. of India), under the EP Act, 1986, valid upto 21st August 2025. ISO 9001 : 2015 and ISO 45001 : 2018 Certified. Page 18

Ambient Instrument No. 7	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 60-C-22	15/12/2023	14/12/2024
Respirable Dust Sampler Sr. No. 1284-R-228-DTK-2014	15/02/2024	14/02/2025
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



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# TEST REPORT

		AMBIENT AIR QUALITY I	MONITORING REPORT				
Report Date	04/	10/2024					
Name of Client	nt M/s. GMR GOA INTERNATIONAL AIRPORT LIMITED						
Address of Client							
Sampling Plan	GLE	PL/QF/7.3/06	Page No.	1 of 1			
Sample Collected By	GLE	PL Representative					
Month of Sampling	Sep	otember 2024					
		AMBIENT AIR	LOCATION				
cation of Ambient Air Sta	ition	Netarde - Maharashtra	State (M-A3)				
Average Ambient Tempera	ture (°C)	30.0	Average Humidity (%)	71			
Average Wind Speed (km/h	nr)	136.5	Average Wind direction (Deg)	306			
Latitude		N 15º46'11.7"	Longitude	E 73°53'47.0"			
Instrument Used		FPS (APM - 550)	RDS (APM - 460)	GPS (APM - 411)			

Sr. Date of Report No.						PAR	AMETERS				
No.	Sampling	Report No.	SPM	PM <sub>10</sub>	PM2.5	SO <sub>2</sub>	NOx	co	CO <sub>2</sub>	Lead	VOC
1	02.09.2024	GA/24/1743	9.5	39.55	10.31	< 6.0	< 9.0	0.42	186.1	0.02	< 1.0
2	05.09.2024	GA/24/1766	8.5	38.00	9.44	< 6.0	< 9.0	0.61	163.8	0.07	< 1.0
3	09.09.2024	GA/24/1777	9.1	40.51	10.98	< 6.0	< 9.0	0.65	171.7	0.05	< 1.0
4	12.09.2024	GA/24/1791	8.7	39.93	10.15	< 6.0	< 9.0	0.74	162.7	0.06	< 1.0
5	16.09.2024	GA/24/1811	10.0	41.48	11.35	< 6.0	< 9.0	0.77	151.8	0.02	< 1.0
6	19.09.2024	GA/24/1830	9.8	39.87	10.06	< 6.0	< 9.0	0.35	122.1	0.06	< 1.0
7	23.09.2024	GA/24/1843	8.5	37.43	9.40	< 6.0	< 9.0	0.65	138.8	0.06	< 1.0
1.	26.09.2024	GA/24/1856	7.1	36.80	8.36	< 6.0	< 9.0	0.88	172.8	0.08	< 1.0
9	30.09.2024	GA/24/1871	8.5	38.00	9.44	< 6.0	< 9.0	0.49	173.5	0.05	< 1.0
	NAAQS LI	MITS *		100	60	80	80	2	+	1	-
	UNIT	S	µg/m <sup>3</sup>	µg/m³	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>	ppm
	METHO	DD	IS 5182 (Part 4)	IS 5182 (Part XXIII) 2006	IS 5182 (Part XXIV) 2006	IS 5182 (Part II) 2001	IS 5182 (Part VI) 2006	IS 5182 (Part X) 1999	GC Method	IS 5182 (Part XXII) 2004	EPA Method 18

\*N.A.A.Q.S. - National Ambient Air Quality Standards

Note :

The results relate only to the samples tested.
 Test Report shall not be reproduced except in full, without written approval of the laboratory

3 Samples will be preserved for a period 15 days from the delivery of Test Report.

4 Test Results relate only to the conditions prevailing at the time of sampling. 5. Customer complaint register is available at laboratory

6 Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report

For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

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Ambient Instrument No. 5	Calibrated On	Calibration Due Date
Fine Particulate Sampler S. No. 940-DTA-2020	14/02/2024	13/02/2025
Respirable Dust Sampler Sr. No. 477-A-23	09/01/2024	08/01/2025
Gaseoue Sampler Sr. No. 470-L-22	08/01/2024	07/01/2025
UV Spectrophotometer Sr. No. UV - 3092	05/07/2024	04/10/2024
Gas Chromatograph (GC) Sr. No. Thermo-Fisher Trace 600	10/01/2024	09/01/2025



**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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## **TEST REPORT**

	e of Issue	04	10/2024						
	ne of Client				RNATIO	AL AIRPORT LIMI	TED	1.1	-
-	ress of Clien	t AD		TIVE B	LOCK, MO	ACHIWADI			
San	npling Plan		PL/QF/7.3/0		-	Sampling Procedure	GLPL/SOP/AA/17		
	nple Collecte		PL Represe						
Jun	ipie oblicate	40, 00				OLLUTION MONITO	RING		
Sr.	Date of	Report N	Station	Zone		ampling Location	Day Time N in dB(A		Night Time Nois in dB(A)
No.	Sampling	Conference.	ID ID				Leq	_	Leq
1	18.09.2024	GA/24/18	9 G-N1	- I	Mopa Bou	ndary	66.3	1	60.1
2	18.09.2024	GA/24/18	8 G-N2	. I -	Shemeche	advan	63.6	2	49.3
3	17.09.2024	GA/24/18		C	Nagzar		58.0		51.9
4	17.09.2024	GA/24/18		R	Purva Cas	arvarnem	52.3	-	41.5
5	23.09.2024	GA/24/18		R	Chandel		52.9		42.4
6	20.09.2024	GA/24/18		R		nere Porscodem	51.0		42.9
7	23.09.2024	GA/24/18	the second se	R	Warkhand	2010 2010 2010	47.7		38.9
8	24.09.2024	GA/24/18		С	Rajvil Wad		62.9		51.7
9	24.09.2024	GA/24/18	G-N9	C	Village Pan - Ugvem	chayant Tamboxem - Mop	a 57.2		51.8
10	20.09.2024	GA/24/18	5 M-N1	R	Satarda		52.4		43.6
11	27.09.2024	GA/24/18	1 M-N2	R	Dingane		44.2	-	38.0
12	27.09.2024	GA/24/18	2 M-N3	R	Netarde	All and a second se	41.2		32.6
	Noise Limits as			of Are	-	Limits in dB	(A) Leq		
	Area Code		Categor	11000	а	Limits in dB Day Time	Night Time		
1	Area Code (A)	) In	Categor dustrial Area	(1)	а	Limits in dB Day Time 75	Night Time 70		
<u>1</u>	Area Code (A) (B)	i In C	Categor dustrial Area ommercial Are	(I) ea (C)	a	Limits in dB Day Time 75 65	Night Time 70 55		
1	Area Code (A) (B) (C)	i In C R	Categor dustrial Area ommercial Are esidential Area	(I) ea (C) a (R)	a	Limits in dB Day Time 75 65 55	Night Time 70 55 45		
	Area Code (A) (B) (C) (D)	i In C R S	Categor dustrial Area ommercial Area esidential Area lence Zone (\$	(I) ea (C) a (R) S)		Limits in dB           Day Time           75           65           55           50	Night Time 70 55 45 40		
	Area Code (A) (B) (C) (D) Day time to re	In C R S ckoned in b	Categor dustrial Area ommercial Area esidential Area lence Zone (S etween 6:00 a	(I) ea (C) a (R) S) am to 10	pm and nigh	Limits in dB Day Time 75 65 55 50 t time is reckoned in be	Night Time 70 55 45 40 tween 10:00 pm 1		
2]	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is a	In C R S ckoned in b enotes the ti a unit in wh	Categor dustrial Area ommercial Area esidential Area lence Zone (S etween 6:00 a me weighted a ch noise is me	(I) ea (C) a (R) S) am to 10 average o easured.	pm and nigh of the level o	Limits in dB Day Time 75 65 55 50 ht time is reckoned in be of sound in decibels on s	Night Time 70 55 45 40 tween 10:00 pm 1 cale A which is re	elatable	to human hearing
2] 3]	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is "A", in dB(A) L characteristics	In C R S ckoned in b notes the ti a unit in wh .eq, denotes s of the hum	Categor dustrial Area ommercial Area esidential Area lence Zone (S etween 6:00 a me weighted a ch noise is me the frequenc an ear.	(I) ea (C) a (R) S) am to 10 average of easured. y weight	pm and nigh of the level o ing in the me	Limits in dB Day Time 75 65 55 50 at time is reckoned in be of sound in decibels on s easurement of noise and	Night Time 70 55 45 40 tween 10:00 pm 1 cale A which is re	elatable	to human hearing
1] 2] 3] 4] 5]	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is : "A", in dB(A) L	In C R S ckoned in b notes the ti a unit in wh .eq, denotes s of the hum	Categor dustrial Area ommercial Area esidential Area lence Zone (S etween 6:00 a me weighted a ch noise is me the frequenc an ear.	(I) ea (C) a (R) S) am to 10 average of easured. y weight	pm and nigh of the level o ing in the me	Limits in dB Day Time 75 65 55 50 at time is reckoned in be of sound in decibels on s easurement of noise and	Night Time 70 55 45 40 tween 10:00 pm 1 cale A which is re	elatable	to human hearing
2] 3] 4] 5] Note 1. Th 2. Te 3. Te 4. Ci 5. Ci	Area Code (A) (B) (C) (D) Day time to re *dB(A) Leq de A "decibel" is i "A", in dB(A) Le characteristics Leq : It is the of the results relate of th	In C C R S ckoned in b motes the ti a unit in wh .eq, denotes s of the hum energy mea nly to the san ot be reprodu only to the co t register is a if the equipmo	Categor dustrial Area ommercial Area esidential Area esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential esidential eside	(I) ea (C) a (R) S) arm to 10 average of easured. y weight level over	pm and nigh of the level of ing in the me er a specifie written approv time of sampli	Limits in dB Day Time 75 65 55 50 nt time is reckoned in be of sound in decibels on s easurement of noise and d period.	Night Time 70 55 45 40 tween 10:00 pm f cale A which is re corresponds to f	elatable	to human hearing

Equipment Name	Calibrated On	Calibration Due Date
Noise Level Meter Sr. No. 554067	16/05/2024	15/05/2025

Equipment Name	Calibrated On	<b>Calibration Due Date</b>
Noise Level Meter Sr. No. 546176	20/06/2024	19/06/2025



# GADARK LAB PVT. LI

**INDUSTRIAL ANALYSTS & CONSULTANTS** 

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# TEST REPORT

	ANALYSIS R	EPORT FOR	WATER SAMPLE				
Report No.	GW/24/1724		Report Date	24/	09/2024		
Client Name & Address	Administrative Block, M	GMR Goa International Airport Limited, Administrative Block, Mopa International Airport, Dadachiwadi Road, Nagzar, Taluka Pernem, Mopa, North Goa - 403512					
Order / Reference	rence As Per Dated 19/09/2024 Environmental Condition of Lab		Temp <sup>0</sup> C	Humidity %			
Order / Reference			tal condition of Lab	27.5	77		
Sampling Plan	GLPL/QF/7.3/06	Sampling Pr	ocedure No.	APHA 10	60		
Sampling Point	STP Outlet (A.C.F.)						
Sampling Details	STP Outlet (A.C.F.) Wa	ater Sample	Date of Collection	19/	09/2024		
Sample Collected by	GLPL Representative		Sample Received (	On 20/0	20/09/2024		
Analysis Started On	20/09/2024		Analysis Complete	d On 24/0	24/09/2024		
Sample Container	Plastic Carboy + Glass	Bottle	Sample Quantity	5 lit	+ 1.5 lit		

#### **Chemical Testing:**

Sr. No.	Parameters	Result	Unit	Limits	Method
1	pH	6.98	-	5.5 - 9.0	APHA 4500 H*
2	Chemical Oxygen Demand (COD)	36	mg/lit	50.00	APHA 5220 B
3	Biochemical Oxygen Demand (27ºC day) (BOD)	6	mg/lit	10.00	IS 3025 (Part 44)
4	Total Suspended Solids (TSS)	2	mg/lit	20.00	APHA 2540 D
5	Oil & Grease (O & G)	< 0,1	mg/lit	10.00	APHA 5520 B
6	Ammonia	3.47	mg/lit	5.00	APHA 4500 NH3 B&C
7	Total Nitrogen (as N)	5.49	mg/lit	10.00	APHA 4500-Norg

#### Microbiological Parameters:

9	Fecal Coliform at 44.5°C for 24 hrs.	27	MPN Index/100ml	100	APHA 9221 E
	A CARLES AND A CARLES A		End	-	

#### For GADARK LAB PVT. LTD.

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AUTHORISED SIGNATORY [SACHIN B. GAONKAR]

Note:

- 1. Results relate only to the sample tested.
- 2. Test Report shall not be reproduced except in full, without written approval of the laboratory.
- 3. Samples will be preserved for a period 15 days from the delivery of Test Report.
- 4. Customer complaint register is available at laboratory.
- 5. Calibration details of the equipment's used in monitoring and / or analysis is back side of analysis report.



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Sr.	at constants	Equipment Id	Certificate	Calibra	ation Details
No.	Equipment Name		No.	Calibration Date	Next Calibration Due Date
01.	pH Meter	GL/EQ/pH/02		In hous	se Calibration
02	pH Meter	GL/EQ/pH/03	-	In house Calibration	
03	Hot Air Oven	GL/EQ/0/01	AVI 2406053	28/06/2024	27/06/2025
04	COD Digester	GL/EQ/COD/01	AVI 2406054	28/06/2024	27/06/2025
05.	COD Digester	GL/EQ/COD/02	AVI 2406055	28/06/2024	27/06/2025
06.	BOD Incubator	GL/EQ/I/02	AVI 2406052	28/06/2024	27/06/2025
07.	Microbiological Incubator (35 ° C)	GL/EQ/1/03	AVI 2406080	29/06/2024	28/06/2025
08.	Microbiological Incubator (44.5 ° C)	GL/EQ/I/01	AVI 2406081	29/06/2024	28/06/2025
09.	Laminar Air Flow	GL/EQ/LAF/01	TECH/VAL/ 2024/02/107	15/02/2024	14/02/2025
10	Autoclave	GL/EQ/A/01	AVI 2406070	29/06/2024	28/06/2025

### **Equipment Calibration Details**

<u>ANNEXURE – 3</u>

## **COMPLIANCE STATUS**

of

## CONCERNS RAISED DURING PUBLIC HEARING

## GREENFIELD MANOHAR INTERNATIONAL AIRPORT, Mopa, Goa

Directorate of Civil Aviation Government of Goa

&

**GMR Goa International Airport Limited** 

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No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
01	Questioned the panel members present on the dais for the public hearing and the role of other members seated on the dais.	Collector North Goa clarified that as per the Notification, Collector & the Addl. Collector were present along with the Member Secretary, Goa State Pollution Control Board and other officials of the Airport Directorate (Project Proponent)	No further action is required.
02	Desired to know whether thorough inspection has been done of the Mopa plateau by the panel of six members.	The agency who prepared the Master Plan and collected the baseline data have visited the site.	No further action is required.
03	<ul> <li>Dabolim Airport is controlled by Navy, when assurance was given that the same will be permitted for civilian use. However, the assurances are not kept.</li> <li>It was feared that the Dabolim airport will be closed down due to the commencement of the Mopa airport. How can 3 Airports exist within 100-150 Kms (Dabolim, Mopa &amp; Chipli)</li> <li>Environmental Impact study has to be done in a proper manner.</li> </ul>	<ul> <li>It is a cabinet decision by the Government of India that the Dabolim Airport will continue to operate its civilian enclave even after commissioning of Mopa Airport.</li> <li>As per traffic forecast made in the Master Plan of Mopa Airport there will be traffic for both Dabolim and Mopa Airport to operate.</li> <li>The EIA report has been prepared as per the TOR &amp; Guidelines issued by MoEF.</li> </ul>	No further action is required. No further action is required. No further action is required.
04	The report states that rain water harvesting will be done, when the plateau is surrounded by the Villages on all sides which will be affected.	Rain water harvesting will be done and the path of water flow is shown in the report and there will be no effect on the Villages.	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD)vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021.
05	Not against Dabolim Airport, however, Mopa will improve the state financial position of Goa and raise Goa on an international map. It was further stated that Mopa airport is required since Dabolim does not have the required capacity and Mopa airport will provide ample employment opportunities to the people. It was requested that the work on the airport be started at the earliest.	Work started as per Concession Agreement.	Scheduled commercial Airport operations started on 5 <sup>th</sup> Jan 2023.

#### **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
06	The plateau has multiple water sheds, and the discharge of water is going down to the rivers. Desired to know whether ETP /STP for industrial discharge from the plateau will be constructed. Whether there will be individual STP/ETP and whether disposal of garbage is taken care of. Desired to know the stress on the garbage management on account of catering facilities, the cargo inflow and the outflow.	Separate STP and garbage management plan has been provided in the Master Plan keeping in mind catering & cargo facilities as well.	STP and Garbage Management Facility have been provided.
07	<ul> <li>The report shows couple of rain water harvesting sites which appear to be not sufficient. Rainfall is approximately 1200 mm (One Thousand Two Hundred). No water is harvested till date.</li> <li>Desired to know whether the airport is going to have a Green building</li> </ul>	<ul> <li>A dedicated Rain water harvesting project will be carried out.</li> <li>The terminal building will be a green building.</li> </ul>	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021. Passenger Terminal Building (PTB), designed & constructed as a Green Building has been accredited with Indian Green Building Council (IGBC) Green Building Platinum Standard Certification.
08	<ul> <li>Due to the setting up of the airport the water supply has to be increased, electricity supply has to be augmented, the fresh water springs have to be rejuvenated.</li> </ul>	<ul> <li>5 MLD of water from Right Bank Main Canal of Tillari Irrigation Project is allotted. Starting with 10 MVA in Phase I, eventually at the time of airport attaining the saturation capacity up to 40 MVA power supply capacity has been planned. Natural channels of water flow feeding the water bodies will not be disturbed by suitably channelizing the water flow at the project site.</li> </ul>	<ul> <li>Water supply pipeline to the airport has been provided. Water is being pumped into water storage tanks.</li> <li>A dedicated power supply line has been provided for the airport.</li> <li>The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels.</li> </ul>

Page2 | 25

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
	<ul> <li>Technical and Professional colleges should be set up to impart training to the locals so as to provide employment opportunities and minimum price of land should be notified for the benefit of the farmers</li> </ul>	• All the required trainings shall be provided at the ITI Pernem, for which the Infrastructure will be provided by the Govt. and Faculty and other software will be provided by the Developer wherein the locals will be trained and absorbed when operations start.	An Aviation Skill Development Centre (ASDC) has been set up at the airport.
	<ul> <li>People who will lose land should be adequately compensated. Till date no compensation has been paid to the land affected. Supported for the early commencement of the project.</li> </ul>	• Land compensation claims are paid by Special Land Acquisition Officer as per land acquisition awards. In addition, GoG has paid additional 3 times compensation to the land losers whose lands have been acquired and claims have been settled.	No further action is required.
09	<ul> <li>The flora and fauna of the village will be affected. The springs which number around 40 will be affected. The EIA report does not state the farming and agricultural places. The hearing has been conducted where the land is barren which shows that there is no plantation at all. The report is biased and is done on political pressure.</li> <li>It was felt that the report has been prepared not on the basis of site visit by taking the locals into consideration, but prepared as per the documents available.</li> </ul>	<ul> <li>The airport is presently coming on a flat terrain of a hill top. The valleys where some forest exists will be unaltered due to the project activities. The Compensatory Afforestation program will be adopted with due consultation with Goa Forest Department.</li> <li>The report has been prepared based on the field study carried out by Functional area experts.</li> </ul>	Plantation of 5 lakh saplings by Goa State Bio-diversity Board has been completed. In addition, plantation of 51,000 saplings has been completed within the airport site. No further action is required.
10	<ul> <li>Copy of the EIA report has not been made available to individuals. The Report does make a mention of the animal life in the report wherein endangered species have been reflected.</li> <li>The Civil Aviation Ministry has declared that no two Airports shall be allowed in the State of Goa.</li> </ul>	<ul> <li>EIA report is not made available to the individuals, but available for public with the authorities concerned. The threatened species as per Schedule-I category of Wildlife Protection Act, 1972 are mentioned in the EIA report.</li> <li>There is no such declaration by the Civil Aviation Ministry, GOI</li> </ul>	No further action is required. No further action is required.
	• The preparation of EIA report takes 3 years and not 3 months as this report, which has been prepared in a	• The EIA report is prepared as per the Terms of Reference/EIA Manual for Airports and accordingly the information provided	No further action is required.

Νο	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
	hurry.	is for one season data.	
11	• The fertility of the soil is not mentioned. Report does not go into the aspect of the overall impact.	• The soil quality and its impact have been measured and mentioned in the EIA Report. (Pg. No. 41/42)	No further action is required.
	• The effect of river Chapora which comes under the 10 Kms Zone, which will be destroyed, is not considered. It was further questioned whether this will be destruction of Goa.	• Overall impact of the project has been analyzed and details provided in chapter 5 of EIA report. There will be no effect on Chapora river other than water consumption from Tillari canal due to the proposed Airport.	No further action is required.
	• The flora and fauna of the villages have not been reflected and feared its destruction. The area is a permeable area and cause flooding in the villagers. EIA has not shown the Disaster Management Plan in the report.	• The flora and fauna mentioned in the report is 10 km surrounding from the project site where all villages coming under 10 km radius were covered. There will be no flooding due to construction of Airport. Drainage patterns have been studied for before and after construction of project and the same have been reflected in the report under section 5.3.3 of chapter 5. It is shown in Annexure VI of EIA Report.	No further action is required.
12	• Whether the Public Hearing has a legal status like a Court – questioned the legality of the proceeding. Whether advertisement is issued in the Goa Newspapers and on which newspapers. There are two buffer zones within 5Kms and 10 kms radius. Whether the EIA report has been submitted to the Gram Panchayats in these buffer zones. Whether advertisement has been issued in the newspapers in Maharashtra. Non submission of the EIA report and advertisement on papers affects the Public hearing. No EIA report given to the Panchayats falling in the core zone areas.	<ul> <li>It was clarified that advertisement was issued in the local newspapers i.e. The Navhind Times, Sunaparant and Gomantak, Herald and Indian Express (Mumbai edition) on 31<sup>st</sup> January, 2014. However, a repeat of the advertisement was issued on 31/01/2014, besides FM Radio, News Channels and Panchayats in the vicinity of the project have been given copies of the EIA report and the Executive summary for the perusal of the public. Copies of the Reports were also made available at the office of the District Magistrate, North Goa, Deputy Collector's Office, Zilla Panchayats, District Industries Officer, and other local bodies. Enough care has been taken for giving wide publicity.</li> </ul>	No further action is required.
	How the plateau has Bengal Tigers.	• The present EIA report did not mention any Bengal tiger presence. However, some tiger species of butterflies are observed in the field and included in the report.	No further action is required.
	• How long the Engineers were there to carry out this study?	One month	No further action is required.
	• EIA does not state the Buffer zone area.	• The EIA report is prepared as per the Terms of Reference/EIA Manual for Airports with buffer zone of 5 km & 10Km radius.	No further action is required.
L	1	1	1

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
	<ul> <li>Ground water percolation and recharge have not been mentioned. The EIA is false and fabricated as such this Public hearing in absence of authenticated data does not have any standing. The Public Hearing becomes illegal.</li> </ul>	<ul> <li>Rain water harvesting will be done for natural ground water recharge.</li> </ul>	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021.
	<ul> <li>The entire Mopa Plateau for the proposed airport is of 2271 acres of land which is by itself is a natural mechanism for ground water re-charge, whereas ground water recharge mentioned in the project by the project proponent could hardly be 500 sq. mtrs.</li> </ul>	<ul> <li>Present Ground water level at Mopa is 5 – 10 mbgl (Annexure IV). To maintain the recharging of Ground water level after construction of the proposed Airport a Rain water Harvesting system as given in Annexure II &amp; III of EIA Report will be developed.</li> </ul>	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021.
13	Government is promoting agriculture and not airport. Raised the issue of providing employment opportunities to the local people. He questioned how the Other Backward Class population will survive if their lands are taken away for the development of the airport.	The Airport project is expected to give a big boost for overall economic development of the State and generate employment opportunities.	No further action is required.
14	The springs in the vicinity of the proposed site will be affected and the impact on the water table will have to be studied.	Present Ground water level at Mopa is $5 - 10$ . mbgl (Annexure IV). To maintain the recharging of Ground water level after construction of the proposed Airport a Rain Water Harvesting system as given in Annexure II & III of EIA Report will be developed. The runoff inside the Airport area will be collected through storm water drains and will be routed to the nearest surface water body. There by, there will be no impact on ground & surface water resources.	The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels.
15	The EIA report contains many flaws, which have to be corrected by the Environment Ministry and the concerns raised by the public, should be addressed.	EIA report has been prepared as per relevant guidelines.	No further action is required.
16	• The EIA report prepared by Engineers India Limited is a false, manipulated report prepared at the behest of the Government of Goa. The EIA report is a gross fraud on the people of Goa. The same had to be	• All guidelines of the MoEF are adhered to while preparing the report. Public hearing is conducted as per the Notification of the Govt. of India.	No further action is required.

No	Public Hearing (Oral)	Responses submitted to EAC	Status
	<ul> <li>prepared before acquiring the land and not after the acquisition of the land proceedings, which is stated as per the Law.</li> <li>Desired to know whether the EIA report has been authenticated by the Goa State Pollution Control Board</li> <li>The proposed six lane road project of the state Govt. does not reflect on the displacement of the affected people</li> </ul>	<ul> <li>GSPCB is not required to stamp / approve the report.</li> <li>No people are likely to be displaced on account of the proposed approach road.</li> </ul>	No further action is required. 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. Dedicated 6 lane access control expressway connectivity is constructed & operational.
17	Desired to know whether all guidelines for having a Green building for the airport have been followed. There is adequate requirement for water and electricity, and that the project will change the face of the North Goa District.	All the notifications issued by the Central Govt. will be adhered to in the construction of the Green building for the airport	Passenger Terminal Building (PTB), designed & constructed as a Green Building has been accredited with Indian Green Building Council (IGBC) Green Building Platinum Standard Certification.
18	The compensation towards land is not adequate, which has to be increased. Stated that it is better to have an airport than having a mining site in the location	GoG has already declared additional 3 times compensation to the persons whose lands have been acquired for Mopa Airport project. Payment of this additional compensation has already been made to the persons who have already claimed initial compensation as per Land Acquisition Awards.	No further action is required.
19	<ul> <li>Houses are located within 10 Kms of the buffer zone. The study shows the presence of a bauxite ore located on the plateau. The area is ideal for an airport?</li> <li>A detailed study report has to be carried out at least of the two seasons of the ground water, the socio – cultural impact study has also to be carried out.</li> </ul>	<ul> <li>NOC has been obtained from Mining department</li> <li>EIA Study covers one season data of Groundwater and Socio cultural impact as per EIA Manual for Airports</li> </ul>	No further action is required. No further action is required.
20	Congratulated for conduct of environmental public hearing for the development of the Village of Mopa. Desired that the Village Panchayat of Allornabe taken	The existing natural water channels at the Project site will not be disturbed by channelizing the water flow from the airport to feed the water bodies so that ground water levels in the	The rain water harvesting has been implemented as per revised Plan approved by Water Resources

### GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
	into confidence in this project. The ground water aspects should be assessed properly of Allorna Village.	surrounding villages is not disturbed	Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021.
21	Jobs should be reserved for the persons who are losing land	• 1 person each from the displaced families has been provided employment by the Concessionaire. As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment. The Concessionaire is obligated to setup an Aviation Skill Development Centre to provide training to the local youth to become employable.	No further action is required.
	• The compensation for the land owners should be enhanced to Rs. 400/- per sq. mtr. The land disputes should be settled Local suggestions regarding bio- diversity should be taken into confidence. Rain water should be utilized for generation of electricity.	• GoG has declared 3 times additional compensation to the persons whose lands have been acquired. Wherever there are disputes in the land compensation claims the same are referred to the District Court as per land acquisition act 1894. Rain water harvesting is planned to replenish ground water levels.	No further action is required.
	• Desired that the affected farmers should be paid adequately.	<ul> <li>GoG has declared 3 times additional compensation to the affected land losers.</li> </ul>	No further action is required.
22	<ul> <li>Arrangements should be done for the supply of water to the farmers for their cultivation.</li> </ul>	<ul> <li>The existing natural water channels will not be disturbed by channelizing the water flow from the airport to feed the water bodies so that availability of water for cultivation is addressed.</li> </ul>	The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels.
	• Dust pollution during construction activity should be controlled.	• Dust pollution during construction activity will be controlled and the same is reflected in EIA Report.	Dust Control Management Plan was implemented during construction phase.
23	• The EIA report has not been available to the buffer affected zones and Gram Panchayat.	• The EIA report was available as per the requirements of the EIA Notification, to the local bodies and the concerned Government Authorities and Offices within whose jurisdiction the project is located.	No further action is required.
	• Desired to know why the report has not been made	• State pollution control board has coordinated the task of PH and no administrative unit of Maharashtra is falling in the	No further action is required.

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No	Public Hearing (Oral)	Responses submitted to EAC	Status
	available in Maharashtra.	development area	
	Desired that the Western Ghats have to be protected.	• The present proposed airport site is falling under Pernem taluka of North Goa district. The Pernem taluka has not been included in the Ecologically Sensitive Areas submitted by HLWG. The MoEF order on ESA is attached as Annexure XVI.	No further action is required.
	• The air traffic should not disturb the flora and fauna of the Western Ghats which is under threat.	• The air traffic will not disturb the flora and fauna of the region much. However, the noise generation in the night time may affect some bird movement.	No further action is required.
24	Cattle farming and plantation of the local people will be affected, which should be taken care of	Cattle farming and plantation of the local people of the buffer areas would not be affected. The settlements coming inside the core areas of the project will be rehabilitated as per Government of Goa compensation.	No further action is required.
	• The locals should be adequately compensated which is not done till date.	• Compensation is paid as per the awards passed by the concerned authority, besides additional 3 times compensation has been sanctioned by the GoG.	No further action is required.
	• The EIA study contain all flaws, which should have impartially contained all facts.	• EIA Report has been prepared as per relevant guidelines	No further action is required
25	• For the conduct of Environmental Public Hearing all contracts have been entrusted to the people from Kolhapur, then what guarantee is there that employment will be provided to the local people.	• 1 person each from the displaced families has been provided employment by the Concessionaire. As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment. The Concessionaire is obligated to setup an Aviation Skill Development Centre to provide training to the local youth to become employable.	No further action is required.
	<ul> <li>The number of trees to be affected by the proposed project have not been included in the report.</li> </ul>	<ul> <li>After enumeration 54,176 trees were felled after taking due permissions from the competent authorities and 500 trees have been identified for transplantation.</li> </ul>	Plantation of 5 lakh saplings by Goa State Bio-diversity Board has been completed. In addition, plantation of 51,000 saplings have been completed within the airport site. Trees translocation has been completed.
	• The area required for the Airport has not been declared. The excess land which Govt. acquired needs to be deleted specially in the SimechemAdvem.	No excess land has been acquired for the project	No further action is required.

#### **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

No	Public Hearing (Oral)	Responses submitted to EAC	Status
26	Supported the project as Goa's development will be based on the construction of the airport.	Noted	No further action is required.
27	Objected for the construction of the Golf course on the land earmarked for the Airport project. However, supported the project for the construction of the airport	There is no proposal for construction of Golf Course at the airport area.	There was no such proposal at that time.
25	Supported the proposal for the construction of the airport	Noted	No further action is required.
26	Supported the airport project but however, desired that adequate compensation be given to the affected people.	Compensation is paid as per the awards passed by the concerned authority, besides additional 3 times compensation has been sanctioned by the GoG.	No further action is required.
27	The problems related to Schools, water, farming and agriculture should be resolved. However, supported the construction of the airport.	Noted	No further action is required.
	• Adequate land compensation has not been paid to the affected people.	• Compensation is paid as per the awards passed by the concerned authority, besides additional 3 times compensation has been sanctioned by the GoG.	No further action is required.
28	<ul> <li>Further desired that guidelines for rain water harvesting be followed.</li> </ul>	• A dedicated Rain water harvesting project will be carried out.	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021.
29	Natural resources will be affected. The roads should be properly demarcated by following all the norms.	Natural channels of water flow feeding the water bodies will not be disturbed by suitably channelizing the water flow at the project site. A dedicated Rain water harvesting project will be carried out. Road demarcation and construction will be done as per norms.	The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm

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#### **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
			water runoff outflow from airport site connected to natural water channels.
30	Supported both the Airports Dabolim and Mopa but insisted that the locals should be trained and given job opportunities.	As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment. The Concessionaire is obligated to setup an Aviation Skill Development Centre to provide training to the local youth to become employable.	An Aviation Skill Development Centre (ASDC) has been set up at the airport.
31	Proper rates should be given for their acquired land. First preference for jobs should be given for the locals of this village. Locals should be given priority, opportunities.	Land compensation claims are paid by Special Land Acquisition Officer as per land acquisition awards. In addition, GoG has paid additional 3 times compensation to the land losers whose lands have been acquired and claims have been settled. As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment.	No further action is required.
32	Adequate compensation should be given to the land owners; preference should be given for locals with regard to employment opportunities.	Land compensation claims are paid by Special Land Acquisition Officer as per land acquisition awards. In addition, GoG has paid additional 3 times compensation to the land losers whose lands have been acquired and claims have been settled. As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment.	No further action is required.
33	Supported the proposal for the construction of the airport	Noted	No further action is required.
34	Supported the proposal for the construction of the airport, however care should be taken for conducting water harvesting.	Rain water harvesting is planned	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021.
35	Supported the proposal for the construction of the airport	Noted	No further action is required.
36			

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#### **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
	Compensation to the affected land owners should be adequate and proportionate. Attention should also be paid for the recharging of the ground water and soil which requires to be given due attention.	Land compensation claims are paid by Special Land Acquisition Officer as per land acquisition awards. In addition GoG has paid additional 3 times compensation to the land losers whose lands have been acquired and claims have been settled.	No further action is required.
37	The report ignores the wild life, and has omitted the springs, the flora the fauna and the fertile soil. Further sought to know why was the data collected from the survey conducted in 2011?	The flora and fauna data for the present site was collected during December 2013 to February 2014. Secondary resources, institutions like Goa University, Fisheries Department, Botanical Survey of India, Zoological Survey of India, Forest Department, Goa State Biodiversity Board were consulted while writing the report. The biological report was made with primary data collection in the field as well as available literature.	No further action is required.
38	Stated that the rate of compensation to the affected people is very less, which should be reasonable.	Land compensation claims are paid by Special Land Acquisition Officer as per land acquisition awards. In addition GoG has paid additional 3 times compensation to the land losers whose lands have been acquired and claims have been settled.	No further action is required.
39	The water table and the springs will be adversely affected.	Present Ground water level at Mopa is 5 – 10 mbgl (Annexure IV). To maintain the recharging of Ground water level after construction of the proposed Airport a Rain Water Harvesting system as given in Annexure II & III of EIA Report will be developed. The runoff inside the Airport area will be collected through storm water drains and will be routed to the nearest surface water body. There by, there will be no impact on ground & surface water resources.	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021.The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels.
40	Failed to meet the requirements of the Wild Life Act, 1972	The species belong to Schedule-I category of WPA, 1972 are mentioned in the EIA report.	No further action is required.
41	Supported the proposal for the construction of the airport	Noted	No further action is required.

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No	Public Hearing (Oral)	Responses submitted to EAC	Status
42	The destruction of the water tables / springs in every village has to be assessed and proper remedial measures have to be proposed.	Present Ground water level at Mopa is 5 – 10 mbgl (Annexure IV). To maintain the recharging of Ground water level after construction of the proposed Airport a Rain Water Harvesting system as given in Annexure II & III of EIA Report will be developed. The runoff inside the Airport area will be collected through storm water drains and will be routed to the nearest surface water body. There by, there will be no impact on ground & surface water resources.	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021. The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels.
43	The dhangar families living in the earmarked land for the proposed project should be properly compensated, since they are not having proper records of their lands, although they were residing in the area for centuries.	Out of 15 Project Affected Families, 14 have been rehabilitated and 1 family has claimed compensation.	No further action is required.
44	Supported the proposal for the construction of the airport	Noted	No further action is required.
	• Guidance Manual, points out that stress should be given to the location. The EIA has not taken the location of the project in consideration. The plateau is located close to the Western Ghats.	• The present proposed airport site is falling under Pernem taluka of North Goa district. The Pernem taluka has not been included in the Ecologically Sensitive Areas submitted by HLWG.	No further action is required.
45	• EIA fails to reflect the impact on Tillari dam.	<ul> <li>No objection certificate from GOG dated 30.01.2015 to withdraw 5 MLD of water from Right Bank Main canal of Tillari Project is obtained. Tillari dam is beyond 15 Kms from the project site.</li> </ul>	No further action is required.
	• The Dodamarg Wild Life sanctuary has been sanitized by the Hon. High Court. Adequate permissions from the Chief Wild Life warden have not been obtained.	• Bombay High Court has ordered the Maharashtra Government to declare the DodamargSawantwadi wildlife corridor an ecologically sensitive area. MoEF has not declared the region as a Wildlife Sanctuary so far. Moreover, the present project is not a part of this wildlife corridor.	No further action is required.

#### **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
46	The project proponent has ignored the fact that the site is having bauxite ore, 43 perennial springs which support farming and agriculture and fisheries of Chapora and Tiracol rivers.	NOC has been obtained from Mining department for construction of Airport. Agricultural activities and fisheries of this region will not be affected by these project activities. Natural channels of water flow feeding the water bodies will not be disturbed by suitably channelizing the water flow at the project site.	No further action is required.
47	The socio-cultural impact on the State of Maharashtra has been ignored in the report.	The contours of the project area border the neighboring state of Maharashtra. The land is mainly non-cultivable used largely by interstate migratory populace herding cattle. This inter-state migratory segment of the population would also benefit by way of employment and increased income opportunities arising from the project including tourism, transportation and communications.	No further action is required.
48	Medicinal use of the plants has also not been reflected in the report.	Medicinal plants of this region are included in the EIA report.	The Goa State Bio-diversity Board has provided details of medicinal use of the plants vide letter No. 6-1- 2020/GSBB/ISS/140 dated 20-07- 2020.
49	The Terms of Reference has expired in May, 2014 which is invalid	Validity of the TOR has been extended by one year up to $31^{st}$ May, 2015.	No further action is required.
50	Forest Clearance has not been obtained and the Other Backward Community has not been included in the Report	Stage I and II Forest Clearance for an area of 1133 sq. mts.has been obtained under FCA, 1980 for approach lighting system. For an area of about 25,000 sq. mts. in the approach road alignment, FCA clearance will be obtained.	No further action is required. 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.Dedicated 6 lane access control expressway connectivity is constructed & operational.

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The Manual requires Litigation to be mentioned in the EIA Report, but it does not mention ongoing litigation regarding land acquisition.	There is no litigation regarding land acquisition.	No further action is required.
The approach lighting extends 100s of meters beyond the edge of the plateau, making it technically not feasible.	For an area of 1133 sq. mtrs (length 250 meters) for approach lighting system stage I & stage II clearance has been obtained under FCA 1980	No further action is required.
The sacred groves of the area have not been described including the Barazan which will be lost.	To ensure that the Sacred groove (Barazan) is protected and kept untouched. It has been culled out of the project area to give unhindered access to the villagers.	No further action is required.
The socio economic aspect of the community is our greatest wealth.	As per the Environment Management Plan in the EIA Study, the local population will benefit from employment and income generating opportunities both during the construction and operational phases of the project. Further, it has been suggested that local population is to be employed to the extent possible. The socio economic impacts including increase in tourism, transportation, communication, employment generation, and revenue income to state government would have positive impacts for the local population enabling increased economic activities and enhancement of wealth in the area.	No further action is required.
Supported the proposal for the construction of the airport	Noted	No further action is required.
The land owners should be adequately compensated and precautions should be taken to safeguard springs.	Land compensation claims are paid by Special Land Acquisition Officer as per land acquisition awards. In addition, GoG has paid additional 3 times compensation to the land losers whose lands have been acquired and claims have been settled. The existing natural water channels at the Project site will not be disturbed by channelizing the water flow from the airport to feed the water bodies.	No further action is required. The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10-
               	EIA Report, but it does not mention ongoing litigation regarding land acquisition. The approach lighting extends 100s of meters beyond the edge of the plateau, making it technically not feasible. The sacred groves of the area have not been described including the Barazan which will be lost. The socio economic aspect of the community is our greatest wealth. Supported the proposal for the construction of the airport	ELA Report, but it does not mention ongoing litigation regarding land acquisition. The approach lighting extends 100s of meters beyond the edge of the plateau, making it technically not feasible. The sacred groves of the area have not been described including the Barazan which will be lost. The socio economic aspect of the community is our greatest wealth. The socio economic aspect of the community is our greatest wealth. Supported the proposal for the construction of the airport The land owners should be taken to safeguard springs. Under FCA 1980 The sacred groves (Barazan) is protected and kept untouched. It has been culled out of the project area to give unhindered access to the villagers. The socio economic aspect of the community is our greatest wealth. Supported the proposal for the construction of the airport The land owners should be taken to safeguard springs.

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
			02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels.
57	Supported the proposal for the construction of the airport	Noted	No further action is required.
58	• That the issues raised at the hearing namely environment issues and land related issues should be addressed in detail by the Government. Stated that all the issues are to be considered and resolved by the Government.	<ul> <li>All the issues are considered for resolution. Additional 3 times compensation is declared to the land losers.</li> <li>1 person each from the displaced families has been provided employment by the Concessionaire.</li> <li>As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment. The Concessionaire is obligated to setup an Aviation Skill Development Centre to provide training to the local youth to become employable. Environmental issues are being addressed.</li> </ul>	No further action is required. No further action is required. An Aviation Skill Development Centre (ASDC) has been set up at the airport.
59	Stated that he resides at Dhangarvaddo his livelihood by way of agriculture and rearing of livestock. Stated that the airport project will cause huge loss to livelihood.	1 person each from the displaced families has been provided employment by the Concessionaire. 14 Project Affected families have been rehabilitated with a house, cowshed to each family and common area for grazing of livestock.	No further action is required.
60	<ul> <li>Stated that the Airport project will cause destruction of standing crops.</li> <li>Stated that the airport project will cause destruction of water resources.</li> <li>Stated that the KamdhenuYojana Scheme will be affected if the project takes off, and milk production will also be affected. Stated that local population is uneducated and will not be able to get employment in the Airport project.</li> </ul>	<ul> <li>The proposed airport project will not hamper the standing crops as the flight movement is restricted to certain areas.</li> <li>Proper Solid &amp; Hazardous Management plan will be adopted to avoid any ground water contamination through leachates.</li> <li>The Concessionaire is obligated to setup an Aviation Skill Development Centre to provide training to the local youth to become employable.</li> </ul>	No further action is required. Integrated Solid Waste Management Plan approved by Goa State Pollution Control Board is being implemented. An Aviation Skill Development Centre (ASDC) has been set up at the airport.

Νο	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
61	Stated that the airport project will cause destruction of the environment and agriculture in the area.	For construction of airport, 54,176 trees have been felled by taking necessary permission from competent authority and 500 trees are identified for transplantation. Afforestation of 10 times the number of trees felled is planned over a period of 5 years, which will enhance the overall green cover of the state. A Budget with capital & Recurring cost is also considered for executing the Environmental Management Plan and is mention in section 10.5 of EIA Report.	Plantation of 5 lakh saplings by Goa State Bio-diversity Board has been completed. In addition, plantation of 51,000 saplings has been completed within the airport site.
	<ul> <li>Stated that airport project will cause serious problems in supply of water and electricity to the local residents.</li> </ul>	<ul> <li>Permission to draw 5MLD of water from Right Bank Main Canal of Tillari Irrigation Project and 220 KV from State grid have already been obtained.</li> </ul>	Water supply pipeline has been provided to airport project. Water is being pumped into water storage tanks at site.
62	<ul> <li>Stated that the project will cause destruction of agriculture in the area.</li> <li>Stated that the Government will be required to provide adequate employment to the local residents.</li> </ul>	<ul> <li>There will be no impact on agricultural land due to proposed project.</li> <li>There will be many employments opportunities' from the proposed Airport and its associated development.</li> </ul>	No further action is required. No further action is required.
	• Submitted that there are 5 issues namely environment, land, construction of airport, development of Pernem Taluka and development of youth of Mopa. Stated that this issue should not lead to North - South divide in the State.	• All the issues are considered for resolution. Additional 3 times compensation is declared to the land losers.	Water supply pipeline has been provided to the airport project. Water is being pumped into water storage tanks at site.
		• 1 person each from the displaced families has been provided employment by the Concessionaire.	No further action is required.
63		• As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment.	No further action is required.
		• The Concessionaire is obligated to setup an Aviation Skill Development Centre to provide training to the local youth to become employable.	An Aviation Skill Development Centre (ASDC) has been set up at the airport.
		• Environmental Management Plan is included in the EIA report. All the conditions stipulated by the MoEF& CC in EC and additional conditions of NGT will be complied.	No further action is required.

# **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

Νο	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
	<ul> <li>Stated that there should be adequate safeguards during construction of the airport to protect the environment.</li> </ul>	• All safety measures will be taken during construction and operation of the Proposed Mopa Airport. A detailed study on Disaster Management Plan for Airport has also been carried out and is attached along with EIA Report as Annexure VI.	No further action is required.
	• Stated that compensation to the affected farmers/landowners should be adequate.	• Additional 3 times compensation is declared to the land losers.	No further action is required.
	• Stated that the airport which will be constructed is a Greenfield airport. Stated that the airport is required for development of the State as especially Tourism sector. Stated that the airport will create employment for the locals.	<ul> <li>The project will create employment opportunities for the locals.</li> </ul>	No further action is required.
64	Stated that due to the project and land acquired for the same he has lost all his fields and property. Stated that in spite of being an affected person, he has not been adequately compensated by the Government.	Additional 3 times compensation is declared to the land losers.	No further action is required.
65	Stated that the EIA report was made available in all the affected Village Panchayats. Stated that with regard to para 2.1 of the EIA report regarding air pollution he has suggestion that an independent office should be set up at Pernem to control pollution that will be caused due to operation of the project.	Post project monitoring will be carried out by project proponent as mentioned in EIA Report.	Environmental quality monitoring is being done.
66	Stated that he has large number of livestock including goats, cows, etc. Stated that if the project is constructed he will lose all the livestock. Stated that if the project takes place, the forest in the area will be destroyed including the unique medicinal plants available in the forests. Requested the Govt. to consider these issues.	The surrounding villages in the buffer areas will not be hampered by the project activities. The livestock of the surrounding villages will graze in the surrounding grassland and forests. The important medicinal plants, if any, found at site will be shifted to the greenbelt of proposed airport.	No further action is required. The Goa State Bio-diversity board has transplanted 20 medicinal plant
			species at GSBCC campus, as communicated vide their e-mail dated 04-02-2019 and letter No. 6-1-

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# GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA

No	Public Hearing (Oral)	<b>Responses submitted to EAC</b>	Status
			2020/GSBB/ISS/140 dated 20-07- 2020.
	• Stated that EIA report falsely states that the plateau in question is flat and slopes on the side. The report does not state the reality as there are cashew plantations on the slopes.	• The land acquisition awards have covered compensation for trees including cashew plantations. The cashew plantations on the slopes outside the project area will not be affected.	No further action is required.
	• Stated that the EIA report refers to setting up of a business center and the golf course. This needs to be clarified.	• EIA report does not refer to setting up of any business center and golf course.	There was no such proposal at that time.
67	• Stated that the data used in the report has been submitted by the project proponent. States that this is wrong as the State Government is the interested party and its data will be biased. Stated that this data should have been submitted by an independent authority like Goa University. Stated that the EIA report should have been prepared by a local college or university and not by an agency from Ghaziabad. Stated that the affected area falling in Maharashtra has not been studied in the EIA report.	<ul> <li>A fresh baseline data has been collected during the period of November 2014 to January 2015. A comparative study is made and the same is depicted in EIA Report. The project proponent submitted that no further area will be acquired for the project. The project proponent submitted that a local college/university could not be permitted to prepare the EIA report as they are not MoEF/NABET accredited Consultant.</li> </ul>	No further action is required.
	• Stated that the EIA report also mentions the names of the animals inaccurately e.g. Bengal Fox	• The Bengal Fox (Vulpesbengalensis) which is also known as Indian Fox mentioned correctly in the EIA report.	No further action is required.
68	The slopes of plateau have huge cashew plantations of nearly 40 lakh cashew trees which give income of nearly Rs. 50 crores per annum.	The EIA report already mentioned the cashew trees in the study area and there will be no impact due to project activities.	No further action is required.
69	The study has not been done in Maharashtra in the 10 km. radius of the proposed project	The study covers the ecologically sensitive parameters within 15 Kms radius and study area of 10 Kms including Maharashtra for various other parameters as per the guidelines.	No further action is required.
70	• Stated that his land has been acquired on account of the project. Stated that he has not taken compensation offered by the Government as the same is less.	Additional 3 times compensation is declared to the land losers.	No further action is required.
70	• Stated that Water sources in the area will not be affected by the project. Stated that cultivation of cash crops i.e. cashew will not be affected by the project. Stated that this project is required for the	The land acquisition awards have covered compensation for trees including cashew plantations.	No further action is required.

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No	Public Hearing (Oral)	Responses submitted to EAC	Status
	development of the Pernem Taluka. Submitted that it is wrong to say that the locals of Pernem Taluka are opposed to the project.		
71	Stated that similar projects are constructed across the World without any issues, there is no reason why this project cannot be successfully implemented in Goa, after adopting adequate measures to safeguard environment in a planned manner.	The project is being implemented in a planned manner.	No further action is required.
	• Submitted that the animals and the wild life in the proposed area need to be protected. Stated that peacocks are also present in the area which needs to be protected.	• Wildlife management plan will be followed in consultation with State Forest Department.	Forest Department, Government of Goa has approved the Wildlife Management Plan vide letter No. 134/DOCA/EC/WMP/2020/1991 dated 27-08-2020.
72		• Airport Concessionaire will address wildlife hazard management as per the prescribed procedure of DGCA vide their circular No. 6 of 2017, dtd. 04 <sup>th</sup> Aug, 2017.	Bird Aircraft Strike Hazard Management (BASHM) cell has been set up to address the same.
	• Stated that the herbal medicines and the various plants species are available in the forests of the affected area and that these need to be protected. Submitted his objection to the project.	• Indian Peafowl is found and mentioned in the EIA report. 15 Species of medicinal plant species transplanted.	No further action is required.
	• Stated that the sewage water generated from the project will enter the Chandel Village.	• A STP will be established during construction phase of the project itself and the same will be extended for operation phase of the Airport. Thereby no sewage will enter Chandel Village.	STP has been established and in operation.
73	• Stated that the youth of the affected village are not educated and the government will have to explain as to how these uneducated youths will get employment in the airport project. Stated that the Airport is of the Central Government Project and not the State Government project. Stated that if agriculture is destroyed due to the project and the youth are unable to get employment then they will not survive in the future.	• 1 person each from the displaced families has been provided employment by the Concessionaire. As per the Concession Agreement, the Concessionaire is obligated to give preference to bonafideGoans in employment. The Concessionaire is obligated to setup an Aviation Skill Development Centre to provide training to the local youth to become employable.	No further action is required.

No	Public Hearing (Oral)	Responses submitted to EAC	Status
74	<ul> <li>Stated that the solid waste management facility of the project will have to be studied in detail and strictly implemented in order to control the solid waste generated from the project.</li> <li>Further stated that the project will have to be studied in detail and strictly implemented in order to control the solid waste generated from the project.</li> </ul>	<ul> <li>Solid waste collected during operation phase will be disposed in disposal facility owned by Government of Goa.</li> <li>Hazardous waste management: From Airport, used oil, lubricants, electronic wastes shall be generated and the same shall be disposed through SPCB authorized re-processor. Used batteries will be given to dealer as part of buy back arrangement.</li> </ul>	Integrated Solid Waste Management Plan approved by Goa State Pollution Control Board is being implemented. Integrated Solid Waste Management Plan approved by Goa State Pollution Control Board is being implemented to address.
75	Submitted his total support to the project. Stated that various objections raised by the public at the hearing will have to be considered by the government	Noted	No further action is required.
76	Stated that it is the first time in Goa that such an efficient and successful public hearing has been conducted. Stated that this public hearing has enabled the affected people to place their views before the committee	Noted	No further action is required.

#### **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

No	Public Hearing (Written submission)	Responses submitted to EAC	Status
01	Proposed Mopa airport location consists of Agricultural lands owned by locals.	As per Land use map of Goa State, Remote sensing center, proposed Airport location is covered with 55% scrubs, 8% scrub forest, 22% Barren rocky area. Only 15 % is covered with Kharif& Plantations.	No further action is required.
02	Mopa Plateau contains huge water store & springs. Construction of Mopa Airport would permanently destroy the ground water store and run the dependent water bodies dry's.		The Champ and a large here here
03	The springs of Shedichozoro, Nanyache and Vazar provide perennial drinking water	Present Ground water level at Mopa is 5 – 10 mbgl (Annexure IV). To maintain the recharging of Ground water level after construction of the proposed Airport a Rain Water Harvesting system as given in Annexure II & III of EIA Report will be developed. The runoff inside the Airport area will be collected	The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels. The rain water harvesting has been implemented as per revised Plan
04	The spring near Rastolider temple provide perennial drinking water		
05	What is the plan for ground water replenishment	through storm water drains and will be routed to the nearest surface water body. There by, there will be no impact on ground & surface water resources.	approved by Water Resources Department (WRD) vide letter No. 9/3/EO/WRD/2020-21/527 dated 10-
06	Tulaskarwadi is located adjoining major perennial springs along the steep slopes of a valley. Water of perennial springs is used for drinking and irrigation		02-2021.
07	No hydrological studies have been carried out by the project proponent		
08	The report does not mention even a single perennial source of water from Plateau.	It is mentioned in EIA Report of section 2.1 of chapter 2.	No further action is required.
09	Tillari which is to provide water for irrigation purposes is proposed to provide water construction of Airport. This will cause tremendous water shortage	Mopa Airport will consume water only within the permissible limit	No further action is required.

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No	Public Hearing (Written submission)	<b>Responses submitted to EAC</b>	Status
10	Need to know long term measures on wildlife	Wildlife management plan will be followed in consultation with	Forest Department, Government of Goa has approved the Wildlife
11	In Mopa, there exists wide range of butterflies, moths, insects, reptiles, birds & mammals.	State Forest Department	Management Plan vide letter No. 134/DOCA/EC/WMP/2020/1991 dated 27-08-2020.
12	The collection of fodder from plateau which is a major economic activity on the plateau is missed in the report. Livelihood and business will be damaged if the fodder supply is stopped on account of construction of the airport.	The Project will have multiplier effect on the economy of the state generating significant employment and allied economic opportunities, which will benefit the local population in particular and Goans in general	No further action is required.
13	Time period for biological survey should be one year	Survey was conducted for one season as per approved TOR	No further action is required.
14	IUCN Status of floral species not mentioned	Considering the IUCN status evaluation has been done	No further action is required.
15	Accidents of bison in study area	Evaluation of impacts has been done considering all relevant human activities during both construction and operation phases	No further action is required.
16	Listing of schedule, I / II species	Based on survey all relevant species are included.	No further action is required.
17	Ignorance of grazing ground	1 person each from the displaced families has been provided employment by the Concessionaire. 14 Project Affected families have been rehabilitated with a house, cowshed to each family and common area for grazing of livestock	No further action is required.
18	Listing of ecological sensitive zone of Mopa	The Mopa Airport project area is not identified as Ecologically Sensitive Zone	No further action is required.
19	Airport construction will destroy the medicinal plants	Some species of medicinal plants have been conserved and planted in the campus of Goa state biodiversity board	No further action is required.

Νο	Public Hearing (Written submission)	<b>Responses submitted to EAC</b>	Status
20	No hydrological studies have been carried out by the project proponents'	Detailed hydrological assessment in terms of catchment area mapping estimation of runoff is included	No further action is required.
21	What is the plan to ensure the permanent protection of forest ?	For construction of airport, 54,176 trees have been felled by taking necessary permission from competent authority and 500 trees are identified for transplantation. Afforestation of 10 times the number of trees felled is planned over a period of 5 years, which will enhance the overall green cover of the state. A Budget with capital & Recurring cost is also considered for executing the Environmental Management Plan and is mention in section 10.5 of EIA Report.	Plantation of 5 lakh saplings by Goa State Bio-diversity Board has been completed. In addition, plantation of 51,000 saplings has been completed within the airport site.
22	Destruction of Religious sites	No religious site will be destructed. Considering religious sentiments, the sacred groove (Barazan) is protected and kept out of the project boundary ensuring unhindered access to the villagers	No further action is required.
23	Water management for project is not convincing. When existing water supply not sufficient How it can be used for Airport	Rain water harvesting system will be adopted to maintain the water balance.	The rain water harvesting has been implemented as per revised Plan approved by Water Resources Department (WRD) vide letter No.
24	Tillari irrigation canal belongs to the farmers and cannot be diverted to other uses under any circumstances	No objection certificate from GOG dated 30.01.2015 to withdraw 5 mld of water from Right Bank Main canal of Tillari Project is attached.	9/3/EO/WRD/2020-21/527 dated 10- 02-2021. Water supply pipeline has been providedto the airport project.Water is being pumped into water storage tanks at site.
25	The report states that the land use around the plateau is mostly nonagricultural but it is completely agricultural land.	As per Landuse map of Goa State Remote sensing center, proposed Airport location is covered with 55% scrubs, 8% scrub	No further action is required.
26	The study of land use of the entire study area is not carried out	forest, 22% Barren rocky area. Only 15 % is covered with Kharif& Plantations.	

No	Public Hearing (Written submission)	<b>Responses submitted to EAC</b>	Status
27	What will happen to bauxite deposits?	NOC has been obtained from Mining department for construction of airport	No further action is required.
28	Most important religious site like Barazan, DattatreyaDevasthan etc. will be destroyed	No religious site will be destructed. Considering religious sentiments, the sacred groove (Barazan) is protected and kept out of the project boundary ensuring unhindered access to the villagers.	No further action is required.
29	We are connected with the neighboring village of casarvanem, chandel, Hali, Mopa, Tambose, Ugeum etc. If Airport is constructed, these traditional paths are closed and our economic and social exchanges will be severely affected	No connectivity will be spoiled due to development of Airport. Instead, an approach road from NH-17 to Mopa Airport Site has been proposed.	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.Dedicated 6 lane access control expressway connectivity is constructed & operational.
30	The executive summary is supposed to provide the overall justification for implementation of the project and its mitigation measures.	Executive summary includes environmental impacts and mitigation measures	No further action is required.
31	Baseline data collected was three years older	A fresh baseline data has been collected during the period of November 2014 to January 2015. A comparative study is made and the same is depicted in EIA Report.	No further action is required.
32	Baseline should have been conducted over a period of at least one year	As per Airport Guidance Manual, one season data other than monsoon is acceptable	No further action is required.
33	EIA consultant neglected their professional duties by accepting data collected by a laboratory which is not authorized to collect	M/s. EMTRC Lab had collected the baseline and it was accredited during the period of study.	No further action is required.

#### **GREENFIELD INTERNATIONAL AIRPORT, MOPA, GOA**

No	Public Hearing (Written submission)	Responses submitted to EAC	Status
34	Airport is proposed within western Ghats which is already divested	The present proposed airport site is falling under Pernem taluka of North Goa district. The Pernem taluka has not been included in the Ecologically Sensitive Areas submitted by HLWG.	No further action is required.
35	The report does not consider the impact of waste water generated during construction phase	STP shall be developed during construction phase itself and will be upgraded to design capacity of each phase.	STP has been established & in operation.
36	No estimates are provided for the amount of cutting and filling	$\sim$ 11.7 million CUM cut & 10.0 million CUM fill (cut & fill put together)	No further action is required.
37	EIA Study has not been conducted in the area falling state Maharashtra	The study covers the ecologically sensitive parameters within 15 Kms radius and study area of 10 Kms including Maharashtra for various other parameters as per the guidelines.	No further action is required.
38	EIA Report states biological study is conducted based on secondary sources. No reference for the same is provided in the report.	References are included in the final EIA Report	No further action is required.
39	No geological study has been conducted	Geotechnical studies, Aerial Lidar & Physical survey of the project site completed	No further action is required.
40	Insufficient data on micro meteorology. The data is needed for at least 5 years with a time daily record in time series method.	Primary meteorology data has been used for the study	No further action is required.
41	There is no data in six affected villages of Varconda, Casarvanem, Amberem, Uguem, Mopa and Chandel as per census 2011	Census of the complete Goa is considered in the study	No further action is required.
42	ShemecheAdvan has 34 homes all of which lie within the valley surrounding the springs. The construction of airport will totally displace all of the residence due to the loss of springs, loss of agriculture	<ul> <li>Natural channels of water flow feeding the water bodies will not be disturbed by suitably channelizing the water flow at the project site.</li> </ul>	The Storm water drainage has been implemented as per revised plan approved by WRD vide letter No. 9/3/EO/WRD/2020-21/527 dated 10- 02-2021, to channelize the storm water runoff outflow from airport site connected to natural water channels.

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# <u>ANNEXURE – 4</u>

# ENVIRONMENTAL EXPENDITURE DURING PERIOD OF APRIL 2024 TO SEPTEMBER 2024

	Note: All cost exp	enditures are in INR Crore.		
No.	Particulars	Total EXPENSES during Apr 2024 to Sep 2024 (in INR Crore)		
1	AAQ & Noise Levels Monitoring (in Goa & Maharashtra States including CAAQMS)	0.258		
2	Indoor Air Quality Monitoring	0.012		
3	Dust suppression through tankers	0.050		
4	O&M of 150 KLD labour colony STP	0.200		
5	Occupational health surveillance of workmen	0.028		
6	Environment Management Cell (EMC) set up	0.028		
7	Hazardous Waste Management	0.003		
8	Solid Waste Management	0.998		
9	Construction Debris Management	0.559		
10	Vacuum Tanker (Portable toilets at site)	0.294		
11	Environmental Compliance Monitoring by NEERI	0.201		
12	Aviation Noise Monitoring Terminal units (NMT)	0.145		
13	O&M of 625 KLD STP & WTP	0.301		
14	Landscaping & Horticulture	7.571		
15	Miyawaki Tree Plantation	2.232		
16	Miscellaneous	0.144		
	TOTAL	13.024		



# <u>ANNEXURE – 5</u>

# Environmental Statement for FY 2023-2024 in Form-V



GOA	Goa		Online Cor	nsent Manag	ement l	& Monitoring	g System			1	8	386 🍘
	State Pollution Control Board			Ministry of Environme Gover	ent. Forest an mment of Indi					all	9	सायमेव जयते
Ноте	Consent Management	Lab Manageme	ent Amend	ment BANK	GURANTE	E Environ	nental Statem	ent	Moni	itoring Rep	oort	Logout
Delet Enviror Send u	Environment Statement te In-Progress nment Statement uggestions			Þ							-	
	re for any kind laints or query	Welcome GMR (	Goa Internationa	al Airport Limited					53574	1/42357/69	Date : 2	8-8-202
		Environmental	l Statement D	etails								
		Environmental Statement id	Industry Name	Environment Statement Financial Period	Industry District	Year of establishment	Date of Submission	Query	Query Reply	Verified	Raw Ma consur Attach	nption
		2390572	GMR Goa International Airport Limited	2023-2024	NORTH GOA	2022	2024-08-28 17:19:48.927			Not Mention Yet	View Do	ocumen
		<u>1904981</u>	GMR Goa International Airport Limited	2022-2023	NORTH GOA	2022	2023-09-14 10:41:25.944			Not Mention Yet	View Do	ocumen



#### GOA STATE POLLUTION CONTROL BOARD

FORM V

(See Rule 14)

Environmental Statement for the financial year ending on 31st March on or before 30th of September every year.

		PA	RT A	
(i)	Name and address of the owne the industry operation or proce		:	Sheshan R. V.
( <b>ii</b> )	Industry category Primary-(ST Secondary-(STC Code)	C Code)	:	RED, Airports and Commercial Air Strips
( <b>iii</b> )	Production capacity		:	Not Applicable Numbers/Year
Prod	luction Name	<b>Production Ca</b>	apacity	<b>Production Unit</b>
Prod (iv)	<b>luction Name</b> Year of establishment	Production Ca	apacity :	Production Unit Manohar International Airport, Goa started scheduled commercial operations from 5th January 2023

#### PART B

1. Water consumption m3/d

Process :

Cooling :

Domestic :

Name of products	Process water consumption per unit of product output		
	During the previous financial year	During the current financial year	
Airport Operation and Maintenance	1,605 KLD (Including domestic, cooling, flushing & irrigation during the period from 5th January 2023 to 31st March 2023)	1,254 KLD (Including domestic, cooling, flushing & irrigation during the period from 1st April 2024 to 31st March 2024)	

#### 2. Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit		
		During the previous financial year	During the current financial year	
Nil	Nil	Nil	Nil	

\*Industry may use codes if disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw material used.

#### PART C

Pollution discharged to environment/ unit of output.

Pollution	Quantity of pollutants discharged(mass/day)	Concentration of pollutants in discharges(mass/volu me)	Percentage of variation from prescribed standards with reasons
Water			
Water	Nil	Airport adopted Zero Liquid Discharge Policy. Entire sewage/effluent is treated in 625 KLD sewage treatment plant established within the airport premises.	0% variation from the prescribed standards. Sewage/effluent quality is monitored through MoEF&CC approved environmental laboratory. Environmental quality monitoring reports are attached as Annexure- I
Air			
Air	Details are provided in the Annexure-II (attached). All three Diesel Generator sets (stack height of 30 m) are used as a standby for emergency purpose.	Details are provided in the Annexure-II (attached). The concentration of the pollutants are well within the GSPCB permissible norms.	0% variation from the prescribed standards. DG sets stack emission parameters are monitored through MoEF&CC approved environmental laboratory. Reports are attached as Annexure- I.

Name of Pollutants : Not Applicable.

## PART D Hazardous Wastes

(as specified under Hazardous Wastes (Management and Handling) Rules, 1989)

Hazardous Wastes	Total Quantity (Kg)			
	During the previous financial year	During the current financial year		
(a) From process	Nil	2000 kg (Including Cat. 5.1, 33.1 and 33.2)		
(b) From pollution control facilities	NA	NA		

# PART E

# Solid Wastes

Total Quantity		
During the previous financial year	During the current financial year	

(a) From process	22,510 Kg during the period from 5th January 2023 to 31st March 2023 (Food Waste, Plastic, Metal, Glass, Paper, etc. from airport operations)	1,18,275 Kg during the period from 1st April 2023 to 31st March 2024. (Food Waste, Plastic, Metal, Glass, Paper, etc. from airport operations)
(b) From pollution control facility	NA	NA
(c)(1) Quantity recycled or re-utilised within the unit	14,610 Kg (Food waste converted as compost)	79,441 kg (Food waste converted as compost)
(2) Sold	7470 kg (plastic, paper, metal and glass scrap sold to authorized recyclers)	34,270 kg (plastic, paper, metal and glass scrap sold to authorized recyclers)
(3) Disposed	430 kg (Refused Derived Fuel disposed to Goa Waste Management Corporation)	4,564 kg (Refused Derived Fuel disposed to Goa Waste Management Corporation)

#### PART F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes Total 2000 kg of hazardous waste was generated (including cat. 5.1, 33.1 & 33.2) during FY 2023-24.

Arrangement has been made for the storage and disposal of category-wise hazardous wastes (category 5.1, 33.1 & 33.2) through manifest system.

Membership has been taken with M/s. Goa Industries Environment Management Association for disposal of hazardous waste. Consequently, Agreement has been made with M/s. Ponda Envocare Limited for disposal of hazardous waste in Common Hazardous Waste Treatment & Disposal Facility in Goa State.

Solid Waste generated during FY2023-24 is as below:

Total Bio-degradable/Food Waste (79,441 Kg) processed through Organic Waste Composter and used as manure within airport premises.

Total Non-Biodegradable Recyclable Waste (34,270 Kg) sent to the authorized recyclers for recycling. Total Non-Biodegradable non-recyclable waste (4,564.20 Kg) was bailed as Refused Derived Fuel (RDF) in the bailing machine & sent to Goa Waste Management Corporation (GWMC).

#### PART G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production 100% of treated sewage/effluent has been recycled & reused for toilet flushing, cooling tower makeup & irrigation within the airport premises.

This has resulted in significant reduction in the fresh raw water consumption and corresponding cost savings during FY2023-24.

#### PART H

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution Integrated Solid Waste Management Facility, equipped with Organic Waste Converter, Bailing Machine, Manual Segregation System & Electric Vehicles for waste collection. The entire solid waste management is being managed through a professional third party waste management agency.

Night Soil Pit is provided on the airside for collecting sewage from Aircrafts, which is further pumped to 625 KLD STP for treatment and recycling. Airside Waste Transfer Station has been established on the airside to collect solid waste from aircrafts.

State of the art Sewage Treatment Plant on the landside, Oil Water Separator on the airside, Storm water drainage system across the airport complex with in-line rainwater harvesting pits, acoustic enclosure to the DG sets, concrete/asphalted road network across the airport complex, avenue plantation, landscaping, etc. has been provided.

Passenger Terminal Building has been designed and constructed as per Green Building concepts, which is certified with IGBC Platinum Standard.

## PART I

Any other particulars for improving the quality of the environment GGIAL along with the stakeholders have adopted following measures to improve the quality of environment.

- 5 MWp Solar Power Plant is installed & operational within the Airport Premises.
- Use of Bridge Mounted Equipment (Pre-Conditioned Air and Ground Power Unit)
- Single Engine Taxing In & Out,
- 100% use of LED lighting system across the Airport complex
- GHG Scope-1 and Scope-2 emissions tracking
- 2 nos. of dedicated heavy duty Road Sweeping Machines
- Prohibition of Single Use Plastic (SUP)
- Landscape development & Tree Plantation
- Ground Water Recharging through in-line rainwater harvesting pits
- Environmental Promotional Campaigns, Trainings & Awareness

- Electrical Vehicle/Bus for public/passenger transport by Kadamba Transport Corporation Limited (KTCL), GoG

- 1 number Continuous Ambient Air Quality Monitoring Station (CAAQMS) within the airport premises & 2 nos. of online real-time Noise Monitoring Terminals in the airport funnel zone are installed to monitor online ambient air quality parameters & online noise levels respectively.

- Noise Levels & hazardous waste generation quantities are displayed on Online Display System at the airport entry.

Ambient Air Quality Monitoring is being carried out inside & outside the Airport (6 locations in Goa State & 3 locations in Maharashtra State)

Ambient Noise Level Monitoring is being carried out inside and outside the Airport (9 locations in Goa Sate & 3 locations in Maharashtra State)

Besides above, DG sets stack emissions monitoring, ground water, drinking water and storm water quality are being monitored through MoEF&CC & NABL approved environmental laboratory.

Remarks : GGIAL's Passenger Terminal Building (PTB) is awarded with Platinum Standard Certification for New Building by Indian Green Building Council (IGBC), for embracing various resources conservation and efficiency practices (energy, water, waste water, passive architecture, natural light, ventilation, waste minimization, etc.)

GGIAL is awarded with Construction Industry Development Council's under Planning Commission (NITI Aayog), GoI - 14th Vishwakarma Awards 2023 under the categories of "Best Construction Project" and "Construction HSE Award".

GGIAL is awarded with 21st Annual Greentech Safety Award 2023 by Greentech Foundation, New Delhi under the category of "Construction Safety".

GGIAL received Plaque of Excellence in recognition of being adjudged 2nd Place in the "Best Environmental Practices" Competition organised by Goa State Pollution Control Board (GSPCB) on the occasion of World Environment Day, 5th June 2023.

GGIAL received International Airport Review's The Sustainable Airport Award 2023 (Highly Commendable) under "Strategy, Culture & Ethos" Category during International Airport Summit- 2023 at London, UK.

GGIAL is recognised with Health & Safety Excellence Award (Both Construction & Operation Phase) by Page 199 of 200

M/s. NIIFL (equity partner/investor) during NIIF Annual Environment & Social Summit- 2024 at Faridabad. GGIAL is recognised with Indian Green Building Council (IGBC) Green Building Certification by GSPCB in 2nd International Environment Sustainability Summit Goa (IESSG)- 2024.

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