

EC No: F.No.11-90/2011/IA-III dated 17th July 2013

HALF YEARLY COMPLIANCE REPORT FOR KANNUR INTERNATIONAL AIRPORT FOR THE OPERATIONAL PHASE (MAY 2023- NOVEMBER 2023)



Kannur International Airport Limited Registered Office: "Kannur International Airport", Kara – Peravoor P O, Mattannur, Kannur 670702



Contents

Title	Page No
Monitoring Schedule During Operational Phase	2-4
Annexures	
Copy of the renewed Integrated Consent to Operate Awarded by Keral State Pollution Control Board	Annexure I
Ambient Air Quality Monitoring Test Report	Annexure II
Noise level Monitoring Test Report	Annexure III
Surface Water and Ground water quality Monitoring Test Report	Annexure IV
DG Stack Emission Monitoring Test Report	Annexure V
Photos	Annexure VI



Monitoring Schedule During Operational Phase

Sl No	Conditions of EC	Compliance Status
1.	Copy of the renewed Integrated Consent to Operate Awarded by Kerala State Pollution Control Board	Complied. The renewed Integrated Consent to Operate was issued b KSPCB vide consent no: KSPCB/KN/ICO/10040652/202 on 01.12.2023 and the copy of same is presented a Annexure I
2.	Air Emissions	Complied. The ambient air quality is being monitored during the operational phase as part of the environmental monitoring and the results are presented at Annexure II . Ambient a monitoring is done at five locations for the compliance report. Out of the five monitoring locations three were chosen within the site and two locations outside the project site. The observed values are well within the permissible standards. However mitigation measures to reduce the levels including plantation of trees and use of fuel efficient vehicles already implemented at site.
3.	Noise	Complied. The ambient noise is being monitored during the operational phase as part of the environmental monitoring and the results are presented at Annexure III . The complies DGCA guidelines.
4.	Waste Water Discharge	Complied. A Sewage Treatment Plant based on Fluidised Aerob Bioreactor (FAB) is established for treating the waste wate generated.
5.	Drainage and Effluent Management	Complied. The effluent from STP is recycled and used for non-drinkin purposes such as irrigation. The rain water flown from th airport is channelized through various sub drains to th perennial water body. Rain water is also used for HVAC.
6.	Water Quality and Water levels	Complied. Surface Water and Ground water quality is monitore during the operational phase as part of the environment monitoring and the results are presented at Annexure IV
7.	Energy Usage	Complied. Energy conservation is integrated into the project design b providing LED lights, occupancy sensor, energy efficier HVAC duly integrated with BMS, building orientation &

		this, utilization of solar energy is considered in the second phase of the project. The treated water from STP is reu for various non-drinking purposes and HVAC syste Rainwater collecting sump provided.
8.	Emergency Preparedness such as Fire Fighting	There are two fire stations at airside and the service of units will be utilized during emergencies. Adequate sa measures like fire hydrant, fire extinguishers, sm detectors and fire tenders are available to prevent fi spontaneous fires.
9.	Maintenance of Flora and Fauna	Complied. The airport, encompassing both within a outside the airfield, boasts extensive natural vegetat mainly scrub jungle and Acacia sp. plantations, wh attract a diverse range of native wildlife. Additiona nearby wetlands and agricultural lands provide w habitats for native as well as migratory birds includ peacocks.
10.	Waste Management	The facilities established for handling solid waste general during airport operations include Incinerator, Sew Treatment Plant and a Biogas plant . The recyclable a reusable materials are disposed through 3rd party. STP Capacity - 200 KLD expandable to 400 KLD Biogas Plant Capacity - 500 Kg/day Incinerator Capacity - 125 kg per hour
11.	Health	Airport Health Organization (APHO) is established Kannur Airport which ensures implementation International Health Regulation, International Sanit regulation and Indian Aircraft (Public Health) Rules.
12.	DG Stack Emission	The diesel generator sets are in compliance with the air in noise emission standards set by Central Pollution Com Board in line with the Environment (Protection) Rules. DG stack emission is being monitored during operational phase as part of the environmental monitor and the results are presented at Annexure V
13.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies	Kannur Airport shall submit the duly completed monthly compliance report to MoEF,RO at Bangalore to the respective Zonal office of CPCB and SP Environmental Monitoring results form part of compliance report.

	KANNUR International Airport
as well as by e-mail) to th	e
respective Regional Office	of
MoEF, the respect Zonal offic	e
of CPCB and the SPCB	
14. The environmental statement	t Kannur Airport shall submit the environmental statement
for each financial year endir	g for each financial year in Form V to KSPCB and upload in
31st March in Form V as	s the website and also the same shall be sent to MoEF, RO at
mandated to be submitted b	y Bangalore by e-mail.
the project proponent to the	e
concerned State Pollution	
Control Board as prescribe	d
under the Environmen	t
(Protection) Rules, 1986, a	S
amended subsequently, sha	11
also be put on the website	of
the company along with the	e
status of compliance of E	
conditions and shall also h	e
sent to the respect Regional	
offices of MoEF by e-mail.	

Annexure I

Copy of the renewed Integrated Consent to Operate Awarded by Kerala State Pollution Control Board



KERALA STATE POLLUTION CONTROL BOARD

FILE NO. : KSPCB/KN/ICO/10040652/2023 Date of issue : 01-12-2023

INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No : KSPCB/KN/ICO/10040652/2023 Valid upto : 30-08-2025

Ref: Consent No.PCB/HO/KNR/ICO/02/2018 dated 10/10/2018 valid upto 30.08.2023

The Integrated Consent to Operate issued as per reference above to M/s..Kannur International Airport Limited Kannur International Airport (PO) Mattannur, Kannur, Kerala is hereby renewed up to 30-08-2025 and issued to M/s. Kannur International Airport Limited, Kannur International Airport (PO), Mattannur, Kerala, PIN-670708.

The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

GENERAL

Sl.No	Item	Description
1	Validity	30.08.2025
2	Capital Investment	Rs 165296 lakhs
3	Annual Fee	Rs. 33, 05, 920 /-
4	Fee Remitted	Rs. 66,11,840 /-

1. CONDITIONS AS PER The Water (Prevention and Control of Pollution) Act, 1974

1.1. Sewage/Effluent Treatment Plant consisting of treatment units having adequate capacity shall be shall be properly operated and maintained.

1.2.Water Consumption : 809 KLD

1.3.Effluent Generation : 492 KLD

1.4 Mode of disposal of treated effluent : Reuse for landscaping and as make up water for cooler .

2.CONDITIONS AS PER

The Air (Prevention and Control of Pollution) Act, 1981

2.1. Adequate air pollution control measures shall be provided before the commissioning of the industry/establishment/DG set. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be made along with.

Stack No.	Source of Emission	Stack height above roof level	Control Equipments	
1.	DG set 2000 kVA (2 NOS.)	9 m	Acoustic enclosure	
2.	DG set 1250 kVA	7 m	Acoustic enclosure	
3.	DG set 30 kVA	1 m	Acoustic enclosure	
4.	DG set 400 kVA (4 nos.)	5 m	Acoustic enclosure	
5.	DG set 250 kVA (2 nos.)	3 m	Acoustic enclosure	

3. SPECIFIC CONDITIONS

- 1. No change or alteration of the unit is to be made without the prior permission of the Board.Any change in the particulars furnished in the references or in the identity of the occupier / authorised agent is to be intimated to the Board forthwith.
- 2. The applicant shall comply with the instructions that the Board may issue from time to time regarding prevention and control of air,water and sound pollution.
- 3. For renewal of the consent in case of continuance of discharge/operation of the establishment, application in the prescribed form shall be submitted through the web portal of the Board on or before 30.06.2025. Late application will be accepted with a fine or late fee as applicable.
- 4. This consent is granted based on the particulars and affidavit submitted by the Entrepreneur and any violation/non-compliance/submission of false information will lead to cancellation of consent and stringent action against the applicant and occupier.
- 5. This consent is granted subjected to the power of the Board to review and make variations in all or any of the conditions as per section 21 (6) of the Air Act 1981 and Section 27 of Water Act 1974.
- 6. Proper Solid waste management system shall be provided in the unit, arrangements for collection, segregation, storage, handling and disposal of solid Waste including garbage shall be provided as per SWM Rules 2016 and the facility shall be maintained properly..
- 7. Biodegradable waste shall be seggregated from non biodegradable waste at source.Biodegradable shall be treated in biobins/aerobins/biogas plants. Non biodegradable wastes shall be disposed to authorised collectors namely Haritha Karma Sena for the disposal of wastes for authroised treatment.
- 8. Plastic Waste Management Rules, 2016 and amendments shall be followed for the management of plastic waste. Single use plastic ban as per notifications and Orders for Kerala shall be strictly followed.

- 9. Pollution control measures provided to contro air pollution, noise pollution and water pollution shall be maintained properly and made functional while the establishment is in operation
- 10. Hazardous waste generated if any, shall be disposed of in compliance with the provisions of the Hazardous and other Wastes (Management and Trans boundary Movement) Rules, 2016.
- 11. Waste batteries shall be disposed of as per the Battery Waste Management Rules, 2022.
- 12. E-wastes shall be disposed of as per the provisions of E-waste management Rules, 2022 and amendments.
- 13. Environmental statement shall be submitted in Form V for each financial year ending on March 31st.
- 14. All operational DG sets of capacity 125 kVA and above shall be retrofitted with an Emission Control Device / Equipment having a minimum specified Particulate Matter capturing efficiency of at least 70% in 5 mode D2 cycle for equivalent kVA rating.
- 15. Hygienic condition and good housekeeping practices shall be maintained in and around the unit..
- 16. Annual Environmental Statement as on 31st March -in form V as per EP Rules 1986nshall be submitted on or before 30th September every year.
- 17. Previous consents with all conditions shall be submitted within a month for attaching it in the online consent.

All other conditions of The Integrated Consent to Operate issued as per referance above remains unchanged.

Digitally signed by Sudheer Kulamulla Parambath Date: 2023.12.01 15:07:26 IST

SIGNATURE OF ISSUING AUTHORITY

CHAIRMAN

То

M/s KANNUR INTERNATIONAL AIRPORT LIMITED

Kannur International Airport Limited Kannur International Airport (PO) Mattannur, Kannur, Kerala E-Mail : md@kannurairport.aero

Contact Number :9539074662,

1. This digitally signed document is legally valid as per the Information Technology Act 2000

2. For verifying this document please go to www.keralapcbonline.com and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Phoenix website.

Annexure II Ambient Air Quality Monitoring Test Report



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

AMBIENT AIR MONITORING REPORT

Issue Date : October 27, 2023
TC772023000001496F
M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670702
Cochin Test House
23/10/1496
Ambient Air Quality Monitoring
17.10.2023 – 18.10.2023 & 18.10.2023 – 19.10.2023
20.10.2023 - 26.10.2023

1. a. Frequency and Duration of Sampling

Parameters	Sampling Duration and sampling		
Particulate Matter of Size less than 10µm [PM ₁₀]	Continuous Sampling for 24 Hours		
Particulate Matter of Size less than 2.5µm [PM2.5]	Continuous Sampling for 24 Hours		
Sulphur Dioxide [SO ₂]	Continuous Sampling for 8 Hours		
Oxides of Nitrogen [NO _x]			
Carbon Monoxide [CO]	[Three 8 Hour Samples in 24 Hours]		

1. b.Sampling and analysis Techniques

Parameters	Parameters <u>Technique</u>		Minimum Detection Limit	
Particulate Matter of Size less than 10µm [PM ₁₀].	Gravimetric Method	IS:5182 Part -23	10 μg/m ³	
Particulate Matter of Size less than 2.5µm [PM _{2.5}]	Gravimetric Method	CTH/CH/SOP/462	$4 \ \mu g/m^3$	
Sulphur Dioxide [SO ₂]	Improved West and Gaeke	IS:5182 Part -02	4 μg/m ³	
Oxides of Nitrogen [NO _x]	Modified Jacob and Hochheiser	IS:5182 Part -06	6 μg/m ³	
Carbon Monoxide [CO]	CO Meter	CTH/CH/SOP/473	0.2 ppm	



Authorised Signatory Chemical. COCHIN TEST HOUSE



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

Report No : CTH/LR/23/10/1496 2.a. Details of Locations

Page 2 of 3 Issue Date : October 27, 2023

Location Code	Name of Location	Classification	GPS Coordinates	Environmental Conditions	Date of Monitoring
A 1	MRS	Project Area	Lat 11.930276 [°] ; Long 75.572609 [°]	Sunny Day	
A 2	Nagavalavu	Residential Area	Lat 11.918642 ⁰ ; Long 75.555174 ⁰	Sunny Day	17.10.2023
A 3	Elampara	Residential Area	Lat 11.922988 ⁰ ; Long 75.546664 ⁰	Sunny Day	- 18.10.2023
A 4	Near A T S	Project Area	Lat 11.91302 [°] ; Long 75.544958 [°]	Sunny Day	10.10.2025
A 5	East Fire Station	Project Area	Lat 11.918688 ⁰ ; Long 75.555256 ⁰	Sunny Day	6

	-	Value Reported							NAAQ Standards		
Parameters	Unit Int	Intervals	A 1	A 2	A 3	A 4	A 5	Eco Sensitive Areas	Other Area		
Particulate Matter of Size less than 10µm[PM ₁₀]	µg/m ³	Ī	26.21	24.66	24.29	24.9	61.5	100	100		
Particulate Matter of Size less than 2.5µm[PM _{2.5}]	$\mu g/m^3$	I	11.86	12.88	13.98	12.7	17.96	60	60		
		Ī	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	10.00			
Sulphur Dioxide [SO ₂]	µg/m³	II	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	80	80		
				III	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	4	2.47
		I	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]		14 14		
Oxides of Nitrogen [NO _x]	µg/m³	· 11	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	80	80		
		III	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]				
	1.0	I	0.44	0.45	0.43	0.44	0.42		2		
Carbon Monoxide [CO]	mg/m ³	II	0.46	0.44	0.41	0.40	0.46	4	4		
	Ų	· III	0.45	0.45	0.45	0.42	0.43				

BDL- Below Detection Limit; MDL-Minimum Detection Limit.

By



Michel ten Authorised Signatory Chemical COCHIN TEST HOUSE



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

Report No : CTH/LR/23/10/1496 2.a. Details of Locations

Page 3 of 3 Issue Date : October 27, 2023

Location	Name of Location	Classification	GPS Coordinates	Environmental Conditions	Date of Monitoring
Code A 1	MRS	Project Area	Lat 11.930276 [°] ; Long 75.572609 [°]	Sunny Day	
A 2	Nagavalavu	Residential Area	Lat 11.918642 [°] ; Long 75.555174 [°]	Sunny Day	18 10.2023
A 3	Elampara	Residential Area	Lat 11.922988 ⁰ ; Long 75.546664 ⁰	Sunny Day	19.10.2023
A 4	Near A T S	Project Area	Lat 11.91302°; Long 75.544958°	Sunny Day	
A 5	East Fire Station	Project Area	Lat 11.918688° ; Long 75.555256°	Sunny Day	80%. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				Val	ue Repor	ted		NAAQ Sta	ndards
Parameters	Unit Int	Intervals	A 1	A 2	A 3	A 4	A 5	Eco Sensitive Areas	Other Area
Particulate Matter of Size less than 10µm[PM ₁₀]	$\mu g/m^3$	I	. 38.0	52.2	32.39	27.18	60.08	100	100
Particulate Matter of Size	μ g/m ³	I I	13.6	16.4	13.1	14.2	16.0	60	60
less than 2.5µm[PM _{2.5}]		[*] I	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	d type	18 L.
Sulphur Dioxide [SO ₂]	O ₂] μg/m ³	П	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	80	80
		III	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	BDL[M DL-4.0]	¥	12
		I	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]		
Oxides of Nitrogen [NOx]	μg/m ³	· II	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	80	80
	1	III	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	BDL[M DL-6.0]	- A	
		I	0.41	0.42	0.41	0.45	0.39	4	
Carbon Monoxide [CO]	mg/m ³	·II	0.39	0.39	0.39	0.42	0.38		4
Carbon Monoxide [CO]		· III ·	0.40	0.43	0.40	0.40	0.40	End of repo	

BDL- Below Detection Limit; MDL-Minimum Detection Limit.

d By





Annexure III

Noise level Monitoring Test Report



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

NOISE LEVEL MONITORING REPORT

Page 1 of 1 Report No : CTH/LR/23/10/1491 Issue Date : October 27, 2023 Unique Lab Report Number TC772023000001491F M/s. Kannur International Airport Limited Name & Address of the customer [KIAL], Mattannur, Kannur, Kerala - 670702 Sampled By Cochin Test House Method of Measurement CTH/CH/SOP/468 Sample Code 23/10/1491 Source of monitoring **Ambient Noise Level Monitoring** Dates of Monitoring 17.10.2023 - 18.10.2023

Details of Monitoring Location

Location Code	Name of Location	Classification	GPS Coordinates
NĮ	M R S	Project Area	Lat 11.930276 [°] ; Long 75.572609 [°]
N 3	Elampara	Residential Area	Lat 11.922988 ⁰ ; Long 75.546664 ⁰
N 5	East Fire Station	Project Area	Lat 11.918688 ⁰ ; Long 75.555256 ⁰

Presentation of Result

SI.	Day – Night Average Noise Level [DNL]	Noise level Values Reported in dB(A)			
No.		N 1	N 3	N 5	
. 1 .	Total Day – Night Average Noise Levels [TDNL]	52.1	56.8	65.1	
2	Event Day – Night Average Noise Levels [EDNL]	61.7	63.0	67.1	
3	Background Day - Night Average Noise Levels [BDNL]	49.3	56.2	64.4	

End of report

Verified By



denn Authorised Signatory Chemical COCHIN TEST HOUSE



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

NOISE LEVEL MONITORING REPORT

Report No: CTH/LR/23/10/1495	Page 1 of 1 Issue Date : October 27, 2023
Unique Lab Report Number	TC772023000001495F
Name & Address of the customer	M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670702
Sampled By	Cochin Test House
Method of Measurement	CTH/CH/SOP/468
Sample Code	23/10/1495
Source of monitoring	Ambient Noise Level Monitoring
Dates of Monitoring	18.10.2023 - 19.10.2023

Details of Monitoring Location

Location Code	Name of Location	Classification	GPS Coordinates
N 2	Nagavalavu	Residential Area	Lat 11.918642 ⁰ ; Long 75.555174 ⁰
N 4	Near A T S	Project Area	Lat 11.91302 [°] ; Long 75.544958 [°]

Presentation of Result

SI.	Day – Night Average Noise Level [DNL]	Noise level Values Reported in dB(A)		
No.		N 2	N 4	
1	Total Day – Night Average Noise Levels [TDNL]	54.2	53.3	
2	Event Day - Night Average Noise Levels [EDNL]	64.9	65.8	
3	Background Day – Night Average Noise Levels [BDNL]	53.0	52.4	

End of report

Verified By



Authorised Signatory Chemical COCHIN TEST HOUSE

Annexure IV

Surface Water and Ground water quality Monitoring Test Report



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Page 1 of 1

Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

TEST REPORT

Report No : CTH/I	_R/23/10/1492	Issue	Date: October 28, 2023	
Unique Lab Report Number		TC772023000001492F		
Name and Address of customer		M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670702		
Sample Drawn By	Cochin Test House	Condition of the Sample	Acceptable	
Sampling Method		IS: 17614 [Pt.01] & CTH/MB/SOP/702		
Particulars of the sample	Surface Water Sample	Date of Sampling	19.10.2023	
Location of Sampling	Kotheri Thodu	Sample Quantity	2 Litre	
Sample code	23/10/1492	Date of receipt of sample	20.10.2023	
Dates of Analysis	20.10.2023 - 28.10.2023	GPS Coordinates	Lat 11.928696 ⁰ ; Long 75.553689 ⁰	
Description of the sample by the customer		Kotheri Thodu Water	ral	

Sl. No.	Parameters	Unit	Method	Result
1	Turbidity	NTU	IS: 3025 [Pt.10]	6.9
2	pH@25°C		IS: 3025 [Pt.11]	5.81
3	Chloride as Cl	mg/l	IS: 3025 [Pt.32]	10.13
4	Fluoride as F	mg/l	APHA 24 th Ed. 4500 F D	BDL[MDL - 0.1]
5	Sulphate as SO ₄	- mg/1 -	APHA 24 th Ed. 4500 SO ₄ ²⁻ E	1.65
6	Alkalinity as CaCO ₃	mg/l	IS : 3025 [Pt.23]	11.07
7	Nitrate as NO ₃	mg/l	IS: 3025 [Pt.34]	BDL[MDL - 0.1]
8	Sodium as Na	mg/l	IS : 3025 [Pt.45]	5
9	Potassium as K	mg/l	IS: 3025 [Pt.45]	1.2
10	Mercury as Hg	mg/l	CTH/CH/SOP/416	BDL[MDL - 0.001]
11	Arsenic As	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.005
12	Lead as Pb	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.010
12	Copper as Cu	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.01]
14	Chromium as Cr	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.010
15	Zinc as Zn	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.010
16	Selenium as Se	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.001
17	Nickel as Ni	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.010
18	Cadmium as Cd	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.001
19	Manganese as Mn	.mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.010
20	BOD	mg/l	IS : 3025 [Pt.44]	BDL[MDL - 2.0]
21	COD	. mg/l	IS : 3025 [Pt.58]	BDL[MDL - 5.0]
22	Magnesium Hardness	mg/l	IS: 3025 [Pt.46]	BDL[MDL - 1.0]
23	Dissolved Oxygen [DO]	mg/l	IS : 3025 [Pt.38]	7.4
24	Salinity	mg/l	CTH/CH/SOP/522	16.7
25	Temperature	°C	IS : 3025 [Pt.09]	26.5
	T	Microbiology	Parameters	
SI. No.	Parameters	Unit	Method	Result
1	Coliforms	MPN/100 ml	IS : 1622 - 1981	280

Coliforms MPN/100 III 27 IS: 1622 - 1981 MPN/100 ml Faecal Coliforms 2 End of report.

- Minimum Detection Limit. BDL - Below Detection Limit, MDL

ified By

withorised Signatory Microbiology **COCHIN TEST HOUSE**

Koch

en 10 uthorised Signatory Chemical COCHIN TEST HOUSE



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in

Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

TEST REPORT

Report No : CTH/LR/23/10/1492 Name and Address of customer		Issue Date: October 28, 2023 M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670792		
Comple Drown By	Cochin Test House	Condition of the Sample	Acceptable	
Sample Brannie,		IS : 17614 [Pt.01] & CTH/MB/SOP/702		
Sampling Method	Surface Water Sample	Date of Sampling	19.10.2023	
Particulars of the sample	Kotheri Thodu	Sample Quantity	2 Litre	
Location of Sampling	23/10/1492	Date of receipt of sample	20.10.2023	
Sample code Dates of Analysis	20.10.2023 - 28.10.2023	GPS Coordinates	Lat 11.928696 ⁰ ; Long 75.553689 ⁰	
Description of the sample by the customer		Kotheri Thodu Water		

	D	Unit	Method	Result
SI.No.	Parameters		IS : 3025 [Pt.34]	BDL[MDL-1.0]
1	Total Nitrogen	mg/l		BDL[MDL-0.2]
2	Total Phosphorous	mg/l	APHA 24 th Ed. 4500 – P[C]	BDL[MDL-0.2]

BDL – Below Detection Limit, MDL – Minimum Detection Limit.

End of report.



Verified By NOTE : This test results relate only to the sample submitted for analysis.

The test report shall not be reproduced except in full without the written approval of the laboratory.



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Page 1 of 1

Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

TEST REPORT

Report No : CTH/LR/23/10/1493 Unique Lab Report Number Name and Address of customer		TC772023000001493F		
		M/s. Kannur International Airport Limited [KIAL] Mattannur, Kannur, Kerala - 670702		
Sample Drawn By	Cochin Test House	Condition of the Sample	Acceptable	
Sampling Method		IS : 17614 [Pt.01] & CTH/MB/SOP/702		
Particulars of the sample	Surface Water Sample	Date of Sampling	19.10.2023	
Location of Sampling	Kanad Thodu	Sample Quantity	2 Litre	
	23/10/1493	Date of receipt of sample	20.10.2023	
Sample code Dates of Analysis	20.10.2023 - 28.10.2023	GPS Coordinates	Lat 11.909642 ⁰ ; Long 75.524928 ⁰	
Description of the sample b	by the customer	Kanad Thodu Water		

SI. No.	Parameters	Unit	Method	Result
51. INO.	Turbidity	NTU	IS: 3025 [Pt.10]	8.8
	- True		IS: 3025 [Pt.11]	6.18
- 2	pH@25°C Chloride as Cl	mg/l	IS: 3025 [Pt.32]	10.64
3	Fluoride as F	mg/l	APHA 24th Ed. 4500 F D	BDL[MDL - 0.1]
4	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 4500 SO ₄ ² E	1.40
5	Alkalinity as CaCO ₃	mg/l	IS: 3025 [Pt.23]	12.3
6		mg/l	IS: 3025 [Pt.34]	BDL[MDL - 0.1]
7	Nitrate as NO ₃ Sodium as Na	mg/l	IS: 3025 [Pt.45]	5.3
8		mg/l	IS: 3025 [Pt.45]	1.3
9	Potassium as K	mg/l	CTH/CH/SOP/416	BDL[MDL - 0.001]
10	Mercury as Hg	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.005]
11	Arsenic As	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.010]
12	Lead as Pb	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.01]
13	Copper as Cu	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.010]
14	Chromium as Cr		IS : 3025 [Pt.02]	BDL[MDL - 0.010]
15	Zinc as Zn	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.001]
16	Selenium as Se	- mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.010]
. 17	Nickel as Ni	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.001]
18	Cadmium as Cd	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.010]
19	Manganese as Mn	mg/l	IS: 3025 [Pt.44]	BDL[MDL - 2.0]
20	BOD	mg/l	IS : 3025 [Pt.58]	BDL[MDL - 5.0]
21	COD	mg/l	IS: 3025 [Pt.46]	BDL[MDL - 1.0]
22	Magnesium Hardness	mg/l		7.5
23	Dissolved Oxygen [DO]	mg/l	IS : 3025 [Pt.38]	17.54
. 24	Salinity	mg/l	CTH/CH/SOP/522	26.8
25	Temperature	°C	IS : 3025 [Pt.09]	20.0
- 25		Microbiology	Parameters	Result
SI. No.	Parameters	Unit	Method	1600
1	Coliforms	MPN/100 ml	IS : 1622 - 1981	34
		MDN1/100 ml	1 S • 1677 - 1981	

IS: 1622 - 1981 MPN/100 ml Faecal Coliforms 2 End of report.

BDL - Below Detection Limit, MDL - Minimum Detection Limit.

Koch uthorised gnatory Microbiology d By COCHIN TEST HOUSE

d Signato Chemical COCHIN TEST HOUSE



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in

Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

TEST REPORT

Report No : CTH/I Name and Address of custo	LR/23/10/1493	Page 1 of 1 Issue Date: October 28, 2023 M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670702			
Sample Drawn By	Cochin Test House	Condition of the Sample	Acceptable		
Sampling Method		IS: 17614 [Pt.01] & CTH/MB/SOP/702			
Particulars of the sample	Surface Water Sample	Date of Sampling	19.10.2023		
Location of Sampling	Kanad Thodu	Sample Quantity	2 Litre		
Sample code	23/10/1493	Date of receipt of sample	20.10.2023		
Dates of Analysis	20.10.2023 - 28.10.2023	GPS Coordinates	Lat 11.909642 [°] ; Long 75.524928 [°]		
Description of the sample by the customer		Kanad Thodu Water			

Parameters	Unit	Method	Result
		IS: 3025 [Pt.34]	BDL[MDL-1.0]
		APHA 24 th Ed. 4500 – P[C]	BDL[MDL-0.2]
	Parameters Total Nitrogen Total Phosphorous	Total Nitrogen mg/l	Total Nitrogen mg/l IS : 3025 [Pt.34]

BDL - Below Detection Limit, MDL - Minimum Detection Limit.

End of report.

Verified By



Signator Chemical COCHIN TEST HOUSE



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Page 1 of 1

Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

TEST REPORT

Report No : CTH/I	_R/23/10/1494	Issue Date: October 28, 2023			
Unique Lab Report Numbe		TC772023000001494F			
Name and Address of customer		M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670702			
Sample Drawn By	Cochin Test House	Condition of the Sample	Acceptable		
Sampling Method		IS: 17614 [Pt.01] & CTH/MB/SOP/702			
Particulars of the sample	Ground Water Sample	Date of Sampling	19.10.2023		
Location of Sampling	Bore Well	Sample Quantity	2 Litre		
Sample code	23/10/1494	Date of receipt of sample	20.10.2023		
Dates of Analysis	20.10.2023 - 28.10.2023	GPS Coordinates	Lat 11.91419 ⁰ ; Long 75.550104 ⁰		
Description of the sample l	by the customer	Bore Well Water	~d		

SI. No.	No. Parameters		Method	Result
1	Turbidity	NTU	IS: 3025 [Pt.10]	BDL[MDL - 0.8]
2	pH@25°C		IS: 3025 [Pt.11]	5.0
3	Chloride as Cl	mg/l	IS: 3025 [Pt.32]	11.15
4	Fluoride as F	mg/l	APHA 24 th Ed. 4500 F D	BDL[MDL - 0.1]
-5	Sulphate as SO ₄	mg/l	APHA 24 th Ed. 4500 SO ₄ ² -E	1.02
6	Alkalinity as CaCO ₃	mg/l	IS: 3025 [Pt.23]	9.84
7	Nitrate as NO ₃	mg/l	IS: 3025 [Pt.34]	BDL[MDL - 0.1]
8	Sodium as Na	mg/l	IS: 3025 [Pt.45]	3.5
9	Potassium as K	mg/l	IS: 3025 [Pt.45]	1.2
10	Mercury as Hg	mg/l	CTH/CH/SOP/416	BDL[MDL - 0.001
11	Arsenic As	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.005
12	Lead as Pb	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.010
. 13	Copper as Cu	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.01]
14	Chromium as Cr	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.010
15	Zinc as Zn	mg/l'	IS: 3025 [Pt.02]	BDL[MDL - 0.010
16	Selenium as Se	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.001
17	Nickel as Ni	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.010
18	Cadmium as Cd	mg/l	IS: 3025 [Pt.02]	BDL[MDL - 0.001
19	Manganese as Mn	mg/l	IS : 3025 [Pt.02]	BDL[MDL - 0.010
20	BOD	mg/l	IS : 3025 [Pt.44]	BDL[MDL - 2.0]
21	COD	mg/l	IS : 3025 [Pt.58]	BDL[MDL - 5.0]
22	Magnesium Hardness	mg/l	IS : 3025 [Pt.46]	BDL[MDL - 1.0]
23	Dissolved Oxygen [DO]	mg/l	IS : 3025 [Pt.38]	7.2
24	Salinity	mg/l	CTH/CH/SOP/522	18.38
25	Temperature	°C	IS: 3025 [Pt.09]	26.6
		Microbiology	Parameters	
SI. No.	Parameters	Unit	Method	Result
1	Coliforms	MPN/100 ml	IS : 1622 - 1981	<2.
2	Faecal Coliforms	MPN/100 ml	IS : 1622 - 1981	End of roport

Verified By

End of report.

BDL - Below Detection Limit, MDL - Minimum Detection Limit. <2 indicate to absent.

Kochi Authorised Signatory Microbiology COCHIN TEST HOUSE





ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309
 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672
 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in

Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

TEST REPORT

chin Test House	Mattannur, Kannur, Kera	ll Airport Limited [KIAL], ala - 670702	
abin Test House	~ ··· C.1 C		
	Condition of the Sample	Acceptable	
	IS: 17614 [Pt.01] & CTH/MB/SOP/702		
ound Water Sample		19.10.2023	
		2 Litre	
	Date of receipt of sample	20.10.2023	
	1500 TO 1500	Lat 11.91419 ⁰ ;	
.10.2023 - 28.10.2023	GPS Coordinates	Long 75.550104 ⁰	
customer	Bore Well Water		
1	bund Water Sample re Well 10/1494 10.2023 – 28.10.2023 customer	ound Water SampleDate of Samplingre WellSample Quantity10/1494Date of receipt of sample10.2023 - 28.10.2023GPS Coordinates	

		Unit	Method	Result
SI.No.	Parameters	Unit		BDL[MDL-1.0]
1	Total Nitrogen	mg/l	IS : 3025 [Pt.34]	
2	Total Phosphorous	mg/l	APHA 24 th Ed. 4500 – P[C]	BDL[MDL-0.2]

BDL - Below Detection Limit, MDL - Minimum Detection Limit.

End of report.

Page 1 of 1

ed Signatory Chemical COCHIN TEST HOUSE

Annexure V

DG Stack Emission Monitoring Test Report



ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in



Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

STACK EMISSION MONITORING REPORT

Report No. : CTH/LR/23/10/1490	Page 1 of 1 Issue Date: October 28, 2023
Unique Lab Report Number	TC772023000001490F
Name and Address of customer	M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670702
Monitored By	Cochin Test House
Lab Identification No.	23/10/1490
Identification of Sample	Stack Emission from DG's
Monitoring Date	18.10.2023
Date of Analysis	20.10.2023 - 27.10.2023

Sl. No.	Stack Name	GPS Coordinates
	250 KVA – 1	Lat 11.930276 ⁰ ; Long 75.572609 ⁰
2	250 KVA – 2	Lat 11.918642°; Long 75.555174°
3	1250 KVA	Lat 11.922988 ⁰ ; Long 75.546664 ⁰
4	2000 KVA – 1	Lat 11.91302°; Long 75.544958°
5	2000 KVA – 2	Lat 11.918688 ⁰ ; Long 75.555256 ⁰

17				Result				
SI. No.	Parameters	Unit	Method	250 KVA – 1	250 KVA – 2	1250 KVA	2000 KVA –	2000 KVA – 2
- 1	Temperature	⁰ C	IS: 11255 [Pt.03]	124	118	118	121	112
2	Velocity of Emission	m/S	IS: 11255 [Pt.03]	24.8	24.86	14.36	20.31	20.31
3	Volume of Emission	Nm ³ /hr	IS: 11255 [Pt.03]	432	402	2089	2955	2955
4	Particulate Matter	mg/Nm ³	IS:11255 [Pt.01]	89.1	35.2	43.7	48.0	48.7
5	Sulphur Dioxide [SO ₂]	mg/Nm ³	IS : 11255 [Pt.02]	BDL [MDL- 1.0]	BDL [MDL- 1.0]	BDL [MDL- 1.0]	BDL [MDL- 1.0]	BDL [MDL- 1.0]
6	Nitrogen Dioxide [NO _X]	mg/Nm ³	IS : 11255 [Pt.07]	36.2	34.3	26.7	34.2	36.0

BDL- Below Detection Limit; MDL-Minimum Detection Limit.

End of report







ANALYTICAL SERVICES & TESTING LABORATORY

V / 78, Kollanpady, Murungeliparambu Road, Irumpanam P.O., Kochi - 682 309 Mob.: 9446332556, 9846551014, 9387381780. Tel. : 0484 - 2782672 E-mail: cochintesthouse1@gmail.com, info@cochintesthouse.in. Web : www.cochintesthouse.in

Laboratory Approved by Kerala State Pollution Control Board ('A' Grade)

TEST REPORT

:

Report No : CTH/LR/23/10/1492 A Name and Address of customer

Sample Drawn By Condition of the Sample Particulars of the sample Date of Sampling Sampling Method Sample Quantity Sample code Date of receipt of sample Dates of Analysis

Page 1 of 1 Issue Date: October 25, 2023 M/s. Kannur International Airport Limited [KIAL], Mattannur, Kannur, Kerala - 670702 Cochin Test House Acceptable Water Sample 19.10.2023 APHA 250 ml Each 23/10/1492, 23/10/1493, 23/10/1494 19.10.2023 20.10.2023 - 21.10.2023

Phytoplankton Analysis

SI. No.	GPS Coordinates	Particulars of the Sample	Description of the Sample	Sample ID	Method	Result
1	Lat 11.928696 ⁰ ; Long 75.553689 ⁰	Surface Water	Water from Kotheri Thodu	23/10/1492		Euglena, Cyclotella, Gomphosphaeria, Botryococcus
2	Lat 11.909642 ⁰ ; Long 75.524928 ⁰	Surface Water	Water from Kanad Thodu	23/10/1493	APHA 24 th Ed.	Gomphosphaeria, Botryococcus, Achnanthidium, Cylindrospermopsis
3	Lat 11.91419 ⁰ ; Long 75.550104 ⁰	Ground Water	Water from Bore Well	23/10/1494		Cylindrospermopsis, Oocysts, Ankistrodesmus

End of Report

fied By



Authorised Signatory Microbiology **COCHIN TEST HOUSE**

Annexure VI - Photos

NOISE LEVEL MONITORING





Elambara

AMBIENT AIR QUALITY MONITORING



GROUND WATER MONITORING



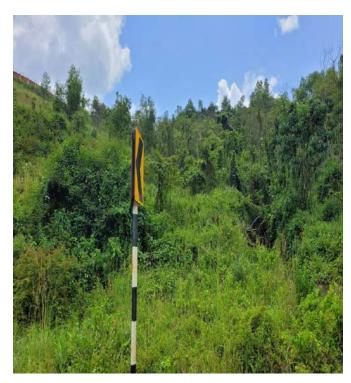
Nagavalavu

Nagavalavu

PTB future expansion area

GREENERY AROUND AIRPORT





Jeepable road

Outside operational boundary wall near Elambara

SEWAGE TREATMENT PLANT



