

#### KSPCB/FORM-V/2019-20/02

25th August, 2020

The Regional Officer, KSPCB, Bommanahalli, Nisarga Bhavan, 2<sup>nd</sup> Floor, Thimmaiah Road, 7<sup>th</sup> 'D' Main, Shivanagar, Opp. Pushpanjali Theatre, Bengaluru – 560010.

#### Dear Sir/Madam,

## Subject: Submission of Environmental Statement (Form-V) for MC Building, Bangalore

With reference to above subject, we hereby submitting the Environmental Statement (Form-V) for the FY 2019-20 for our Infosys MC building, Plot. No.53, Sy. No.157(P) at Electronic city, Bangalore. Enclosed the copies of the same for your reference.

- 1. Form-V for MC building, Bangalore
- 2. Copy of Stack monitoring report
- 3. Copy of Ambient air quality analysis report
- 4. Copy of Treated sewage analysis report

Yours Sincerely,

For INFOSYS LIMITED

VIKRANT KUDIGI

REGIONAL HEAD - FACILITIES



01 00 2052 0262

# Form - V Environmental Statement

April 2019 - March 2020

#### **ANNEXURE**

## ENVIRONMENTAL STATEMENT FORM-V (See rule 14)

Environmental Statement for the financial year ending with 31st March

#### PART-A

i. Name and address of the owner:	M/s Infosys Limited Sy No.157 (P), Plot No. 53		
occupier of the industry			
	Electronic City		
	Bangalore – 560100		
Operation or process.	Software Development		
ii. Industry category Primary- (STC Code) Secondary- (STC Code)	Green Category		
iii. Production category. Units.	Software Development		
iv. Year of establishment	2013		
v. Date of the last environmental statement submitted.	27.09.2019	***	

#### PART-B

Water and Raw Material Consumption:

i. Water consumption in m3/d

Process:

NA

Cooling:

NA

Domestic: Approximately. 16 m³/day

#### **Enclosures:**

- 1) Copy of test report for D.G set emissions
- 2) Copy of test report for Ambient air & noise quality
- 3) Copy of test report for Treated sewage

Process water consumption per unit of products output		
During the previous financial year	During the current financial year	
NA		

ii. Raw material consumption

Name of raw materials*	Name of Products	Consumption of raw ma	aterial per unit of
		During the previous financial year	During the current financial year
		NA `	
	_		

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

#### PART-C

### Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed Standards with reasons.
(a) Water		As per Test Re	ports
(b) Air		As per Test Re	ports
(c) Sludge	Not applicable	0.03 kgs/ltrs	No Variations

#### PART-D

### **HAZARDOUS WASTES**

[As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016].

Hazardous Wastes	Obtained limits	Total Quantity		
	from KSPCB	During the current Financial year 2018-19	During the current Financial year 2019-20	
1. Used Oil	1.3 KL/A	0.720 KL	0.735 KL	
2. Oil soaked cotton waste	0.150 NET/A	0.004 MT	0.004 MT	
3. DG oil filters	0.150 MT/A	34 No's/0.056 MT	0.056 MT	
4. Batteries		Nil	192 No's	
5. Discarded/ Paint Containers	50,000 No's/A (for Campus)	Centralized collection & disposal from main E-city campus	Centralized collection & disposal from main E-city campus	

#### PART - E

#### SOLID WASTES:

	Total Quantity (Kg/A)			
Solid Wastes	During the current Financial year (FY 2018-19)	During the current Financial year (FY 2019-20)  Food waste: 40,681 STP Sludge waste: 11,135 Other Solid wastes: Centralized collection & disposal from main E-city campus		
a. From process	Food waste: 42,871 STP Sludge waste: 10,378 Other Solid wastes: Centralized collection & disposal from main E-city campus			
b. From Pollution Control Sources-STP	Sludge from STP 25 to 30 Kgs/day	Sludge from STP 25 to 32 Kgs/day		
c. Quantity recycled or re- Utilized within the unit.	Food waste is treated in house through biogas and OWC. STP sludge is treated through sludge solar drying bed All other solid wastes are sent to main campus & disposed to the registered recyclers	Food waste is treated in house through biogas and OWC. STP sludge is treated through sludge solar drying bed All other solid wastes are sent to main campus & disposed to the registered recyclers		

#### PART-F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Waste is segregated at source. A color code for bins has been devised and implemented for different types of waste. The color codes are as follows: Green for bio-degradable waste; Red for toxic waste; Blue for dry recyclable waste and grey for e-waste Bio-medical waste and sanitary waste generated in the campus will be taken out by an agency authorized by PCB.

A focused approach to solid waste management has resulted in better disposal systems. Solid waste included all the Non-hazardous waste viz., paper/ cardboard waste, plastic waste, metal waste, wood waste and garden waste.

Dry sludge – Sent to main campus & used as manure 25 to 30 kgs/day generated from domestic sewage

#### Hazardous waste:

- ➤ Used Oil / filters / oil soaked cotton waste Sent to registered KSPCB authorized recyclers as per Hazardous Waste Rules
- > Batteries Sent to registered KSPCB authorized battery recyclers through main campus.
- ➤ E-waste Sent to registered KSPCB authorized recyclers as per Hazardous Waste Rules through main campus.
- Biomedical waste: Generated biomedical waste is disposed to authorized vendor through our main E City Campus
- Covid-19 related tissue papers, masks & gloves centralized disposed (along with Main Campus waste) to send to registered KSPCB authorized incinerator.

#### Non-Hazardous waste:

- Waste like paper, plastic, metal, wood and glass are segregated disposed to registered recyclers/ re-processors for further disposal. All the generated solid waste is stored and disposed through main campus. We have a centralized storage in the main E City Campus
- Dry sludge Sent to main campus & used as manure 25 to 30 kgs/day generated from domestic sewage
- Food waste: All the food waste generated is collected in designated color coded bins and is used for the Biogas plant

#### PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

- ➤ We have 90.26Kwp of solar photovoltaic (PV) systems on the rooftop to harvest solar energy.
- ➤ The building design demonstrates 42% reduction in energy consumption compared to ASHRAE standards and is the first building in India to implement radiant panel based cooling system
- Low Sulphur diesel is used for DG sets
- > Treated water from STP is used for HVAC systems and flushing purpose, thereby we have reduced the consumption of fresh water
- ➤ Sludge waste is treated in solar sludge drying bed which comprises of Building envelope and Electric mole (Automatic Robots). The main source for entire process is solar energy and due to this 35% or less moisture content is expected after sludge drying. The dried sludge is used as manure for in house landscaping

#### PART - H

Additional measures/investment proposal for environmental protection including abatement of pollution.

- ➤ Infosys has been certified to ISO 14001 & OSHAS 18001.
- > Process optimization is followed to reduce our energy and water consumption
- MC building is awarded with LEED India Platinum rating & two GRIHA 5star rating for its new activities in prevention of natural resources.
- ➤ We have radiant panel-based cooling system to achieve the highest levels of efficiency. And first building in India to implement radiant panel based cooling system
- Individual lighting controls are provided for at least 90% of the building occupants to enable adjustments to suit individual task needs and preferences. For multi-occupant spaces, lighting controls are provided for group needs.
- ➤ We have Energy harvesting switches and sensors, wireless, battery less and power less occupancy sensors which generate their own energy from building indoor environment
- ➤ We have installed Solar panels of total capacity 90.26Kwp.
- ➤ LED's are used for indoor lighting & Occupancy Sensors
- We have continued to achieve the reduction in water use through use of water efficient fixtures & reuse of treated grey water for flushing.
- > Pressure compensating aerators are there in the building to reduce the consumption.
- ➤ Waterless urinals have been installed in the entire building to reduce consumption.
- We have Rainwater harvesting strategies in the building by channelizing the roof water and storm water runoff to the recharge pits

A membrane bioreactor (MBR) technology-based sewage treatment plant (STP) recycles 100% of wastewater generated and this is reused for flushing, landscaping and for cooling towers makeup

#### PART-I

#### MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution

- ➤ We carry out environmental quality monitoring for Emissions and effluents as per the PCB standards.
- Treated water from STP is used for HVAC systems and flushing purpose, thereby we have reduced the consumption of fresh water
- ➤ We are ensuring 100% segregation of waste at source, stored and disposed as per applicable legal legislation
- ➤ We continue to ensure the Color coding for different type of waste which is segregating at the building level
- ➤ We have consistently ensured that we reduce, reuse and recycle & dispose the waste responsibly.
- Hazardous wastes are stored and disposed to authorized recyclers only, in adherence to applicable legislation.
- We use green sealed chemicals for our housekeeping purpose.
- > Treated water from STP is used for HVAC systems, gardening and flushing purpose, thereby we have reduced the consumption of fresh water
- > BMS (Building management system) has been implemented.
- We have reduced the usage of tissue papers.
- ➤ We have implemented biodegradable plastics which helps in phasing out of single use & non-recyclable plastics.

#### SHIVA ANALYTICALS (INDIA) PRIVATE LIMITED

Plot No. 24D(P) & 34D, KIADB Industrial Area, Hoskote, Bangalore - 562 114. Karnataka, India

: +91-80-2801 5333 Tel

E-mail: info@shivaanalyticals.com Website: www.shivaanalyticals.com CIN : U24230KA1994PTC125297 **GSTN** : 29AACCS8434K1ZV

> Test Certificate (Environment)

Matrix: Stack Emission

Discipline Group Issued To

Chemical Atmospheric Pollution

Infosys Limited..

PO / Reference No. PO / Reference Date

Date of Receipt

2300149397 12-JUN-2019 05200218000801

Address

IL Bangalore STP Park - I No. 45 & 46, 3rd Cross, Electronics 17-FEB-2020

City

Hosur Road, Bangalore - 560100

Date of Booking

C.A.No.

18-FEB-2020

Customer ID

Sample for the month of Feb. 2020. Stack Monitoring

**Date of Completion** 

27-FEB-2020

Sample ID

Stack attached to 1250 KVA DG Set-2-M&C Building

27-FEB-2020

Sampling Date

13-FEB-2020

Date of Issue

Vayubodhan Upakaran Pvt

Sampling Duration

NA

Instrument used for sampling

LtdStack Sampler VSS 3

s.no.	TEST	UNIT	RESULTS	REQUIREMENTS	PROTOCOL/TES T METHOD
1	Ambient Temperature	°C	29	Not Specified	IS 11255 (P3): 2008
2	Stack Diameter	m	0.3300	Not Specified	IS:11255 (P3): 2008
3	Flue gas Temperature	°C	293	Not Specified	IS 11255 (P3): 2008
4	Flue gas Velocity	m s .	13,44	Not Specified	IS 11255 (P3): 2008
5	Quantity of Emission	Nm³ Hr	1978	Not Specified	IS 11255 (P3): 2008
6	Particulate matter	mg/Nm³	31.1	75 max	IS 11255 (P1): 1985
7	Sulphur Dioxide as SO2	mg/Nm³	Below Detection Limit of 3	Not Specified	Fluegas Analyzer Method
8	Oxides of Nitrogen as NO2	ppmv	121	. 710 max	Fluegas Analyzer Method
9	Carbon monoxide as CO	mg Nm³	136	150 max	Fluegas Analyzer Method
10	Non Methane Hydrocarbons	mg/Nm³	Below Detection Limit of I	100 max	IS 13270: 1992

Remarks: The Requirement mentioned here is as per Environment Protection Act-1986

#### Terms And Conditions

S.No.	Description
1	The results reported above pertains only to the tested samples and applicable parameters.
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	test certificate unless otherwise specified.
3	Total liability of our laboratory is limited to the invoiced amount.
4	This report is not to be reproduced either wholly or in part and cannot be used as an evidence in the Court of Law and should not be used in
	any advertising media without prior written permission.
5	In case any reconfirmation of contents of this test certificate is required, please contact our office.
6	Sampling is not done by us unless specified.

Approved Authorized Signatory

Krishnamurthy..

(Manager-Environment)

Approved On

27-FEB-2020

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Page No.: 1 of 2

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#### SHIVA ANALYTICALS (INDIA) PRIVATE LIMITED

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: +91-80-2801 5333

: info@shivaanalyticals.com E-mail Website: www.shivaanalyticals.com : U24230KA1994PTC125297 CIN

GSTN : 29AACCS8434K1ZV

> **Test Certificate** (Environment)

Matrix: Stack Emission

Discipline Group Issued To

Chemical Atmospheric Pollution Infosys Limited.

PO / Reference No. PO / Reference Date C.A.No.

Date of Receipt

2300149397 12-JUN-2019 05200218000801 17-FEB-2020

Address

IL Bangalore STP Park - I No. 45 & 46, 3rd Cross, Electronics

Hosur Road, Bangalore - 560100

Date of Booking

18-FEB-2020

Customer ID

Sample for the month of Feb. 2020. Stack Monitoring

27-FEB-2020

Sample ID

Stack attached to 1250 KVA DG

**Date of Completion** 

Sampling Date

Set-2-M&C Building 13-FEB-2020

Date of Issue

27-FEB-2020 Vayubodhan Upakaran Pvt

Sampling Duration

Instrument used for sampling

LtdStack Sampler VSS 3

Any discrepancy in the Test Certificate should be notified within 30 days.

Approved Authorized Signatory

Krishnamurthy.. (Manager-Environment) Approved On

27-FEB-2020

Printed by: Krishne.Gowda

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Part of the Cotecna Group

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E-mail: info@shivaanalyticals.com Website: www.shivaanalyticals.com CIN: U24230KA1994PTC125297

GSTN: 29AACCS8434K1ZV

## Test Certificate (Environment)

Matrix: Stack Emission			* Development
Discipline	Chemical	PO / Reference No.	2300149397
Group	Atmospheric Pollution	PO / Reference Date	12-JUN-2019
Issued To	Infosys Limited	C.A.No.	05200218000802
Address	IL Bangalore STP Park - I	Date of Receipt	17-FEB-2020
	No. 45 & 46, 3rd Cross, Electronics		
	City		
	Hosur Road, Bangalore - 560100		
Customer ID	Sample for the month of Feb. 2020.	Date of Booking	18-FEB-2020
	Stack Monitoring		
Sample ID	Stack attached to 1250 KVA DG	Date of Completion	27-FEB-2020
2000000 r 1	Set-3-M & C Building		
Sampling Date	13-FEB-2020	Date of Issue	27-FEB-2020
Sampling Duration	NA	Instrument used for sampling	Vayubodhan Upakaran Pvt
100000000			LtdStack Sampler VSS 3

s.no.	TEST	UNIT	RESULTS	REQUIREMENTS	PROTOCOL/TES T METHOD
ı	Ambient Temperature	°C	30	Not Specified	IS 11255 (P3): 2008
2	Stack Diameter	m	0.3300	Not Specified	IS:11255 (P3): 2008
3	Flue gas Temperature	°C	297	Not Specified	IS 11255 (P3): 2008
4	Flue gas Velocity	m s	13,55	Not Specified	IS 11255 (P3): 2008
5	Quantity of Emission	Nm³ Hr	1980	Not Specified	IS 11255 (P3): 2008
6	Particulate matter	mg Nm³	30.6	75 max	IS 11255 (P1): 1985
7	Sulphur Dioxide as SO2	mg Nm³	Below Detection Limit of 3	Not Specified	Fluegas Analyzer Method
8	Oxides of Nitrogen as NO2	ppmv	100	710 max	Fluegas Analyzer Method
9	Carbon monoxide as CO	mg Nm³	115	150 max	Fluegas Analyzer Method
10	Non Methane Hydrocarbons	mg Nm³	Below Detection Limit of 1	100 max	IS 13270 : 1992

Remarks: The Requirement mentioned here is as per Environment Protection Act-1986

#### **Terms And Conditions**

S.No.	Description					
1	The results reported above pertains only to the tested samples and applicable parameters.					
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3		boratory is limited to the invoiced ar				
4	This report is not to be reproduced either wholly or in part and cannot be used as an evidence in the Court of Law and should not be used any advertising media without prior written permission.					
5	In case any reconfirma	tion of contents of this test certificat	e is required, please contact our office	N		
6	Sampling is not done b	ny us unless specified.				
upproved	Authorized Signatory	Krishnamurthy (Manager-Environment)	Approved On	27-FEB-2020		
rinted by	r: Krishne.Gowda		Printed on: 28-FEB-2020			
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E-mail: info@shivaanalyticals.com Website: www.shivaanalyticals.com CIN : U24230KA1994PTC125297

: 29AACCS8434K1ZV

Test Certificate (Environment)

Matrix: Stack Emission

Discipline Group

Chemical

PO / Reference No.

2300149397

Issued To Address

Atmospheric Pollution Infosys Limited.,

PO / Reference Date C.A.No.

12-JUN-2019 05200218000802

IL Bangalore STP Park - I No. 45 & 46, 3rd Cross, Electronics Date of Receipt

17-FEB-2020

GSTN

City

Hosur Road, Bangalore - 560100

Date of Booking

18-FEB-2020

Customer 1D

Sample for the month of Feb. 2020. Stack Monitoring

27-FEB-2020

Sample ID

Stack attached to 1250 KVA DG

Date of Completion

Sampling Date

Set-3-M & C Building 13-FEB-2020

Date of Issue

27-FEB-2020

**Sampling Duration** 

NA

Instrument used for sampling

Vayubodhan Upakaran Pyt LtdStack Sampler VSS 3

Any discrepancy in the Test Certificate should be notified within 30 days.

Approved Authorized Signatory

Krishnamurthy..

(Manager-Environment)

Approved On

27-FEB-2020

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E-mail: info@shivaanalyticals.com Website: www.shivaanalyticals.com : U24230KA1994PTC125297

: 29AACCS8434K1ZV

Test Certificate (Environment)

Matrix: Ambient Air

Discipline Group

Chemical Atmospheric Pollution PO / Reference No. PO / Reference Date

2300149397 12-JUN-2019 05200328001431

Issued To Address

Infosys Limited... IL Bangalore STP Park - I C.A.No. Date of Receipt

23-MAR-2020

No. 45 & 46, 3rd Cross, Electronics

City

GSTN

Hosur Road, Bangalore - 560100 Sample for the month of March.

Date of Booking

28-MAR-2020

Customer ID Sample ID

2020. Ambient Air Quality Near DG Room, EC-53 (M & C

Date of Completion

22-APR-2020

Building) 13-MAR-2020

Date of Issue

22-APR-2020

Sampling Date Sampling Duration

24 Hrs

Instrument used for sampling

ThermoEnvironmentalRespirableDus

tsamplerModelTEI-108 BL,TEI 110. FineparticulatesamplerModel

TE1121

S.NO.	TEST	UNIT	RESULTS	REQUIREMENTS	PROTOCOL/TES T METHOD
1	Particulate matter Size less than 10 microns	րք m³	62.0	100 max	IS: 5182 (Part-23): 2006
2	Particulate Matter size less than 2.5 microns	μg m³	32.0	60 max	IS: 5182 (Part 24): 2019
3	Sulphur Dioxide as SO2	μg m <sup>1</sup>	9,4	80 max	IS 5182 (Part-2): 2001
4	Nitrogen Dioxide as NO2	μg m³	32.6	80 max	IS:5182 (Part-6): 2006
5	Carbon Monoxide as CO	mg m'	1.26	2 max	IS: 5182 (Part-10): 1999
6	Lead as Pb	µg·m³	0.014	1 max	IS: 5182 (Part-22): 2004
7	Ammonia as NH3	µg m³	29,3	400 max	IS: 5182 (Part-25): 2018
8	Ozone as O3	µg m³	19,7	100 max	IS 5182 (Part-9): 1974
9	Benzene asC6H6	μg m³	Below detection Limit of 2.5	5 max	IS: 5182 (Part-11): 2006
10	Benzo(a)pyrine (Particulate phase only)	ng m³	Below Detection Limit of 0.1	1 max	IS: 5182 (Part-12): 2004
11	Arsenic as As	ng m³	Below Detection Limit of 1	6 max	USEPA Compondium Method IO 3.1 &
12	Nickel as Ni	ng m³	5.8	20 mas	3.4 USEPA Compondium Method IO 3.1 &
					7 6

Remarks: The Requirement mentioned here is as per National ambient air quality standards

Approved Authorized Signatory

Krishnamurthy...

(Manager-Environment)

Approved On

22-APR-2020

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E-mail: info@shivaanalyticals.com Website: www.shivaanalyticals.com CIN : U24230KA1994PTC125297

GSTN : 29AACCS8434K1ZV

> Test Certificate (Environment)

Matrix: Ambient Air

Discipline Group

Chemical

PO / Reference No.

2300149397

Issued To

Atmospheric Pollution Infosys Limited.,

PO / Reference Date C.A.No.

12-JUN-2019 05200328001431

Address

IL Bangalore STP Park - I

Date of Receipt

23-MAR-2020

No. 45 & 46, 3rd Cross, Electronics

Hosur Road, Bangalore - 560100

Date of Booking

28-MAR-2020

Customer ID

Sample for the month of March.

Sample ID

2020. Ambient Air Quality Near DG Room, EC-53 (M & C

**Date of Completion** 

22-APR-2020

Building)

Date of Issue

22-APR-2020

Sampling Date Sampling Duration 13-MAR-2020 24 Hrs

Instrument used for sampling

ThermoEnvironmentalRespirableDus

tsamplerModelTEI-108 BL,TEI 110, FineparticulatesamplerModel

TEH21

Note: Instruments used

i) Thermo Environmental Respirable Dust sampler Model TEI-108 BL., TEI 110,

Date of Calibration: 26.03.2019 Next Calibration Due on: 25.03,2020 ii) Fine particulate sampler Model TEI 121.

Date of Calibration: 26.03.2019 Next Calibration Due on: 25.03.2020

#### **Terms And Conditions**

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- 3 Total liability of our laboratory is limited to the invoiced amount.
- This report is not to be reproduced either wholly or in part and cannot be used as an evidence in the Court of Law and should not be used in any advertising media without prior written permission,
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Approved Authorized Signatory

Krishnamurthy...

(Manager-Environment)

Approved On

22-APR-2020

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: -91-80-2801 5333

E-mail: info@shivaanalyticals.com Website: www.shivaanalyticals.com CIN : U24230KA1994PTC125297

GSTN: 29AACCS8434K1ZV

Test Certificate (Environment)

Matrix: Noise Discipline Group

Chemical Atmospheric Pollution Infosys Limited.,

PO / Reference No. PO / Reference Date C.A.No.

2300149397 12-JUN-2019 05200328001440

Issued To Address

IL Bangalore STP Park - I No. 45 & 46, 3rd Cross, Electronics Date of Receipt

23-MAR-2020

Hosur Road, Bangalore - 560100

Date of Booking

28-MAR-2020

Customer ID

S.NO.

Sample for the month of March 2020. Ambient Noise

**Date of Completion** 

22-APR-2020

Sample ID

MC Building Near main gate

Date of Issue

22-APR-2020

Sampling Date Sampling Duration

13-MAR-2020 24 Hrs

Instrument used for sampling

Sound Level Meter- BASE LINE,

Model 2511

RESULTS PROTOCOL/TEST METHOD 55.4 IS 9989; 1981

1 Day Time Noise Level 2 Night Time Noise Level dB(A) Leq

47.4

IS 9989; 1981

Remarks: Ambient air quality standards in respect of Noise as per Environment (Protection) Rules, 1986

dB(A) Leq

UNIT

Area Code----- Category of area---- Day Time Limits in dB(A) Leq----- Day Time Limits in dB(A) Leq (B)------55 

(D)------Silence Zone------50----------50 Note1: Day time is reckoned in between 06.00 am and 09.00 pm Note2: Night time is reckoned in between 09.00 pm and 06.00 am

TEST

Note: Instruments used and Calibration details Sound Level Meter- BASE LINE, Model 2511

Date of Calibration: 28.01.2020 Next Calibration Due on: 27.01,2021

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Approved Authorized Signatory

Krishnamurthy..

Approved On

22-APR-2020

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(Manager-Environment)

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#### SHIVA ANALYTICALS (INDIA) PRIVATE LIMITED

Plot No. 24D(P) & 34D, KIADB Industrial Area. Hoskote, Bangalore - 562 114. Karnataka, India

: -91-80-2801 5333 Tel

E-mail: info(a/shivaanalyticals.com Website: www.shivaanalyticals.com CIN : U24230KA1994PTC125297

GSTN: 29AACCS8434K1ZV

Test Certificate (Environment)

Matrix: Noise

Address

Discipline Group Issued To

Chemical Atmospheric Pollution

IL Bangalore STP Park - I

PO / Reference No. PO / Reference Date Infosys Limited.. C.A.No.

Date of Receipt

12-JUN-2019 05200328001441 23-MAR-2020

2300149397

No. 45 & 46, 3rd Cross, Electronics

Hosur Road, Bangalore - 560100

Sample for the month of March

2020. Ambient Noise

Date of Booking

28-MAR-2020

Sample 1D

Customer ID

MC Building Near Entrance gate of car parking area

Date of Completion

22-APR-2020

Sampling Date Sampling Duration 13-MAR-2020

Date of Issue

22-APR-2020 Sound Level Meter- BASE LINE.

24 Hrs

Instrument used for sampling

Model 2511

S.NO.	TEST	UNIT	RESULTS	PROTOCOL/TEST METHOD
i	Day Time Noise Level	dB(A) Leq	62.7	IS 9989; 1981
2	Night Time Noise Level	dB(A) Leq	50,3	IS 9989: 1981

Remarks: Ambient air quality standards in respect of Noise as per Environment (Protection) Rules, 1986

Area Code----- Category of area---- Day Time Limits in dB(A) Leq----- Day Time Limits in dB(A) Leq

Note1: Day time is reckoned in between 06.00 am and 09.00 pm Note2: Night time is reckoned in between 09.00 pm and 06.00 am

Note: Instruments used and Calibration details Sound Level Meter- BASE LINE, Model 2511

Date of Calibration: 28.01.2020 Next Calibration Due on: 27.01.2021

#### **Terms And Conditions**

#### S.No.

#### Description

- The results reported above pertains only to the tested samples and applicable parameters.
- 2 Samples which are degradable will be disposed immediately after testing and others will be disposed after one month from the date of issue of test certificate unless otherwise specified.
- 3 Total liability of our laboratory is limited to the invoiced amount.
- 4 This report is not to be reproduced either wholly or in part and cannot be used as an evidence in the Court of Law and should not be used in any advertising media without prior written permission.
- 5 In case any reconfirmation of contents of this test certificate is required, please contact our office.
- Sampling is not done by us unless specified.
- Any discrepancy in the Test Certificate should be notified within 30 days.

Approved Authorized Signatory

Krishnamurthy...

Approved On

22-APR-2020

Printed by: Krishne.Gowda

(Manager-Environment)

Printed on: 22-APR-2020

Copy No.: 1

Page No.: Lof L

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#### SHIVA ANALYTICALS (INDIA) PRIVATE LIMITED

Plot No. 24D(P) & 34D, KIADB Industrial Area, Hoskote, Bangalore - 562 114. Karnataka, India

Tel : +91-80-2801 5333

E-mail: info@shivaanalyticals.com Website: www.shivaanalyticals.com : U24230KA1994PTC125297

GSTN : 29AACCS8434K1ZV

#### Test Certificate (Environment)

Matrix: Noise Discipline Group

Chemical

PO / Reference No.

2300149397

Issued To

Atmospheric Pollution Infosys Limited.,

PO / Reference Date

12-JUN-2019

Address

IL Bangalore STP Park - I

C.A.No. Date of Receipt 05200328001442 23-MAR-2020

No. 45 & 46, 3rd Cross, Electronics

Customer ID

Hosur Road, Bangalore - 560100 Sample for the month of March

Date of Booking

28-MAR-2020

Sample ID

2020. Ambient Noise MC Building Near DG room

Date of Completion

22-APR-2020

Sampling Date

13-MAR-2020

Date of Issue

22-APR-2020

Sampling Duration

24 Hrs

Instrument used for sampling

Sound Level Meter- BASE LINE.

Model 2511

S.NO.

TEST

RESULTS 59 2

PROTOCOL/TEST METHOD

Day Time Noise Level Night Time Noise Level

dB(A) Leq

UNIT

50.1

IS 9989: 1981

dB(A) Leq

IS 9989; 1981

Remarks: Ambient air quality standards in respect of Noise as per Environment (Protection) Rules, 1986 Area Code------ Category of area----- Day Time Limits in dB(A) Leq------ Day Time Limits in dB(A) Leq

(A)------55 (B)-----55

Note2: Night time is reckoned in between 09.00 pm and 06.00 am

Note1: Day time is reckoned in between 06,00 am and 09,00 pm

Note: Instruments used and Calibration details Sound Level Meter- BASE LINE, Model 2511

Date of Calibration: 28.01,2020 Next Calibration Due on: 27.01.2021

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(Manager-Environment)

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Page No.: Lof I

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## **AQUADIAGNOSTICS WATER RESEARCH &** TECHNOLOGY CENTRE LIMITED.

CIN: U73100KA2008PLC045994| An IAPMO Group - USA Company

Regd. Off: No. 43, PMR Tower, 3rd Floor, Above State Bank of India, Beratena Agrahara,

Near Hosa Road Junction, Hosur Main Road, Bangalore - 560100.

Date: 22.02.2020

Ph: +91 80 25743042 | website : www.aquadiagnostics.org | E: askme@IAPMOAquadiagnostics.org

#### TEST REPORT

ULR - TC764719000000931F

SAMPLE DETAILS

CUSTOMER DETAILS : AWRTCLWTR - C&B/ 08810-08810A/ 19-20 Sample Code No.

Name & Address :11.02.2020 Sample received on :PO.NO.430002253 Dated 24.05.2019

Reference :TREATED SEWAGE WATER M/s Infosys Ltd, Description of the sample Date of Analysis started :11.02.2020( Chemistry ) MC BUILDING :11.02,2020(Microbiology)

Electronics City, Date of Analysis Completed :15.02.2020 (Chemistry) Bangalore. :13.02.2020(Microbiology)

:1 Ltr + 250 ml Quantity of the sample :Without seal & Signature Packing seal and signature

:Mr.Ramu - IS 3025(Part 1) 1987 (RA 2019) Sampling : Not Applicable Subcontract

Condition of the sample when received: Turbid water in Plastic and sterilized bottles.

TEST DATA: CHEMICAL TESING - WATER

S.No	PARAMETER TESTED	UNITS	TEST METHOD	TEST	Effluent discharge standard for Sewage treatment plant CPCB And KSPCB consent Parameters
00				RESULT	Requirement (Acceptable Limit)
1	Color	Hazen	APHA 23 <sup>rd</sup> edn 2120 B	<5.0	
2	Odor	<b></b>	IS 3025 (Part 5 ):1983 (RA 2018)	Agreeable	
3	Turbidity NTU	NTU	APHA 23 <sup>rd</sup> edn 2130 B	<1.0	
4	pH Value		APHA 23 <sup>rd</sup> edn 4500 H+ B	7.50	6.5-9.0
5	Total Dissolved solids	mg/L	APHA 23 <sup>rd</sup> edn 2540 C	848.0	
6	Total suspended Solids	mg/L	APHA 23 <sup>rd</sup> edn 2540 D	<1.0	≯ 20
7	Oil and grease	mg/L	APHA 23 <sup>rd</sup> edn 5520 B	<0.1	
8	Residual Chlorine	mg/L	APHA 23 <sup>rd</sup> edn 4500 CI F	<0.2	
9	BOD	mg/L	IS 3025 ( Part 44):1993 (RA 2019)	6.40	≯ 10
10	COD	mg/L	APHA 23 <sup>rd</sup> edn 5220 B	50.0	≯ 50
11	Ammonical nitrogen NH3-N	mg/L	APHA 23 <sup>rd</sup> edn 4500 NH 3 F	0.22	≯ 5.0
12	Total Nitrogen as N	mg/L	IS 3025Part 34 1998 (RA 2009) + APHA 23 <sup>rd</sup> edn 4500NO3B + 4500 Norg	1.34	≯ 10

TEST DATA: MICROBIOLOGICAL TESTING - WATER

S.No	PARAMETER TESTED	TEST METHOD	TEST RESULT	Effluent discharge standard for Sewage treatment plant CPCB And KSPCB consent Parameters
1	Faecal Coliform MPN / 100 ml	IS 1622:1981 ( RA 2019)	Not Detected	Less than 100
2	E. coli or thermotolerant Coliform bacteria Presence or Absence / 100ml	IS 1622:1981 (RA 2019)	Absent	

MPN: Most Probable Number

INTERPRETATION: Tested sample of water conforms to above Specification.

JE531815 1. p. muhulumaran

DR S. MURALIDHARA RAO Head - Laboratory

**AUTHORIZED SIGNATORY** 

REPORT No: AWRTCL/ WTR-C&B /08810-08810A / 19-20, Date: 22.02.2020 Page 1 of 3

#### NABL ACCREDITED LABORATORY | RECOGNIZED BY IAPMO R&T - USA

WE UNDER TAKE ANALYTICAL JOBS FOR WATER, FOOD, BIOCIDAL RESINS, DETERGENTS & SANITIZERS AND SOIL. WE CARRY OUT PERFORMANCE EVALUATION OF DRINKING WATER TREATMENT UNITS AS PER INSFANSIAND BIS STANDARDS BASED ON PERFORMANCE WE CAN ARRANGE FOR CERTFICATION FROM IAPMO R&T - USA.

#### Note:

- 1. The Results pertain only to the tested samples and applicable parameters.
- Samples will be disposed after 15 days from the issue of test certificate unless otherwise specified, In case of bacteriological tests, the samples will be disposed after 7 days itself from the date of issuing the certificate.
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Ph: +91 80 25743042 | website: www.aquadiagnostics.org | E: askme@IAPMOAquadiagnostics.org

#### TEST REPORT

Condition of the sample when received: Turbid water in a Plastic bottle

ULR - TC764719000000931F CUSTOMER DETAILS

Name & Address

M/s Infosys Ltd,

Electronics City.

MC BUILDING,

Bangalore.

Date: 22.02.2020 SAMPLE DETAILS :AWRTCLWTR - C/ 08810/ 19-20 :11.02.2020 :PO.NO.430002253 Dated 24.05.2019 TREATED SEWAGE WATER :11.02.2020 Date of Analysis Completed :15.02.2020 :1 Ltr : Without seal & Signature Packing seal and signature :Mr.Ramu - IS 3025(Part 1) 1987 (RA 2019) : Not Applicable

TEST DATA: CHEMICAL TESTING - WATER

S.No	PARAMETER TESTED	TEST METHOD	TESTRESULT
1	Silica as SiO2 mg/L	APHA 23 <sup>rd</sup> edn 4500 SiO2 C	7.27

Sample Code No. Sample received on

Description of the sample Date of Analysis started

Quantity of the sample

Reference

Sampling

Subcontract

AUTHORIZED SIGNATORY

DR S. MURALIDHARA RAO Head - Laboratory

REPORT No: AWRTCL/ WTR-C /08810 / 19-20, Date: 22.02.2020 Page 2 of 3

#### NABL ACCREDITED LABORATORY | RECOGNIZED BY IAPMO R&T - USA

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#### **TEST REPORT**

ULR - TC764719000000931F

Date: 22.02.2020

CUSTOMER DETAILS	SAMPLE DETAILS		
Name & Address	Sample Code No.	: AWRTCL/WTR - C&B/ 08810/ 19-20	
M/s Infosys Ltd, MC BUILDING, Electronics City, Bangalore	Sample received on Reference Description of the sample Date of Analysis started Date of Analysis Completed Quantity of the sample Packing seal and signature Sampling Subcontract Condition of the sample whe	:11.02.2020 :PO.NO.430002253 Dated 24.05.2019 :TREATED SEWAGE WATER :11.02.2020 :15.02.2020 :1 Ltr :Without seal & Signature :Mr.Ramu - IS 3025(Part 1) 1987 (RA 2019) : Not Applicable n received; Clear water in a Plastic bottle.	

TEST DATA: CHEMICAL TESING - WATER

S.No	PARAMETER TESTED	UNIT	TEST METHOD	TESTRESULT
1	Sodium absorption ratio (SAR)	Mmol/L	APHA 23 <sup>rd</sup> edn 3500 Ca B+NaB+Mg B	10.32

**AUTHORIZED SIGNATORY** 

HB140

1. Numulhumasan

DR S. MURALIDHARA RAO Head – Laboratory

REPORT No: AWRTCL/ WTR-C /08810 / 19-20, Date: 22.02.2020 Page 3 of 3

\*\*\*End of the Report\*\*\*

#### NABL ACCREDITED LABORATORY | RECOGNIZED BY IAPMO R&T - USA

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