



IL/BBSR/FAC/IDCO/19-20

Dt. 4<sup>th</sup> June 2019

To

The Member Secretary  
State Environment Impact Assessment Authority  
SEIAA (Odisha)  
Qr No. 5 RF.2/1, Unit-IX  
Bhubaneswar – 751 022

**Sub: Compliance report for our campus at IDCO allotted plot no PB-1, NE-1 and NP-1, Info Valley – SEZ, Bhubaneswar.**

**Ref: SEIAA Letter No. 188/SEIAA -33/10 Dated 25<sup>th</sup> Sept 2012.  
Extension 2932/ SEIAA, Dt. 6<sup>th</sup> May 2017.**

Dear Sir,

With reference to above mentioned letter, we are submitting herewith the copies of the six monthly analysis report of Ambient Air, Noise monitoring, DG noise, Soil analysis, Ground water as per the compliance report pertaining to Oct'18 – Mar'19.

As per proposed expansion of campus for Infosys Limited at IDCO allotted plot no PB-1, NE-1 and NP-1, Info Valley – SEZ, Bhubaneswar, we have already completed 4 Nos Software Development Blocks, Customer Care Center and other utilities.

You are requested to kindly let us know if any further details need to be provided in this matter.

Thanking you,

Yours Faithfully,

For Infosys Limited

  
Biswajit Nayak  
Regional Manager Facilities

Attached:

1. Compliance Report
2. Analysis reports from Oct'18 – Mar'19

CC – The Chairman, OSPCB, Bhubaneswar  
Chief General Manager (Env.) IDCO, IDCO, Bhubaneswar  
Mr. Saswat Patnaik, Expert (PMU), IDCO, Bhubaneswar

**INFOSYS LIMITED**  
Plot No-PB-1, NE-1&NP-1  
Info valley, IDCO IT/ITES SEZ  
Vill-Gaudakashipur & Arisal  
Bhubaneswar  
Dist. Khurda 752 054, India  
T 91 674 334 0001

Corporate Office:  
CIN: L85110KA1981PLC013115  
44, Infosys Avenue  
Electronics City, Hosur Road  
Bangalore 560 100, India  
T 91 80 2852 0261  
F 91 80 2852 0362  
askus@infosys.com  
www.infosys.com

<b>I. Construction Phase</b>		
	<b>Conditions</b>	<b>Compliance</b>
i	Provision shall be made for the housing of construction laborers 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.	All the necessary domestic facilities are made available for construction workers both within the Site and Labour Colony.
ii	A first Aid room will be provided in the project both during construction and operation of the project.	First aid facility and dispensary is available at construction office area. First aid trained personnel were available.
iii	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	Excavated soil during construction is being used for filling up low area and for landscape development within the campus
iv	Disposal of muck during construction phrase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for the general safety and health aspects of people, only in approved sites with the approval of competent authority.	Yes, the management of construction debris will be done in such a manner so as not to cause any harm to humans nor environment.
v	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy materials and other toxic contaminants.	Periodical checks are in place during construction phase.
vi	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such material must be secured so that they should not leach in to the ground water	During construction, it is ensured that the hazardous waste were kept separately in a bin and disposed safely to prevent contamination of ground water.
vii	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the OPCB.	The hazardous waste are accumulated and stored in a designed bin and will be disposed as per the applicable norms.

viii	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules,1986 prescribed for air and noise emission standards.	DG sets have provided with suitable acoustic metal enclosures. D.G sets have confirmed to EPA Rules prescribed for air and noise emission standards. Necessary approval is obtained from Electrical Inspector before commissioning.
ix	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.	Since the DG is a standby to the power supply, we are not storing diesel at Site. The construction power is available through a 250KW transformer installed on Site.
x	Vehicles used for bringing construction materials to the site should be in good conditions and should have a pollution check certificate and conform to applicable air and noise emission standards and should be operated only during non-peak hours	We are checking the fitness certificate issued by the Competent Authority before allowing any vehicle inside the construction Site. The pollution check certificates are also verified.
xi	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ OPCB	We are following CPCB norms to reduce air and noise pollution at the site.
xii	Fly ash should be used as building material in the construction as per the provisions of Fly ash Notification of Sept 1999 and amended as on 27th August 2003, The above condition is applicable as the project site is located within the 100 Km of thermal Power Stations.	All the blocks used for construction of walls are of fly ash mix.  We are blending 25% of fly ash with Cement to produce concrete in our RMC plant.
xiii	Ready mixed concrete must be used in building construction	Yes, same used for all construction purposes
xiv	Storm water control and it's reuse should be as per CGWB and BIS standards for various applications.	Yes, complied.

xv	Water demand during construction should be optimized by adopting best practices without compromising quality.	Yes, same is followed at the time of construction.
xvi	Permission to draw ground water shall be obtained from the competent authority prior to construction / Operation of the project.	We are getting construction water from IDCO.
xvii	Separation of grey and black water should be done by the use of dual plumbing line. Grey and black water should be treated separately.	Project under construction and it Will be done.
xvii i	Fixtures of showers, toilet flushing and drinking water should be of low flow type either by by use of aerators or pressure reducing devices or sensor based control.	Water saving taps through Pressure reducing valves, Sensor controlled urinals and Use of flow restrictors are provided
xix	Use of glass may be reduced up to 40% of total outer wall area to reduce the energy consumption and load on air conditioning. If necessary, high quality double glass with special reflective coating may be used in the windows.	Low emissivity glass is used & Common areas will not be air conditioned but be naturally ventilated
xx	Roof should meet the prescribed requirement as per energy conservation building code.	Yes, followed
xxi	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipment's, etc. As per National Building Code of India, 2005 including protection measures from lightening etc.	Yes, followed
xxii	Regular Supervision of the above and other measures for monitoring should be in place although the construction phase to avoid disturbance to the surroundings.	Ok

## II. Operation Phase

	Conditions	Compliance
i	<p>The installation of the Sewage Treatment Plant(STP) should be certified by a competent agency and a report in this regard should be submitted to the SEIAA, Orissa before the project is commissioned for operation. Treated effluent from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards OSPCB. Necessary measures should be taken to mitigate the odour problem from STP.</p>	<p>All the waste water is being treated at Sewage treatment plant having capacity of 140 KLD. The total quantity of treated water is being used for landscaping purpose.</p> <p>The STP plant is placed away from operational area and the treatment process is membrane based.</p> <p>Water test report of STP attached.</p>
ii	<p>The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/ inert solid waste should be disposed off to the approved sites for land filling after recovering recycle material.</p>	<p>All the solid waste generated like Paper, plastic, polythene etc. are segregated in different colored bins before disposing to authorized vendors or recycler.</p>
iii	<p>Diesel power generating sets proposed as source of back up power for lifts, elevators and common area illumination during operation phase should be a enclosed type and conform to Environment Protection (EP) rules 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Low sulphur diesel should be used. The location of the DG sets may be decided in consultation with OSPCB.</p>	<p>DG's are placed in separate block and are adhered to all norms.</p>
iv	<p>Noise should be controlled to ensure that it does not exceed the prescribed standards. During night the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.</p>	<p>Periodical monitoring is in place and report attached.</p>
v	<p>The project proponent clarified that part of existing project area is jungle kizam land which will be developed as green belt. If the status of land is forest land, then Forest clearance from MOEF, Govt. of India is</p>	<p>NA.</p>

	required. Development of green belt in the proposed jungle kisam land with full cost details etc. to be submitted to the MOEF. Govt. of India for seeking forest clearance under Forest conservation Act, 1980.	
vi	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during monsoon period.	Available.
vii	Rain water harvesting for roof run off and surface run off, as plan submitted should be implemented. Before recharging the surface run off, pre treatment must be done to remove suspended matter, oil and grease. The bore well for rain water recharging should be kept at least 5 mts above the highest groundwater table.	In place.
viii	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	NA. we are not drawing any ground water inside the campus.
ix	Traffic congestion near the entry and exist points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be used for this purpose.	Proper entry / exit gates are in place. Parking is provided inside the campus for all vehicles.
x	A Report on the energy conservation measures confirming to energy conservation norms finalized by Bureau of energy efficiency should be prepared incorporating details about building materials & technology. R & U Factors etc and submit to the SEIAA, Odisha in three months time.	Is included in the report.
xi	Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the	We are using LED lights in all operational areas. The building management system (BMS) helps to conserve power efficiently.

	prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the maximum extent possible.	
xii	The building blocks should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Complied.
xiii	The proponent shall furnish detailed information on domestic E-waste which includes obsolete personal computers(PC) etc and dispose the e-waste as per CPCB, Delhi/MOEF, Govt. of India guidelines. A details proposal to this effect shall be submitted to the authority.	Complied.
xiv	The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances the funds shall be diverted for other purposes. Year wise expenditure for this fund should be reported to the SEIAA, Odisha.	This is being monitored centrally at our corporate.
xv	The above mentioned stipulated conditions shall be compiled in time bound matter. Failure to comply with any of the conditions mentioned above may result in withdrawal of this environmental clearance and attract action under the provisions of Environment Protection (EP) Act, 1986.	Noted for compliance.



Ref.: EnvLab/19/R-338

Date: 02/02/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR JAN -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-1 (Near Chiller)
3. Monitoring Date : 16.01.2019
4. Date of Analysis : 17.01.2019 to 24.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	55.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	32.6
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.5
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	15.6
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	5.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.56
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.001
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.





Ref. Env/Lab/19/R-339

Date: 02/02/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR JAN -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-2 (Near SOBHA Canteen)
8. Monitoring Date : 16.01.2019
9. Date of Analysis : 17.01.2019 to 24.01.2019
10. Date of Validity of Calibration : 23.05.2019
3. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
4. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	58.9
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	36.5
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	15.6
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	7.8
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.36
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<19.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref: Env/16/19/R-340

Date: 02/02/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR JAN -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-3 (Near SOBHA Main Gate)
3. Monitoring Date : 16.01.2019
4. Date of Analysis : 17.01.2019 to 24.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	56.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	27.6
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	5.5
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	16.5
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.36
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	19.8
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref.: Env/Lab/19/R-341

Date: 02/02/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR JAN -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-4 (Near Water Project)
3. Monitoring Date : 17.01.2019
4. Date of Analysis : 18.01.2019 to 24.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	58.9
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	28.6
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	9.7
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.6
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.34
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<20.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref.: Env/lab/19/R - 342

Date: 02/02/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR JAN -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-5 (Near Last Boundary Wall-South)
3. Monitoring Date : 17.01.2019
4. Date of Analysis : 18.01.2019 to 24.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	56.9
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	23.6
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	9.8
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	18.6
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	9.8
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.36
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref.: EnvLab/19/R-343

Date: 02/02/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR JAN -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-6 (Near Main Gate)
3. Monitoring Date : 17.01.2019
4. Date of Analysis : 18.01.2019 to 24.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	58.9
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	26.7
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	16.5
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	4.8
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.46
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	16.5
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref: Env/lab/19/R-346

Date: 02/02/19

## INDOOR AIR QUALITY MONITORING REPORT FOR JAN-2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-1 (SDB-B Ground Floor)
3. Monitoring Date : 17.01.2019
4. Date of Analysis : 18.01.2019 to 24.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	Analysis Results
Temperature	°C	---	34.0
Humidity	%	---	62.0
Particulate Matter as PM	µg / m <sup>3</sup>	Gravimetric	10.2
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West & Geake Method	5.2
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	10.6
Microbial Count ( Fungi)	CFU/m <sup>3</sup>	Total Viable Count Method	ND
Microbial Count ( Bacteria)	CFU/m <sup>3</sup>	Total Viable Count Method	ND

For Visiontek Consultancy Services Pvt.Ltd.





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004

OHSAS 18001 : 2007

Ref.: Env/lab/19/R-347

Date: 02/02/19

## INDOOR AIR QUALITY MONITORING REPORT FOR JAN-2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-2 (CCC Building 1<sup>st</sup> Floor)
3. Monitoring Date : 17.01.2019
4. Date of Analysis : 18.01.2019 to 24.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	Analysis Results
Temperature	<sup>o</sup> C	---	32.0
Humidity	%	---	59.0
Particulate Matter as PM	$\mu\text{g} / \text{m}^3$	Gravimetric	9.8
Sulphur Dioxide as SO <sub>2</sub>	$\mu\text{g} / \text{m}^3$	Improved West & Geake Method	4.6
Oxides of Nitrogen as NO <sub>x</sub>	$\mu\text{g} / \text{m}^3$	Modified Jacob & Hochheiser (Na -Arsenite)	9.8
Microbial Count ( Fungi)	CFU/m <sup>3</sup>	Total Viable Count Method	ND
Microbial Count ( Bacteria)	CFU/m <sup>3</sup>	Total Viable Count Method	4.0

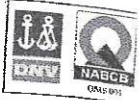


For Visiontek Consultancy Services Pvt.Ltd.



# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004

OHSAS 18001 : 2007

Ref.: Env/lab/19/R-348

Date: 02/02/19

## INDOOR AIR QUALITY MONITORING REPORT FOR JAN 2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-3 (Food Court)
3. Monitoring Date : 18.01.2019
4. Date of Analysis : 19.01.2019 to 25.01.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	Analysis Results
Temperature	$^{\circ}\text{C}$	---	28.0
Humidity	%	---	64.0
Particulate Matter as PM	$\mu\text{g} / \text{m}^3$	Gravimetric	10.2
Sulphur Dioxide as $\text{SO}_2$	$\mu\text{g} / \text{m}^3$	Improved West & Geake Method	<4.0
Oxides of Nitrogen as $\text{NO}_x$	$\mu\text{g} / \text{m}^3$	Modified Jacob & Hochheiser (Na -Arsenite)	11.6
Microbial Count ( Fungi)	$\text{CFU}/\text{m}^3$	Total Viable Count Method	ND
Microbial Count ( Bacteria)	$\text{CFU}/\text{m}^3$	Total Viable Count Method	6.1







Ref.: Env/lab/19/R 350

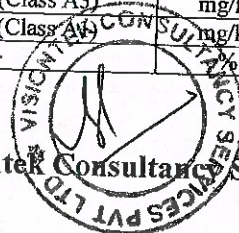
Date: 02/02/19

## SLUDGE SAMPLE ANALYSIS REPORT

Name of Industry : M/s INFOSYS Ltd; Khurda.  
 Sampling Location : S-1 : Sludge Inlet  
 Monitoring Date : 16.01.2019  
 Date of Analysis : 17.01.2019 to 24.01.2019  
 Date of Validity of Calibration : 23.05.2019  
 Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Sl.No	Name of the Parameters	Test Methods	Govt.Of India , MoEF CC Leachable concentration limits (TCLP) or soluble Threshold Limit Concentration (STLC), Class A, 2016	Unit	Analysis Result
					S1
01.	pH Value	TCLP with Zero Head Extraction Followed by Analysis in pH Meter	---	%	7.96
02.	Moisture Content	Gravimetric	---	%	48.0
03.	Electrical Conductivity	TCLP with Zero Head Extraction Followed by Analysis in Conductivity Meter	---	µmhos/cm	3819.26
04.	Nitrogen as N	Total Kjeldahl Nitrogen	---	%	8.8
05.	Phosphorus as P	TCLP with Zero Head Extraction Followed by Analysis in UV-Vis Spectrophotometer	---	%	ND
06.	Potassium as K	TCLP with Zero Head Extraction Followed by Analysis in Flame photometer	---	%	1.89
07.	Lead as Pb	TCLP with Zero Head Extraction Followed by Analysis in Flame photometer	5.0 mg/l (Class A5)	mg/kg	1.28
08.	Hexavalent Chromium as Cr <sup>6+</sup>	TCLP with Zero Head Extraction Followed by Analysis in UV-Vis Spectrophotometer	5.0 mg/l (Class A4)	%	0.026
09.	Copper as Cu		25.0 mg/l (Class A66)	mg/kg	2.2
10.	Iron as Fe	TCLP with Zero Head Extraction Followed by Analysis in Atomic Absorption Spectroscopy	---	mg/kg	26.0
11.	Zinc as Zn		250.0 mg/l (Class A71)	mg/kg	10.8
12.	Manganese as Mn		10.0 mg/l (Class A6)	mg/kg	0.024
13.	Cadmium as Cd		1.0 mg/l (Class A3)	mg/kg	0.42
14.	Arsenic as As		5.0 mg/l (Class A4)	mg/kg	ND
15.	Oil Contamination	Gravimetric	---	---	3.2

For Visiontek Consultancy Services Pvt.Ltd.





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004

OHSAS 18001 : 2007

Ref: EnvLab/19/R-351

Date: 02/02/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 16.01.2019

<b>A. <u>General Information about Stack</u></b>		
1. Stack Connected to	:	DG Set-I
2. Emission due to	:	Burning of Diesel
3. Material of Construction of stack	:	MS
4. Shape of stack	:	Circular
5. Whether stack is provided with permanent platform & ladder	:	Yes
6. Generator capacity	:	1500 KVA
<b>B. <u>Physical Characteristics of Stack:</u></b>		
1. Height of the stack from ground level	:	31.5 mtrs.
2. Diameter of the stack at bottom	:	0.365 mtrs.
3. Diameter of the stack at sampling point	:	0.365 mtrs.
<b>C. <u>Analysis / Characteristic of Stack:</u></b>		
1. Fuel Used	:	HSD
2. Fuel consumption	:	100-150Lit/Hr
<b>D. <u>Results of Sampling &amp; Analysis of Gaseous Emission</u></b>		
	<b>Result</b>	<b>CPCB Limit</b>
1. Temperature of emission (°C)	: 232.8	----
2. Barometric pressure (mm of Hg)	: 743	----
3. Velocity of gas (m/sec.)	: 13.6	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 5465.2	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 23.6	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 33.4	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 42.5	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 25.6	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 4.8	----
<b>E. <u>Pollution control Device</u></b>		
Details of pollution control		
Device attached with the stack	:	Nil
<b>F. <u>Remarks:</u> PM Concentration is within the CPCB norms.</b>		
<b><u>Equipment Detail</u></b>		
1. Equipment Name	:	Stack Sampler
2. Model No	:	VSS I
3. Make	:	Vayubodhan
4. Calibration Upto	:	03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.



# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004

OHSAS 18001 : 2007

Ref: EnvLab /19/R-352

Date: 02/02/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 16.01.2019

### A. General Information about Stack

1. Stack Connected to : DG Set-II  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : Yes  
 6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
 2. Diameter of the stack at bottom : 0.365 mtrs.  
 3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	<u>Result</u>	<u>CPCB Limit</u>
1. Temperature of emission (°C)	: 298.0	----
2. Barometric pressure (mm of Hg)	: 738.2	----
3. Velocity of gas (m/sec.)	: 15.6	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 4563.5	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 21.5	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 39.7	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 45.6	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 27.8	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 4.5	----

### E. Pollution control Device

Details of pollution control : Nil  
 Device attached with the stack

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.

Ref.: ENVLab/19/R-353

Date: 02/02/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 16.01.2019

### A. General Information about Stack

1. Stack Connected to : DG Set-III  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : No  
 6. Generator capacity : 92.96 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 3.5 mtrs.  
 2. Diameter of the stack at bottom : 0.152 mtrs.  
 3. Diameter of the stack at sampling point : 0.152 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 25 Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	<u>Result</u>	<u>CPCB Limit</u>
1. Temperature of emission (°C)	: 275.6	----
2. Barometric pressure (mm of Hg)	: 713	----
3. Velocity of gas (m/sec.)	: 16.5	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 1135.6	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 24.5	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 33.5	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 36.5	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 39.8	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 3.6	----

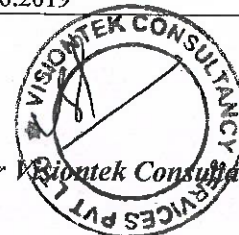
### E. Pollution control Device

Details of pollution control  
 Device attached with the stack : Nil

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.

Ref: Env/ab/18/R-9182

Date: 08/11/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR OCT-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-1 (Near Chiller)
3. Monitoring Date : 15.10.2018
4. Date of Analysis : 16.10.2018 TO 23.10.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	52.3
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	25.8
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	6.8
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	12.6
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	4.7
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.31
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.001
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: Env/ab/18/R-9183

Date: 08/11/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR OCT-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-2 (Near SOBHA Canteen)
8. Monitoring Date : 15.10.2018
9. Date of Analysis : 16.10.2018 TO 23.10.2018
10. Date of Validity of Calibration : 23.05.2019
3. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
4. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10 $\mu$ m) or PM <sub>10</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	100	49.8
Particulate Matter (size less than 2.5 $\mu$ m) or PM <sub>2.5</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	60	27.3
Sulphur Dioxide as SO <sub>2</sub>	$\mu$ g / m <sup>3</sup>	Improved West and Gaeke method	80	6.1
Oxides of Nitrogen as NO <sub>x</sub>	$\mu$ g / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	12.3
Ozone as O <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Chemical Method	100	5.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.14
Ammonia as NH <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Indo phenol blue method	400	<19.0
Benzene as C <sub>6</sub> H <sub>6</sub>	$\mu$ g / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	$\mu$ g / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4 $\mu$ g/m<sup>3</sup>, NO<sub>x</sub> < 9  $\mu$ g/m<sup>3</sup>, O<sub>3</sub> < 4 $\mu$ g/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20 $\mu$ g/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001  $\mu$ g/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001  $\mu$ g/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref.: Enufab/18/R-9184

Date: 03/11/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR OCT-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-3 (Near SOBHA Main Gate)
3. Monitoring Date : 16.10.2018
4. Date of Analysis : 17.10.2018 TO 23.10.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	51.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	18.5
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	4.6
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	15.7
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	7.4
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.19
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	16.5
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.



Ref: Ena/lab/H8/R-9185

Date: 08/11/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR OCT-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-4 (Near Water Project)
3. Monitoring Date : 16.10.2018
4. Date of Analysis : 17.10.2018 TO 23.10.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	49.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	23.5
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	6.7
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	8.5
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	6.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.12
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<20.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.





Ref.: Enu/lab/18/R-9186

Date: 03/11/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR OCT-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-5 (Near Last Boundary Wall-South)
3. Monitoring Date : 17.10.2018
4. Date of Analysis : 18.10.2018 TO 24.10.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10 $\mu$ m) or PM <sub>10</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	100	51.3
Particulate Matter (size less than 2.5 $\mu$ m) or PM <sub>2.5</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	60	20.3
Sulphur Dioxide as SO <sub>2</sub>	$\mu$ g / m <sup>3</sup>	Improved West and Gaeke method	80	8.3
Oxides of Nitrogen as NO <sub>x</sub>	$\mu$ g / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	12.8
Ozone as O <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Chemical Method	100	8.8
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.16
Ammonia as NH <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	$\mu$ g / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	$\mu$ g / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4 $\mu$ g/m<sup>3</sup>, NO<sub>x</sub> < 9  $\mu$ g/m<sup>3</sup>, O<sub>3</sub> < 4 $\mu$ g/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20 $\mu$ g/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001  $\mu$ g/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001  $\mu$ g/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.



Ref: Enufab/18/R-9187

Date: 03/11/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR OCT-2018

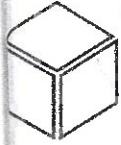
1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-6 (Near Main Gate)
3. Monitoring Date : 17.10.2018
4. Date of Analysis : 18.10.2018 TO 24.10.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	52.1
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	21.4
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.3
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	13.5
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	7.2
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.14
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	18.6
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008  
ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref: *en/ab/18/R-9/191*

Date: *08/11/18*

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 16.10.2018

<b>A. General Information about Stack</b>			
1. Stack Connected to		: DG Set-I	
2. Emission due to		: Burning of Diesel	
3. Material of Construction of stack		: MS	
4. Shape of stack		: Circular	
5. Whether stack is provided with permanent platform & ladder		: Yes	
6. Generator capacity		: 1500 KVA	
<b>B. Physical Characteristics of Stack:</b>			
1. Height of the stack from ground level		: 31.5 mtrs.	
2. Diameter of the stack at bottom		: 0.365 mtrs.	
3. Diameter of the stack at sampling point		: 0.365 mtrs.	
<b>C. Analysis / Characteristic of Stack:</b>			
1. Fuel Used		: HSD	
2. Fuel consumption		: 100-150Lit/Hr	
<b>D. Results of Sampling &amp; Analysis of Gaseous Emission</b>		<b>Result</b>	<b>CPCB Limit</b>
1. Temperature of emission (°C)		: 220.0	----
2. Barometric pressure (mm of Hg)		: 754	----
3. Velocity of gas (m/sec.)		: 12.6	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)		: 5231.0	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )		: 26.3	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )		: 30.1	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )		: 43.5	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )		: 25.9	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )		: 3.2	----
<b>E. Pollution control Device</b>			
Details of pollution control			
Device attached with the stack		: Nil	
<b>F. Remarks:</b> PM Concentration is within the CPCB norms.			
<b>Equipment Detail</b>			
1. Equipment Name		: Stack Sampler	
2. Model No		: VSS 1	
3. Make		: Vayubodhan	
4. Calibration Upto		: 03.06.2019	



For Visiontek Consultancy Services Pvt. Ltd.



# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref: Enu/ab/18/R-9192

Date: 08/11/18

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 16.10.2018

### A. General Information about Stack

1. Stack Connected to : DG Set-II  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : Yes  
 6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
 2. Diameter of the stack at bottom : 0.365 mtrs.  
 3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	<u>Result</u>	<u>CPCB Limit</u>
1. Temperature of emission (°C)	: 260.0	----
2. Barometric pressure (mm of Hg)	: 723	----
3. Velocity of gas (m/sec.)	: 12.09	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 4513.0	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 20.2	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 36.3	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 40.4	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 23.1	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 4.0	----

### E. Pollution control Device

Details of pollution control  
 Device attached with the stack : Nil

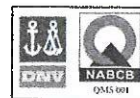
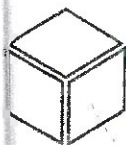
**F. Remarks:** PM Concentration is within the CPCB norms.

### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.



Ref: Enu/ab/18/R-9193

Date: 03/11/18

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 16.10.2018

### A. General Information about Stack

1. Stack Connected to : DG Set-III  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : No  
 6. Generator capacity : 92.96 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 3.5 mtrs.  
 2. Diameter of the stack at bottom : 0.152 mtrs.  
 3. Diameter of the stack at sampling point : 0.152 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 25 Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	<u>Result</u>	<u>CPCB Limit</u>
1. Temperature of emission (°C)	: 240.0	----
2. Barometric pressure (mm of Hg)	: 742	----
3. Velocity of gas (m/sec.)	: 15.8	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 1097.2	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 21.5	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 36.4	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 35.1	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 30.9	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 3.2	----

### E. Pollution control Device

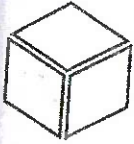
Details of pollution control  
 Device attached with the stack : Nil

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008  
ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref.: Enufab/18/R-9195

Date: 08/11/18

## WATER QUALITY ANALYSIS REPORT FOR OCT-2018

1. Name of the Industry : M/s INFOSYS Ltd, Khurda.
2. Sampling Location : W-2: After Commissioning of MBR
3. Date of Sampling : 16.10.2018
4. Date of Analysis : 17.10.2018 TO 24.10.2018
5. Date of validity of Calibration : 23.05.2019
6. Sample Collected By : VCSPL representative in presence of INFOSYS representative

Sl. No.	Parameter	Unit	Analysis Results
1	TSS		W-2
2	Turbidity	mg/L	2.8
3	BOD	NTU	0.25
4	COD	mg/L	3.5
5	Total Ammonia as N	mg/L	9.56
6	Total Nitrogen	mg/L	0.16
7	TP	mg/L	1.58
8	O&G	mg/L	0.28
9	Total Alkalinity as CaCO <sub>3</sub>	mg/L	1.45
10	Silica as SiO <sub>2</sub>	mg/L	80.5
11	Total Dissolved Solids	mg/L	0.012
12	pH		278.8
13	Total Hardness	--	7.32
14	Total Coliform	mg/L	135.8
15	Faecal Coliform	MPN/100 ml	2.2*10 <sup>2</sup>
		MPN/100 ml	0.19*10 <sup>2</sup>

For Visiontek Consultancy Services Pvt. Ltd.



Ref.: Emfab/18/R-9792

Date: 08/12/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR NOV-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-1 (Near Chiller)
3. Monitoring Date : 16.11.2018
4. Date of Analysis : 17.11.2018 TO 22.11.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	50.6
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	26.7
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	6.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	13.5
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	4.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.39
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.001
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub><4µg/m<sup>3</sup>, NO<sub>x</sub><9 µg/m<sup>3</sup>, O<sub>3</sub><4µg/m<sup>3</sup>, CO<0.1 mg/m<sup>3</sup>, NH<sub>3</sub><20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: trufab/18/R-9743

Date: 03/12/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR NOV-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-2 (Near SOBHA Canteen)
8. Monitoring Date : 16.11.2018
9. Date of Analysis : 17.11.2018 TO 22.11.2018
10. Date of Validity of Calibration : 23.05.2019
3. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
4. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	51.1
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	30.2
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	6.8
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	14.7
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	6.8
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.28
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<19.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub>< 4µg/m<sup>3</sup>, NO<sub>x</sub>< 9 µg/m<sup>3</sup>, O<sub>3</sub>< 4µg/m<sup>3</sup>, CO< 0.1 mg/m<sup>3</sup>, NH<sub>3</sub>< 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref: Enufceb/18/R-9744

Date: 03/12/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR NOV-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-3 (Near SOBHA Main Gate)
3. Monitoring Date : 16.11.2018
4. Date of Analysis : 17.11.2018 TO 22.11.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	52.6
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	21.8
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	4.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	16.4
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.21
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	17.9
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.



Ref: Enu/ab/18/R-9745

Date: 08/12/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR NOV-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-4 (Near Water Project)
3. Monitoring Date : 17.11.2018
4. Date of Analysis : 18.11.2018 TO 23.11.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	52.2
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	25.4
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.8
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	8.9
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	7.3
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.23
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<20.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub><4µg/m<sup>3</sup>, NO<sub>x</sub><9 µg/m<sup>3</sup>, O<sub>3</sub><4µg/m<sup>3</sup>, CO<0.1 mg/m<sup>3</sup>, NH<sub>3</sub><20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: Gm/ab/18/R-9746

Date: 03/12/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR NOV-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-5 (Near Last Boundary Wall-South)
3. Monitoring Date : 17.11.2018
4. Date of Analysis : 18.11.2018 TO 23.11.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	50.4
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	20.8
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	9.2
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	16.5
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	9.1
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.27
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub><4µg/m<sup>3</sup>, NO<sub>x</sub><9 µg/m<sup>3</sup>, O<sub>3</sub><4µg/m<sup>3</sup>, CO<0.1 mg/m<sup>3</sup>, NH<sub>3</sub><20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.



Ref: ENV/ab/18/R-9747

Date: 03/12/18

## AMBIENT AIR QUALITY MONITORING REPORT FOR NOV-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-6 (Near Main Gate)
3. Monitoring Date : 17.11.2018
4. Date of Analysis : 18.11.2018 TO 23.11.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	53.2
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	20.8
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.8
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	14.6
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	4.3
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.28
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	14.6
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008  
ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref.: EnvLab/18/R-9752

Date: 03/12/18

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 17.11.2018

### A. General Information about Stack

1. Stack Connected to : DG Set-I  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : Yes  
 6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
 2. Diameter of the stack at bottom : 0.365 mtrs.  
 3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	<u>Result</u>	<u>CPCB Limit</u>
1. Temperature of emission (°C)	: 220.0	---
2. Barometric pressure (mm of Hg)	: 787	---
3. Velocity of gas (m/sec.)	: 12.8	---
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 5249.0	---
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 26.7	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 31.2	---
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 45.6	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 23.6	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 3.9	---

### E. Pollution control Device

Details of pollution control  
Device attached with the stack : Nil

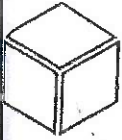
### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS I  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.



# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008  
ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref.: EnvLab/18/R-19753

Date: 03/12/18

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
2. Address : Khurda.  
3. Date of Sampling : 17.11.2018

### A. General Information about Stack

1. Stack Connected to : DG Set-II  
2. Emission due to : Burning of Diesel  
3. Material of Construction of stack : MS  
4. Shape of stack : Circular  
5. Whether stack is provided with permanent platform & ladder : Yes  
6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
2. Diameter of the stack at bottom : 0.365 mtrs.  
3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission ( $^{\circ}$ C)	272.0	----
2. Barometric pressure (mm of Hg)	729.2	----
3. Velocity of gas (m/sec.)	13.5	----
4. Quantity of gas flow ( $\text{Nm}^3/\text{hr.}$ )	4592.0	----
5. Concentration of Carbon monoxide ( $\text{mg}/\text{Nm}^3$ )	22.3	150
6. Concentration of Sulphur dioxide ( $\text{mg}/\text{Nm}^3$ )	38.9	----
7. Concentration of Nitrogen dioxide ( $\text{mg}/\text{Nm}^3$ )	45.6	710
8. Concentration of particulate Matters ( $\text{mg}/\text{Nm}^3$ )	24.5	75
9. Concentration of Non Methane Hydrocarbon ( $\text{mg}/\text{Nm}^3$ )	4.3	----

### E. Pollution control Device

Details of pollution control : Nil  
Device attached with the stack

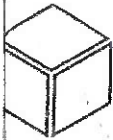
### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
2. Model No : VSS 1  
3. Make : Vayubodhan  
4. Calibration Upto : 03.06.2019

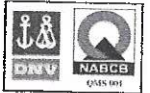
For Visiontek Consultancy Services Pvt. Ltd.





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008  
ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref.: Envlab/18/R-9754


Date: 03/12/18

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
2. Address : Khurda.  
3. Date of Sampling : 17.11.2018

<b>A. General Information about Stack</b>		
1. Stack Connected to	:	DG Set-III
2. Emission due to	:	Burning of Diesel
3. Material of Construction of stack	:	MS
4. Shape of stack	:	Circular
5. Whether stack is provided with permanent platform & ladder	:	No
6. Generator capacity	:	92.96 KVA
<b>B. Physical Characteristics of Stack:</b>		
1. Height of the stack from ground level	:	3.5 mtrs.
2. Diameter of the stack at bottom	:	0.152 mtrs.
3. Diameter of the stack at sampling point	:	0.152 mtrs.
<b>C. Analysis / Characteristic of Stack:</b>		
1. Fuel Used	:	HSD
2. Fuel consumption	:	25 Lit/Hr
<b>D. Results of Sampling &amp; Analysis of Gaseous Emission</b>		
	<b>Result</b>	<b>CPCB Limit</b>
1. Temperature of emission (°C)	: 256.0	----
2. Barometric pressure (mm of Hg)	: 783	----
3. Velocity of gas (m/sec.)	: 16.5	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 1089.0	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 23.6	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 29.8	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 32.6	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 37.2	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 3.6	----
<b>E. Pollution control Device</b>		
Details of pollution control		
Device attached with the stack	:	Nil
<b>F. Remarks:</b> PM Concentration is within the CPCB norms.		
<b>Equipment Detail</b>		
1. Equipment Name	:	Stack Sampler
2. Model No	:	VSS 1
3. Make	:	Vayubodhan
4. Calibration Upto	:	03.06.2019

For Visiontek Consultancy Services Pvt. Ltd.





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref.: EnvLab/19/R-355

Date: 02/02/19

## WATER QUALITY ANALYSIS REPORT FOR JANUARY -2019

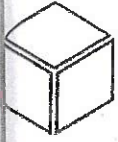
1. Name of the Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : W-2: After Commissioning of MBR
3. Date of Sampling : 16.01.2019
4. Date of Analysis : 17.01.2019 to 24.01.2019
5. Date of validity of Calibration : 23.05.2019
6. Sample Collected By : VCSPL representative in presence of INFOSYS representative

Sl. No.	Parameter	Unit	Analysis Results
			W-2
1	Total Suspended Solids as TSS	mg/L	4.6
2	Turbidity	NTU	0.51
3	Biochemical Oxygen Demand as BOD	mg/L	4.1
4	Chemical Oxygen Demand as COD	mg/L	14.6
5	Total Ammonia as NH <sub>3</sub>	mg/L	0.32
6	Total Nitrogen as N-Total	mg/L	2.2
7	Total Phosphorus as TP	mg/L	0.40
8	Oil & Grease as O&G	mg/L	1.51
9	Total Alkalinity as CaCO <sub>3</sub>	mg/L	86.5
10	Silica as SiO <sub>2</sub>	mg/L	0.025
11	Total Dissolved Solids as TDS	mg/L	128.5
12	pH	--	7.54
13	Total Hardness as TH	mg/L	125.5
14	Total Coliform as TC	MPN/100 ml	2.0*10 <sup>2</sup>
15	Faecal Coliform as FC	MPN/100 ml	0.22*10 <sup>2</sup>



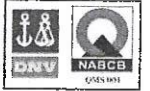
For Visiontek Consultancy Services Pvt. Ltd.





# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004

OHSAS 18001 : 2007

Ref.: EnvLab/18/R-19756

Date: 03/12/18

## WATER QUALITY ANALYSIS REPORT FOR NOVEMBER -2018

1. Name of the Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : W-2: After Commissioning of MBR
3. Date of Sampling : 16.11.2018
4. Date of Analysis : 17.11.2018 TO 23.11.2018
5. Date of validity of Calibration : 23.05.2019
6. Sample Collected By : VCSPL representative in presence of INFOSYS representative

Sl. No.	Parameter	Unit	Analysis Results
			W-2
1	Total Suspended Solids as TSS	mg/L	3.6
2	Turbidity	NTU	0.41
3	Biochemical Oxygen Demand as BOD	mg/L	4.2
4	Chemical Oxygen Demand as COD	mg/L	10.2
5	Total Ammonia as NH <sub>3</sub>	mg/L	0.24
6	Total Nitrogen as N-Total	mg/L	2.4
7	Total Phosphorus as TP	mg/L	0.32
8	Oil & Grease as O&G	mg/L	1.26
9	Total Alkalinity as CaCO <sub>3</sub>	mg/L	80.6
10	Silica as SiO <sub>2</sub>	mg/L	0.023
11	Total Dissolved Solids as TDS	mg/L	294.0
12	pH	--	7.56
13	Total Hardness as TH	mg/L	132.0
14	Total Coliform as TC	MPN/100 ml	2.3*10 <sup>2</sup>
15	Faecal Coliform as FC	MPN/100 ml	0.23*10 <sup>2</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Enufab/19/R-151

Date: 02/01/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR DEC -2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-1 (Near Chiller)
3. Monitoring Date : 17.12.2018
4. Date of Analysis : 18.12.2018 to 25.12.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10 $\mu$ m) or PM <sub>10</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	100	52.6
Particulate Matter (size less than 2.5 $\mu$ m) or PM <sub>2.5</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	60	29.8
Sulphur Dioxide as SO <sub>2</sub>	$\mu$ g / m <sup>3</sup>	Improved West and Gaeke method	80	7.2
Oxides of Nitrogen as NO <sub>x</sub>	$\mu$ g / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	13.9
Ozone as O <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Chemical Method	100	5.2
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.42
Ammonia as NH <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	$\mu$ g / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.001
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	$\mu$ g / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

DL Values: SO<sub>2</sub> < 4 $\mu$ g/m<sup>3</sup>, NO<sub>x</sub> < 9  $\mu$ g/m<sup>3</sup>, O<sub>3</sub> < 4 $\mu$ g/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20 $\mu$ g/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001  $\mu$ g/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001  $\mu$ g/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Envt/19/R-152

Date: 02/01/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR DEC -2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-2 (Near SOBHA Canteen)
8. Monitoring Date : 17.12.2018
9. Date of Analysis : 18.12.2018 to 25.12.2018
10. Date of Validity of Calibration : 23.05.2019
3. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
4. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10 $\mu$ m) or PM <sub>10</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	100	52.6
Particulate Matter (size less than 2.5 $\mu$ m) or PM <sub>2.5</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	60	32.6
Sulphur Dioxide as SO <sub>2</sub>	$\mu$ g / m <sup>3</sup>	Improved West and Gaeke method	80	7.5
Oxides of Nitrogen as NO <sub>x</sub>	$\mu$ g / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	14.5
Ozone as O <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Chemical Method	100	7.2
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.35
Ammonia as NH <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Indo phenol blue method	400	<19.0
Benzene as C <sub>6</sub> H <sub>6</sub>	$\mu$ g / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	$\mu$ g / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4 $\mu$ g/m<sup>3</sup>, NO<sub>x</sub> < 9 $\mu$ g/m<sup>3</sup>, O<sub>3</sub> < 4 $\mu$ g/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20 $\mu$ g/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 $\mu$ g/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 $\mu$ g/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Enr/191R-113

Date: 08/01/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR DEC -2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-3 (Near SOBHA Main Gate)
3. Monitoring Date : 17.12.2018
4. Date of Analysis : 18.12.2018 to 25.12.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	54.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	29.8
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	5.3
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	15.6
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.7
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.35
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	18.9
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

  
 For Visiontek Consultancy Services Pvt. Ltd.

Enufab/19/R - 154

Date: 02/01/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR DEC -2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-4 (Near Water Project)
3. Monitoring Date : 17.12.2018
4. Date of Analysis : 18.12.2018 to 25.12.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	54.5
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	26.5
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	9.1
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	7.5
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.29
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<20.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Enufad/19/R-155

Date: 02/01/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR DEC -2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-5 (Near Last Boundary Wall-South)
3. Monitoring Date : 17.12.2018
4. Date of Analysis : 18.12.2018 to 25.12.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	53.6
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	21.5
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	9.5
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	17.5
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	9.2
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.29
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub>< 4µg/m<sup>3</sup>, NO<sub>x</sub>< 9 µg/m<sup>3</sup>, O<sub>3</sub>< 4µg/m<sup>3</sup>, CO< 0.1 mg/m<sup>3</sup>, NH<sub>3</sub>< 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: EAU/06/19/R-164

Date: 02/02/19

## WATER QUALITY ANALYSIS REPORT FOR DECEMBER -2018

1. Name of the Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : W-2: After Commissioning of MBR
3. Date of Sampling : 17.12.2018
4. Date of Analysis : 18.12.2018 to 25.12.2018
5. Date of validity of Calibration : 23.05.2019
6. Sample Collected By : VCSPL representative in presence of INFOSYS representative

Sl. No.	Parameter	Unit	Analysis Results
			W-2
1	Total Suspended Solids as TSS	mg/L	3.9
2	Turbidity	NTU	0.52
3	Biochemical Oxygen Demand as BOD	mg/L	4.8
4	Chemical Oxygen Demand as COD	mg/L	16.2
5	Total Ammonia as NH <sub>3</sub>	mg/L	0.32
6	Total Nitrogen as N-Total	mg/L	2.6
7	Total Phosphorus as TP	mg/L	0.45
8	Oil & Grease as O&G	mg/L	1.56
9	Total Alkalinity as CaCO <sub>3</sub>	mg/L	82.0
10	Silica as SiO <sub>2</sub>	mg/L	0.041
11	Total Dissolved Solids as TDS	mg/L	192.0
12	pH	--	7.91
13	Total Hardness as TH	mg/L	142.0
14	Total Coliform as TC	MPN/100 ml	2.5*10 <sup>2</sup>
15	Faecal Coliform as FC	MPN/100 ml	0.27*10 <sup>2</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: env/ab/19/R-156

Date: 02/01/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR DEC-2018

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-6 (Near Main Gate)
3. Monitoring Date : 17.12.2018
4. Date of Analysis : 18.12.2018 to 25.12.2018
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	54.2
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	24.5
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	15.6
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	4.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.35
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	15.6
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub><4µg/m<sup>3</sup>, NO<sub>x</sub><9 µg/m<sup>3</sup>, O<sub>3</sub><4µg/m<sup>3</sup>, CO<0.1 mg/m<sup>3</sup>, NH<sub>3</sub><20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref: Env/ab/19/R-160

Date: 02/01/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
2. Address : Khurda.  
3. Date of Sampling : 17.12.2018

### A. General Information about Stack

1. Stack Connected to : DG Set-I  
2. Emission due to : Burning of Diesel  
3. Material of Construction of stack : MS  
4. Shape of stack : Circular  
5. Whether stack is provided with permanent platform & ladder : Yes  
6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
2. Diameter of the stack at bottom : 0.365 mtrs.  
3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	<u>Result</u>	<u>CPCB Limit</u>
1. Temperature of emission (°C)	: 218.0	----
2. Barometric pressure (mm of Hg)	: 752	----
3. Velocity of gas (m/sec.)	: 10.42	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 5345.0	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 26.4	<b>150</b>
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 30.8	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 41.6	<b>710</b>
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 23.2	<b>75</b>
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 4.2	----

### E. Pollution control Device

Details of pollution control  
Device attached with the stack : Nil

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
2. Model No : VSS 1  
3. Make : Vayubodhan17.12.  
4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.

Ref.: 672/ab/19/R-161

Date: 02/02/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;
2. Address : Khurda.
3. Date of Sampling : 17.12.2018

### A. General Information about Stack

1. Stack Connected to : DG Set-II
2. Emission due to : Burning of Diesel
3. Material of Construction of stack : MS
4. Shape of stack : Circular
5. Whether stack is provided with permanent platform & ladder : Yes
6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.
2. Diameter of the stack at bottom : 0.365 mtrs.
3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD
2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission (°C)	282.0	---
2. Barometric pressure (mm of Hg)	756.2	---
3. Velocity of gas (m/sec.)	13.9	---
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	4682.0	---
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	22.9	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	37.5	---
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	43.4	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	26.5	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	4.9	---

### E. Pollution control Device

Details of pollution control  
Device attached with the stack : Nil

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

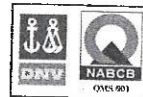
1. Equipment Name : Stack Sampler
2. Model No : VSS 1
3. Make : Vayubodhan
4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.

# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004

OHSAS 18001 : 2007

Ref: Gupta/19/R-102

Date: 02/10/18

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
2. Address : Khurda.  
3. Date of Sampling : 17.12.2018

### A. General Information about Stack

1. Stack Connected to : DG Set-III  
2. Emission due to : Burning of Diesel  
3. Material of Construction of stack : MS  
4. Shape of stack : Circular  
5. Whether stack is provided with permanent platform & ladder : No  
6. Generator capacity : 92.96 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 3.5 mtrs.  
2. Diameter of the stack at bottom : 0.152 mtrs.  
3. Diameter of the stack at sampling point : 0.152 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
2. Fuel consumption : 25 Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission (°C)	: 298.0	----
2. Barometric pressure (mm of Hg)	: 723	----
3. Velocity of gas (m/sec.)	: 15.8	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 1239.0	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 24.6	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 30.5	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 34.6	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 38.9	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 3.5	----

### E. Pollution control Device

Details of pollution control  
Device attached with the stack : Nil

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

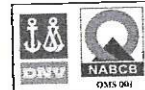
1. Equipment Name : Stack Sampler  
2. Model No : VSS 1  
3. Make : Vayubodhan  
4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.

# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008  
ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref: Caupab/19/R-1186

Date: 05/08/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR FEB -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-6 (Near Main Gate)
3. Monitoring Date : 24.02.2019
4. Date of Analysis : 24.02.2019 to 27.02.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	60.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	26.9
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	8.1
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	12.2
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.0
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.61
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	17.5
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

  
 For Visiontek Consultancy Services Pvt. Ltd.

Ref: Enu/ab/19/R-1187

Date: 05/08/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 23.02.2019

### A. General Information about Stack

1. Stack Connected to : DG Set-I  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : Yes  
 6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
 2. Diameter of the stack at bottom : 0.365 mtrs.  
 3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission (°C)	: 226.0	----
2. Barometric pressure (mm of Hg)	: 743	----
3. Velocity of gas (m/sec.)	: 13.8	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 5455.6	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 24.5	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 34.6	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 43.5	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 27.8	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 4.3	----

### E. Pollution control Device

Details of pollution control  
 Device attached with the stack : Nil

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019



For Visiontek Consultancy Services Pvt. Ltd.

Ref.: Enufab/19/R-1138

Date: 05/08/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 23.02.2019

### A. General Information about Stack

1. Stack Connected to : DG Set-II  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : Yes  
 6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
 2. Diameter of the stack at bottom : 0.365 mtrs.  
 3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission (°C)	: 288.0	----
2. Barometric pressure (mm of Hg)	: 743	----
3. Velocity of gas (m/sec.)	: 17.5	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 4559.5	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 24.6	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 40.8	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 42.2	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 26.5	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 4.2	----

### E. Pollution control Device

Details of pollution control Device attached with the stack : Nil

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019

# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008  
ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref.: Enufab/19/R-1189

Date: 05/08/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
2. Address : Khurda.  
3. Date of Sampling : 23.02.2019

### A. General Information about Stack

1. Stack Connected to : DG Set-III  
2. Emission due to : Burning of Diesel  
3. Material of Construction of stack : MS  
4. Shape of stack : Circular  
5. Whether stack is provided with permanent platform & ladder : No  
6. Generator capacity : 92.96 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 3.5 mtrs.  
2. Diameter of the stack at bottom : 0.152 mtrs.  
3. Diameter of the stack at sampling point : 0.152 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
2. Fuel consumption : 25 Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission (°C)	: 292.0	----
2. Barometric pressure (mm of Hg)	: 743	----
3. Velocity of gas (m/sec.)	: 19.2	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 1128.0	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 25.8	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 32.6	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 35.2	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 34.2	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 3.6	----

### E. Pollution control Device

Details of pollution control : Nil  
Device attached with the stack

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
2. Model No : VSS 1  
3. Make : Vayubodhan  
4. Calibration Upto : 03.06.2019

For Visiontek Consultancy Services Pvt. Ltd.

# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004  
OHSAS 18001 : 2007

ref:

Enufab/19/R-1131

Date: 08/08/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR FEB -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-1 (Near Chiller)
3. Monitoring Date : 23.02.2019
4. Date of Analysis : 24.02.2019 to 27.02.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	59.5
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	34.5
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	7.6
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	15.8
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	5.6
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.59
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.001
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref:

Env/ab/19/R-1132

Date:

05/08/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR FEB -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-2 (Near SOBHA Canteen)
3. Monitoring Date : 23.02.2019
4. Date of Analysis : 24.02.2019 to 27.02.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10 $\mu$ m) or PM <sub>10</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	100	60.2
Particulate Matter (size less than 2.5 $\mu$ m) or PM <sub>2.5</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	60	38.6
Sulphur Dioxide as SO <sub>2</sub>	$\mu$ g / m <sup>3</sup>	Improved West and Gaeke method	80	8.2
Oxides of Nitrogen as NO <sub>x</sub>	$\mu$ g / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	16.4
Ozone as O <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Chemical Method	100	7.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.45
Ammonia as NH <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Indo phenol blue method	400	<19.0
Benzene as C <sub>6</sub> H <sub>6</sub>	$\mu$ g / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	$\mu$ g / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4 $\mu$ g/m<sup>3</sup>, NO<sub>x</sub> < 9  $\mu$ g/m<sup>3</sup>, O<sub>3</sub> < 4 $\mu$ g/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20 $\mu$ g/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001  $\mu$ g/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001  $\mu$ g/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: Enufab/19/R-1183

Date: 08/08/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR FEB -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-3 (Near SOBHA Main Gate)
3. Monitoring Date : 23.02.2019
4. Date of Analysis : 24.02.2019 to 27.02.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

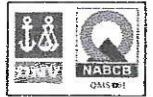
Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	48.9
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	28.6
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	5.9
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	17.8
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	9.2
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.42
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	19.7
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.

# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref: Enufab/19/R-1134

Date: 05/08/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR FEB -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-4 (Near Water Project)
3. Monitoring Date : 24.02.2019
4. Date of Analysis : 24.02.2019 to 27.02.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	61.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	27.9
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	8.1
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	10.2
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.36
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<20.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub>< 4µg/m<sup>3</sup>, NO<sub>x</sub>< 9 µg/m<sup>3</sup>, O<sub>3</sub>< 4µg/m<sup>3</sup>, CO< 0.1 mg/m<sup>3</sup>, NH<sub>3</sub>< 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004

OHSAS 18001 : 2007

Ref.:

Enu/ab/19/R-11851

Date: 08/08/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR FEB -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-5 (Near Last Boundary Wall-South)
3. Monitoring Date : 24.02.2019
4. Date of Analysis : 24.02.2019 to 27.02.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10 $\mu$ m) or PM <sub>10</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	100	58.6
Particulate Matter (size less than 2.5 $\mu$ m) or PM <sub>2.5</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	60	26.2
Sulphur Dioxide as SO <sub>2</sub>	$\mu$ g / m <sup>3</sup>	Improved West and Gaeke method	80	10.2
Oxides of Nitrogen as NO <sub>x</sub>	$\mu$ g / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	19.7
Ozone as O <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Chemical Method	100	9.9
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.42
Ammonia as NH <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	$\mu$ g / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	$\mu$ g / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub><4 $\mu$ g/m<sup>3</sup>, NO<sub>x</sub><9  $\mu$ g/m<sup>3</sup>, O<sub>3</sub><4 $\mu$ g/m<sup>3</sup>, CO<0.1 mg/m<sup>3</sup>, NH<sub>3</sub><20 $\mu$ g/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001  $\mu$ g/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001  $\mu$ g/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>

For Visiontek Consultancy Services Pvt. Ltd.



Ref.: Enu/ab/19/R-1144

Date: 08/08/19

## WATER QUALITY ANALYSIS REPORT FOR FEBRUARY -2019

1. Name of the Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : W-2: After Commissioning of MBR
3. Date of Sampling : 23.02.2019
4. Date of Analysis : 24.02.2019 to 28.02.2019
5. Date of validity of Calibration : 23.05.2019
6. Sample Collected By : VCSPL representative in presence of INFOSYS representative

Sl. No.	Parameter	Unit	Analysis Results
			W-2
1	Total Suspended Solids as TSS	mg/L	11.8
2	Turbidity	NTU	0.6
3	Biochemical Oxygen Demand as BOD	mg/L	4.2
4	Chemical Oxygen Demand as COD	mg/L	17.4
5	Total Ammonia as NH <sub>3</sub>	mg/L	0.38
6	Total Nitrogen as N-Total	mg/L	2.46
7	Total Phosphorus as TP	mg/L	0.51
8	Oil & Grease as O&G	mg/L	1.6
9	Total Alkalinity as CaCO <sub>3</sub>	mg/L	56.0
10	Silica as SiO <sub>2</sub>	mg/L	0.024
11	Total Dissolved Solids as TDS	mg/L	128.0
12	pH	--	7.52
13	Total Hardness as TH	mg/L	118.0
14	Total Coliform as TC	MPN/100 ml	2.1*10 <sup>2</sup>
15	Faecal Coliform as FC	MPN/100 ml	0.25*10 <sup>2</sup>

For Visiontek Consultancy Services Pvt. Ltd.



Ref: Emfab/19/R-1643

Date: 04/04/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR MARCH -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-1 (Near Chiller)
3. Monitoring Date : 25.03.2019
4. Date of Analysis : 26.03.2019 to 29.03.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL Representative in presence of INFOSYS Representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10 $\mu$ m) or PM <sub>10</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	100	62.0
Particulate Matter (size less than 2.5 $\mu$ m) or PM <sub>2.5</sub>	$\mu$ g / m <sup>3</sup>	Gravimetric	60	38.0
Sulphur Dioxide as SO <sub>2</sub>	$\mu$ g / m <sup>3</sup>	Improved West and Gaeke method	80	7.9
Oxides of Nitrogen as NO <sub>x</sub>	$\mu$ g / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	16.8
Ozone as O <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Chemical Method	100	5.7
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.86
Ammonia as NH <sub>3</sub>	$\mu$ g / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	$\mu$ g / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.001
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	$\mu$ g / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4 $\mu$ g/m<sup>3</sup>, NO<sub>x</sub> < 9  $\mu$ g/m<sup>3</sup>, O<sub>3</sub> < 4 $\mu$ g/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20 $\mu$ g/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001  $\mu$ g/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001  $\mu$ g/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: Env/Proj/19/R-1644

Date: 04/04/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR MARCH -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-2 (Near SOBHA Canteen)
8. Monitoring Date : 25.03.2019
9. Date of Analysis : 26.03.2019 to 29.03.2019
10. Date of Validity of Calibration : 23.05.2019
3. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
4. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analyzed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	65.2
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	40.2
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	8.5
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	17.8
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.5
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.53
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<19.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

  
 For Visiontek Consultancy Services Pvt. Ltd.

Ref: *anufab/19/R-1645*

Date: *04/04/19*

**AMBIENT AIR QUALITY MONITORING REPORT FOR MARCH -2019**

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-3 (Near SOBHA Main Gate)
3. Monitoring Date : 25.03.2019
4. Date of Analysis : 26.03.2019 to 29.03.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	56.0
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	28.4
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	6.6
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	19.2
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	10.3
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.53
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	20.5
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>

  
 For Visiontek Consultancy Services Pvt. Ltd.





Ref: *Enufab/19/R-1646*

Date: *04/04/19*

## AMBIENT AIR QUALITY MONITORING REPORT FOR MARCH -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-4 (Near Water Project)
3. Monitoring Date : 26.03.2019
4. Date of Analysis : 26.03.2019 to 29.03.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	66.0
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	30.2
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	8.5
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	9.9
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	9.3
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.43
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<20.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub>< 4µg/m<sup>3</sup>, NO<sub>x</sub>< 9 µg/m<sup>3</sup>, O<sub>3</sub>< 4µg/m<sup>3</sup>, CO< 0.1 mg/m<sup>3</sup>, NH<sub>3</sub>< 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.



Ref: Enufab/19/R-1647

Date: 04/04/19

**AMBIENT AIR QUALITY MONITORING REPORT FOR MARCH -2019**

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-5 (Near Last Boundary Wall-South)
3. Monitoring Date : 26.03.2019
4. Date of Analysis : 26.03.2019 to 29.03.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	64.1
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	30.2
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	9.7
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	20.3
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	9.7
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.53
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	<18.0
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

BDL Values: SO<sub>2</sub> < 4µg/m<sup>3</sup>, NO<sub>x</sub> < 9 µg/m<sup>3</sup>, O<sub>3</sub> < 4µg/m<sup>3</sup>, CO < 0.1 mg/m<sup>3</sup>, NH<sub>3</sub> < 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub> < 0.001 µg/m<sup>3</sup>, BaP < 0.002 ng/m<sup>3</sup>, Ni < 0.01 ng/m<sup>3</sup>, Pb < 0.001 µg/m<sup>3</sup>, As < 0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

Ref: Envtab/19/R-1648

Date: 04/04/19

## AMBIENT AIR QUALITY MONITORING REPORT FOR MARCH -2019

1. Name of Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : Monitoring Station ID:- AAQMS-6 (Near Main Gate)
3. Monitoring Date : 26.03.2019
4. Date of Analysis : 26.03.2019 to 29.03.2019
5. Date of Validity of Calibration : 23.05.2019
6. Monitoring Instruments : RDS(APM 460 BL), FPS(APM 550) Envirotech, CO Analyzer, VOC Sampler
7. Sample collected by : VCSPL representative in presence of INFOSYS representative.

Parameters Analysed	Unit	Testing method	NAAQ Standard	Analysis Results
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg / m <sup>3</sup>	Gravimetric	100	61.8
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg / m <sup>3</sup>	Gravimetric	60	31.6
Sulphur Dioxide as SO <sub>2</sub>	µg / m <sup>3</sup>	Improved West and Gaeke method	80	8.6
Oxides of Nitrogen as NO <sub>x</sub>	µg / m <sup>3</sup>	Modified Jacob & Hochheiser (Na-Arsenite)	80	18.9
Ozone as O <sub>3</sub>	µg / m <sup>3</sup>	Chemical Method	100	8.6
Carbon Monoxide as CO	mg / m <sup>3</sup>	NDIR Spectroscopy	02	0.64
Ammonia as NH <sub>3</sub>	µg / m <sup>3</sup>	Indo phenol blue method	400	18.9
Benzene as C <sub>6</sub> H <sub>6</sub>	µg / m <sup>3</sup>	Absorption & Desorption followed by GC analysis	05	<0.001
Benzo(a)Pyrene as BaP	ng/m <sup>3</sup>	Solvent extraction followed by Gas Chromatography analysis	01	<0.002
Nickel as Ni	ng/m <sup>3</sup>	AAS method after sampling	20	<0.01
Lead as Pb	µg / m <sup>3</sup>	AAS method after sampling	1.0	<0.001
Arsenic as As	ng/m <sup>3</sup>	AAS method after sampling	06	<0.001

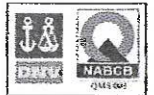
BDL Values: SO<sub>2</sub>< 4µg/m<sup>3</sup>, NO<sub>x</sub>< 9 µg/m<sup>3</sup>, O<sub>3</sub>< 4µg/m<sup>3</sup>, CO< 0.1 mg/m<sup>3</sup>, NH<sub>3</sub>< 20µg/m<sup>3</sup>, C<sub>6</sub>H<sub>6</sub><0.001 µg/m<sup>3</sup>, BaP<0.002 ng/m<sup>3</sup>, Ni<0.01 ng/m<sup>3</sup>, Pb<0.001 µg/m<sup>3</sup>, As<0.001 ng/m<sup>3</sup>



For Visiontek Consultancy Services Pvt. Ltd.

# Visiontek Consultancy Services Pvt. Ltd.

(An Enviro Engineering Consulting Cell)



ISO 9001 : 2008

ISO 14001 : 2004  
OHSAS 18001 : 2007

Ref: Gm/ab/19/R-1651

Date: 04/04/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
2. Address : Khurda.  
3. Date of Sampling : 26.03.2019

<b>A. General Information about Stack</b>		: DG Set-I
1. Stack Connected to		Burning of Diesel
2. Emission due to		: MS
3. Material of Construction of stack		: Circular
4. Shape of stack		: Yes
5. Whether stack is provided with permanent platform & ladder		: 1500 KVA
6. Generator capacity		
<b>B. Physical Characteristics of Stack:</b>		
1. Height of the stack from ground level		: 31.5 mtrs.
2. Diameter of the stack at bottom		: 0.365 mtrs.
3. Diameter of the stack at sampling point		0.365 mtrs.
<b>C. Analysis / Characteristic of Stack:</b>		
1. Fuel Used		: HSD
2. Fuel consumption		: 100-150Lit/Hr
<b>D. Results of Sampling &amp; Analysis of Gaseous Emission</b>		
		<b>Result</b> <b>CPCB Limit</b>
1. Temperature of emission (°C)	: 236.0	----
2. Barometric pressure (mm of Hg)	: 713	----
3. Velocity of gas (m/sec.)	: 14.6	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	: 5469.6	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	: 26.3	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	: 36.4	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	: 45.5	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	: 29.8	----
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	: 4.9	----
<b>E. Pollution control Device</b>		
Details of pollution control Device attached with the stack		: Nil
<b>F. Remarks:</b> PM Concentration is within the CPCB norms.		
<b>Equipment Detail</b>		
1. Equipment Name	: Stack Sampler	
2. Model No	: VSS 1	
3. Make	: Vayubodhan	
4. Calibration Upto	: 03.06.2019	



For Visiontek Consultancy Services Pvt. Ltd.

Ref: Enufab/19/R-1652

Date: 04/04/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 26.03.2019

### A. General Information about Stack

1. Stack Connected to : DG Set-II  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : Yes  
 6. Generator capacity : 1500 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 31.5 mtrs.  
 2. Diameter of the stack at bottom : 0.365 mtrs.  
 3. Diameter of the stack at sampling point : 0.365 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 100-150Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission (°C)	294.0	----
2. Barometric pressure (mm of Hg)	713	----
3. Velocity of gas (m/sec.)	19.8	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	4699.5	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	23.6	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	46.9	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	47.8	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	29.6	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	5.3	----

### E. Pollution control Device

Details of pollution control : Nil  
 Device attached with the stack

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019

  
 For Visiontek Consultancy Services Pvt. Ltd.

Ref: Enu/ab/19/R-1653

Date: 04/04/19

## ANALYSIS REPORT OF FLUE GAS

1. Name of the Industry : M/s. INFOSYS Ltd;  
 2. Address : Khurda.  
 3. Date of Sampling : 26.03.2019

### A. General Information about Stack

1. Stack Connected to : DG Set-III  
 2. Emission due to : Burning of Diesel  
 3. Material of Construction of stack : MS  
 4. Shape of stack : Circular  
 5. Whether stack is provided with permanent platform & ladder : No  
 6. Generator capacity : 92.96 KVA

### B. Physical Characteristics of Stack:

1. Height of the stack from ground level : 3.5 mtrs.  
 2. Diameter of the stack at bottom : 0.152 mtrs.  
 3. Diameter of the stack at sampling point : 0.152 mtrs.

### C. Analysis / Characteristic of Stack:

1. Fuel Used : HSD  
 2. Fuel consumption : 25 Lit/Hr

### D. Results of Sampling & Analysis of Gaseous Emission

	Result	CPCB Limit
1. Temperature of emission (°C)	322.0	----
2. Barometric pressure (mm of Hg)	713	----
3. Velocity of gas (m/sec.)	19.6	----
4. Quantity of gas flow (Nm <sup>3</sup> /hr.)	2125.6	----
5. Concentration of Carbon monoxide (mg/Nm <sup>3</sup> )	29.8	150
6. Concentration of Sulphur dioxide (mg/Nm <sup>3</sup> )	36.9	----
7. Concentration of Nitrogen dioxide (mg/Nm <sup>3</sup> )	35.6	710
8. Concentration of particulate Matters (mg/Nm <sup>3</sup> )	37.8	75
9. Concentration of Non Methane Hydrocarbon (mg/Nm <sup>3</sup> )	6.3	----

### E. Pollution control Device

Details of pollution control : Nil  
 Device attached with the stack

### F. Remarks: PM Concentration is within the CPCB norms.

#### Equipment Detail

1. Equipment Name : Stack Sampler  
 2. Model No : VSS 1  
 3. Make : Vayubodhan  
 4. Calibration Upto : 03.06.2019

For Visiontek Consultancy Services Pvt. Ltd.



Ref: Enw/lab/19/R-1655

Date: 04/04/19

## WATER QUALITY ANALYSIS REPORT FOR MARCH -2019

1. Name of the Industry : M/s INFOSYS Ltd; Khurda.
2. Sampling Location : W-2: After Commissioning of MBR
3. Date of Sampling : 26.03.2019
4. Date of Analysis : 27.03.2019 to 30.03.2019
5. Date of validity of Calibration : 23.05.2019
6. Sample Collected By : VCSPL representative in presence of INFOSYS representative

Sl. No.	Parameter	Unit	Analysis Results
			W-2
1	Total Suspended Solids as TSS	mg/L	11.3
2	Turbidity	NTU	0.59
3	Biochemical Oxygen Demand as BOD	mg/L	4.6
4	Chemical Oxygen Demand as COD	mg/L	16.5
5	Total Ammonia as NH <sub>3</sub>	mg/L	0.36
6	Total Nitrogen as N-Total	mg/L	2.5
7	Total Phosphorus as TP	mg/L	0.53
8	Oil & Grease as O&G	mg/L	1.54
9	Total Alkalinity as CaCO <sub>3</sub>	mg/L	57.8
10	Silica as SiO <sub>2</sub>	mg/L	0.027
11	Total Dissolved Solids as TDS	mg/L	125.6
12	pH	--	7.58
13	Total Hardness as TH	mg/L	120.4
14	Total Coliform as TC	MPN/100 ml	2.1*10 <sup>2</sup>
15	Faecal Coliform as FC	MPN/100 ml	0.25*10 <sup>2</sup>

For Visiontek Consultancy Services Pvt. Ltd.

