

MNGSEZ/FAC/MIS/ 23-24/ 07

23rd May 2023

The Director – IA. III,
Room No. 524, 5th Floor,
The Ministry of Environment & Forest,
Paryavaran Bhavan, C.G.O complex, Lodhi Road,
New Delhi – 110 033.

Dear Sir,

Sub: Six monthly post ECC-construction phase monitoring report (for the period of October 2022 to March 2023) for our project at Pajiru, Dakshina Kannada District, Karnataka.

Ref: ECC No: 21 – 404 /2006- IA. III dated 16th May 2007.

As per the requirement of the above environmental clearance, we are submitting the following half yearly reports for your perusal.

1. Compliance report - Annexure 1
2. Ambient air quality reports - Annexure 2
3. Noise monitoring reports - Annexure 3
4. DG stack emission reports - Annexure 4
5. STP outlet sample analysis report - Annexure 5

Kindly acknowledge the same

Yours faithfully,

Authorized Signatory,
Infosys Ltd.
Mangaluru-574153.

CC to: The CCF, Regional Office, Ministry of Environment & Forests, Bangalore.

Annexure – 1

Compliance Report for the period of October 2022 to March 2023

1	Project type	Software Park (IT-SEZ)												
2	Name of the project	Construction of software development park (IT SEZ) project at Kairangala, Pajiru and Kurnadu, Dist. Dakshina Kannada, Karnataka.												
3	Clearance letter no. & date	No.21-404/2006-IA.III dated 16 th May, 2007.												
4	Location: District & State / UT	Dakshina Kannada, Karnataka.												
5	Address for correspondence:	Infosys Limited, Infosys IT & ITES SEZ, Kamblapadavu, Kurnad Post, Pajeeru Village, Bantwal Taluk, Dakshina Kannada (Dis.) 574 153.												
6	Financial Details:													
a	Project cost as originally planned and subsequent revised estimates and the years of price reference	Proposed Project cost: 350.40 crores Actual : 1077 crores												
b	Allocations made for environmental management plans, with item wise and year wise breakup	<table border="1"> <tr> <td>STP establishment</td> <td>10 Crores</td> </tr> <tr> <td>Air/ Noise pollution control measures</td> <td>4 Crores</td> </tr> <tr> <td>Landscaping</td> <td>10 Crores</td> </tr> <tr> <td>Maintenance of Air pollution control equipment</td> <td>2 Lakh per annum</td> </tr> <tr> <td>Maintenance of STP</td> <td>5 lakh per annum</td> </tr> </table>	STP establishment	10 Crores	Air/ Noise pollution control measures	4 Crores	Landscaping	10 Crores	Maintenance of Air pollution control equipment	2 Lakh per annum	Maintenance of STP	5 lakh per annum		
STP establishment	10 Crores													
Air/ Noise pollution control measures	4 Crores													
Landscaping	10 Crores													
Maintenance of Air pollution control equipment	2 Lakh per annum													
Maintenance of STP	5 lakh per annum													
c	Total expenditure on the Project as on Mar 31, 2023	1077 crores												
d	Actual expenditure incurred on the environmental management plans	<table border="1"> <tr> <td>Tree Plantation & Maintenance</td> <td>40.99 Crores</td> </tr> <tr> <td>STP operation & Maintenance</td> <td>1.35 Crores</td> </tr> <tr> <td>Analysis of STP water and drinking water</td> <td>0.56 Crores</td> </tr> <tr> <td>Stack, Noise and AAQ monitoring</td> <td>0.35 Crores</td> </tr> <tr> <td>Bio medical waste disposal</td> <td>0.07 Crores</td> </tr> <tr> <td>Total</td> <td>43.33 Crores</td> </tr> </table>	Tree Plantation & Maintenance	40.99 Crores	STP operation & Maintenance	1.35 Crores	Analysis of STP water and drinking water	0.56 Crores	Stack, Noise and AAQ monitoring	0.35 Crores	Bio medical waste disposal	0.07 Crores	Total	43.33 Crores
Tree Plantation & Maintenance	40.99 Crores													
STP operation & Maintenance	1.35 Crores													
Analysis of STP water and drinking water	0.56 Crores													
Stack, Noise and AAQ monitoring	0.35 Crores													
Bio medical waste disposal	0.07 Crores													
Total	43.33 Crores													
7.	Status of construction:	Completed buildings: SDB1, SDB2, SDB3, ECC1, ECC2, FC1, FC2, ETA, MLPL, Sports Complex & Amphitheatre & SDB 4												
a.	Date of commencement	October 2007												
b.	Date of completion (actual and/or planned)	Planned – 12 years												

8	Date of site visit:	-
a.	The dates on which the project was monitored by the Regional Office on previous occasions, if any	-
b.	Date of site visit for this monitoring report	-

PART A. SPECIFIC CONDITIONS:

Sr. No.	Conditions Imposed	Compliance taken by us
A. Specific Conditions – I. Construction Phase		
1.	All required sanitary and hygienic measures should be in place before starting construction activities and to maintain throughout the construction phase.	No construction activities are carried out during the period
2.	A First Aid Room should be provided in the project both during construction and operation of the project.	Infosys medical center is available in case of emergency. Ambulances are available to handle any emergency.
3.	Adequate drinking water and sanitary facilities should be provided for construction works at the site. The safe disposal of wastewater and solid waste generated during the construction phase should be ensured.	Drinking water facilities provided Sewage Treatment Plant is available where sewage is treated. No construction related waste generated during the period
4.	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.	Our terrain is covered with hard laterite stone, so no fertile top soil is available. The soil excavated during construction activities is used for levelling the areas within the project site. No soil exaction is done during the period.
5.	Construction Spoils, including bituminous materials and other hazardous materials, must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach the ground water.	Adequate care is taken so as not to cause any adverse impacts on the environment. Construction spoils are used in the construction of roads. For the construction of road, bitumen mix is brought from outside, so no waste bituminous material is generated in the site. No construction related waste generated
6.	The diesel generator sets to be used during construction phase should be of low Sulphur diesel type and should conform to E (P) Rules prescribed for air and noise emission standards.	Only low Sulphur diesel is used for DG sets. At present we are using 3 x 2000 KVA DG sets. Stack emission and noise levels are monitored monthly and meeting the requirements of air and noise emission standards under E (P) rules. Noise monitoring reports are attached in annexure 3 and DG stack emission reports are attached in Annexure 4.

		DG Stack Emission for March 2023				
		Parameter	Stipulated Limit	Results		
				DG1	DG2	DG3
		Nox	50 ppm	6	10	7
		NMHC	- ppm	1	1	1
		PM	150 mg/Nm ³	63.12	68.92	74.52
		CO	- ppm	98	101	108
		Sox	100 ppm	1	2	1
7.	Vehicles hired for bringing construction materials to the site should be in good condition and should conform to the applicable air and noise emission standards and should be operated only during non-peak hours.	Security checks at the gate are done for all vehicles ensuring that only good condition vehicles are used for the movement of materials and that all vehicles are conforming to air and noise emission standards.				
8.	Ambient noise levels should conform to the residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase.	Ambient noise levels during day and night are conforming to the consent conditions. Ambient noise is monitored monthly. Noise monitoring reports are attached in annexure 3. Ambient noise levels are below 75 dB during day time and below 70 dB during night time.				
9.	Ready mixed concrete must be used in building construction.	Yes, we are using the ready-mix concrete for the building construction.				
10.	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Yes, rainwater collected in rain water harvesting ponds and is allowed to percolate to ground which will increase the water table. Six rain water harvesting ponds are created and having a holding capacity of 953 lakh liters of water at a time.				
11.	Water demand during construction should be reduce by use of pre-mixed concrete, curing agent and other best practices referred	Agreed and followed.				
12.	Separation of gray and black water should be done by the use of dual plumbing line for separation of grey and black water.	Separation of Grey water and black water is done using dual plumbing line.				
13.	Treatment of 100% grey water by decentralized treatment should be done.	50.KLD LETP is established to treat the grey water.				
14.	Fixtures for showers, toilets flushing, and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor-based control.	Water saving taps through Pressure reducing valves, Sensor controlled / waterless urinals and use of flow restrictors are provided.				
15.	Use of Glass shall not exceed 40% of exposed area to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.	High quality double glass with special reflective coating is used in windows. Low emissivity glass is used & Common areas will not be air conditioned but be naturally ventilated.				
16.	Roof should meet prescriptive requirements as per Energy Conservation Building Code, 2007 by using appropriate thermal insulation materials.	Thermal insulation is provided for the roof of the building.				

17.	Adequate measures to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits	All possible measures are practiced to control air & noise pollution. Air and noise pollution is monitored monthly and is meeting the requirements of CPCB norms (insertion loss of 25 dB). Acoustic enclosures are made for the DG and is located away from the residential area and work area.															
18.	Opaque wall should meet prescriptive requirement as per Energy conservation Building Code, 2007 which is proposed to be mandatory for all air-conditioned spaces while it is optional for non-air conditioned spaces by use of appropriate thermal insulation material to be fulfill requirement.	Yes, Energy Conservation Building Code, 2007 is followed. The external walls of our buildings comprise of double wall (concrete blocks) construction with a 50mm insulation (R-10) and an air cavity of 50mm. This wall assembly has a U-value lower than ECBC recommended U-value, thus complying with requirement.															
A. Specific Conditions – II. Operation Phase																	
1.	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the ministry before the project is commissioned for operations. Discharge of treated sewage shall conform the norms & standards of the Karnataka State Pollution Control Board.	<p>Installed Sewage Treatment Plant having a capacity of 750 KLD and presently utilizing 250 KLD. Treated sewage water is tested monthly and is meeting the KSPCB norms as below</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Stipulated Limit</th> <th>Result for Feb-23</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>6 to 9</td> <td>6.34</td> </tr> <tr> <td>BOD₅</td> <td>≤10 mg/l</td> <td>4</td> </tr> <tr> <td>E-Coli</td> <td>None</td> <td>None</td> </tr> <tr> <td>Turbidity</td> <td>≤2 NTU</td> <td>0.05</td> </tr> </tbody> </table>	Parameter	Stipulated Limit	Result for Feb-23	pH	6 to 9	6.34	BOD ₅	≤10 mg/l	4	E-Coli	None	None	Turbidity	≤2 NTU	0.05
Parameter	Stipulated Limit	Result for Feb-23															
pH	6 to 9	6.34															
BOD ₅	≤10 mg/l	4															
E-Coli	None	None															
Turbidity	≤2 NTU	0.05															
2.	Rainwater harvesting for roof run-off and surface run off as per the plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.	Rainwater collected in rain water harvesting ponds and is allowed to percolate to ground which will increase the water table. Six rain water harvesting ponds are created and having a capacity of holding 953 lakh liters of water at a time.															
3.	The solid waste generated should be properly collected and segregated before disposal to the municipal facility. The in vessel bio-conversion technique should be used for composting the organic waste.	<p>Solid waste generated is properly collected and segregated before disposal. Food waste generated in the food court is partially converted as biogas and balance sent to piggeries. Tissue papers, garden waste, cardboards etc. are used in the vermi-compost for making compost. Other solid waste generated in segregated and send to recycler / scrap vendor.</p> <p>Average solid waste generated during is as follows.</p> <ul style="list-style-type: none"> • Food Waste – 2774 Kg/ Month • Garden waste – 4320 Kg / Month • Paper – 79 kg / Month • Mixed waste – 603 kg/ Month 															
4.	Any hazardous waste including biomedical waste should be disposed off as per the applicable Rules and norms with necessary approval of the Karnataka State Pollution Control Board.	Yes, authorization is obtained from KSPCB for disposal of hazardous waste and biomedical waste. Hazardous and biomedical waste is disposed to KSPCB authorised vendors only. Agreements with															

		the Biomedical and E waste vendors are in place.																
5.	The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.	Over 2.2 lakh trees of 300 species have been planted till date. Impetus is given to planting of rare, indigenous, threatened and endangered species. Banyan trees from outside the campus which would have been destroyed are transplanted and nurtured in our campus. 150 acres of land is developed as green belt area.																
6.	Incremental pollution loads on the ambient air quality; noise and water quality should be periodically monitored after commissioning of the project.	Regular monitoring is carried out and reports are maintained at the site <table border="1" data-bbox="890 651 1485 972"> <thead> <tr> <th>Parameter</th> <th>Result for Feb 23</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>42.64 ug/m³</td> </tr> <tr> <td>SPM</td> <td>7.96 ug/m³</td> </tr> <tr> <td>SO₂</td> <td>BDL</td> </tr> <tr> <td>NO₂</td> <td>BDL</td> </tr> <tr> <td>O₃</td> <td>26.04</td> </tr> <tr> <td>NH₃</td> <td>BDL</td> </tr> <tr> <td>CO</td> <td>BDL</td> </tr> </tbody> </table> <p>Ambient noise levels are below 75 dB during day time and below 70 dB during night time.</p>	Parameter	Result for Feb 23	PM10	42.64 ug/m ³	SPM	7.96 ug/m ³	SO ₂	BDL	NO ₂	BDL	O ₃	26.04	NH ₃	BDL	CO	BDL
Parameter	Result for Feb 23																	
PM10	42.64 ug/m ³																	
SPM	7.96 ug/m ³																	
SO ₂	BDL																	
NO ₂	BDL																	
O ₃	26.04																	
NH ₃	BDL																	
CO	BDL																	
7.	Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provisions for solar water heating. A hybrid system or fully solar system for the complex should be provided. Details in this regard should be submitted to the SEIAA.	All remote security stations are solar powered & solar water heating is used with an intention to utilize available natural resources and prevent any unnecessary usage or wastage of raw materials. Also we have harnessed 80% of our energy requirement from wheeled energy for our campus. Currently an installed capacity of 25 KL of solar water heaters and solar panel of 1231 KW exists.																
8.	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	Sufficient parking facilities are provided within our premises. Road widened near the exit / entry points to avoid the traffic congestion. No public space is utilized for the parking. Construction of multi-level parking lot is completed and is used for parking vehicles.																
9.	A Report on the energy conservation measures conforming to energy conservation norms finalized by the Board of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the ministry three months time.	The buildings being constructed is following the LEED framework for energy efficiency. SDB3 building LEED certified.																
	Part B: General Conditions																	

1.	The Environmental safeguards contained in the application should be implemented in letter and spirit.	<p>Agreed and followed</p> <p>We are certified to ISO14001 and ISO 45001 standards.</p> <p>Infosys is the first IT company in the world to publish its sustainability report based on the latest Global Reporting Initiative (GRI) G4 comprehensive framework. GRI is the most widely respected sustainability reporting framework, worldwide.</p> <p>Infosys is the First Indian Company to Join RE100 Renewable Energy Campaign. As part of our commitment to RE100, we have achieved carbon neutral.</p>
2.	Half yearly monitoring report should be submitted to the ministry and the Regional Office Bangalore.	Yes, we are submitting the half yearly report in December and June every year.
3.	Officials from the Department of Environment and Ecology, Bangalore/ Regional Office of MoEF, Bangalore who would be monitoring the implementation of Environmental safeguards should be given full cooperation, facilities and documents/ data by the project proponents during their inspection. A complete set of all the document submitted to MoEF/SEIAA should be forwarded to the CCF, Regional Office at MoEF, Bangalore / Department of Environment and Ecology Bangalore.	Agreed and is followed
4.	In the case of any charge(s) in the scope of the project, the project would required a fresh appraisal by this Authority.	No changes implemented so far. For any further changes, prior clearance will be obtained.
5.	The ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environmental clearance under the provision of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Accepted
6.	All other statutory clearances such as the approval for storage of diesel from Chief Controller of Explosive, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act 1972 etc. shall be obtained, as applicable by project proponents from the competent authorities.	<p>We have obtained the following consent from the authorities</p> <ul style="list-style-type: none"> - Water and air consent from KSPCB - Hazardous waste consent from KSPCB - Biomedical waste authorization from KSPCB - HSD storage license from Chief controller of Explosives

		<ul style="list-style-type: none"> - Medical center registration from Karnataka Private Medical Establishment Authority. - Fire NOC & CC from fire department
7.	The project proponent should advertise in at least two local Newspapers widely circulated in the region, One of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with Karnataka State Pollution Control board and may also be seen on the website of the SEIAA, Karnataka at http://www.Seiaa.kar.nic.in . The advertisement should be made within 7 days from the day of issue of the Regional Office of the MoEF at Bangalore / Department of Environment and Ecology, Bangalore.	Done during the initial stage
8.	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) act 1974, the air (Prevention and Control of Pollution) act 1981, the Environment (Protection) Act, 1986, the public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	Accepted. We are complying with all the rules and regulations laid against our project. We have obtained the following consent from the authorities <ul style="list-style-type: none"> - Water and air consent from KSPCB - Hazardous waste consent from KSPCB - Biomedical waste authorization from KSPCB - HSD storage license from Chief controller of Explosives - Medical center registration from Karnataka Private Medical Establishment Authority.
13.	Environmental clearance is subject to obtaining clearance under the wildlife (protection) act 1972 from the competent authority (if applicable)	Not Applicable
14.	Environmental clearance is subjected to final order of the Hon'ble supreme court of India in the matter of Goa foundation vs union of India in writ petition (civil) no.460 of 2004 as may be applicable to this project	Agreed