


## COMPLIANCE OF ENVIRONMENTAL CLEARANCE CONDITIONS



FOR THE PERIOD: **October 2019 TO March 2020**

**Ref:** Order No. SEIAA/A/AP/RRD-75/2008 - 298 dated 08.06.2009

Submitted by

	<p>Infosys Limited (IT SEZ Project)</p> <p><i>44 &amp; 45(part), 48, 49, 50(part), 51 and 54 Pocharam (V), Ghatkesar (M), Rangareddy (D). TELANGANA.</i></p>
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**PART A: Specific Conditions****I. Construction Phase:**

S.No	EC conditions	Compliance status
i	Provision shall be made for the housing of the construction labour within the site with all necessary infrastructure and facilities such as safe drinking water, fuel for cooking, mobile toilets, mobile STP, medical health care, crèche etc., The housing may be in the form of temporary structures to be removed after the completion of the project. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured	Construction of Parcel 1 is completed.
ii	All the top soil excavated during construction activities should be stored for use in horticulture / landscape development within the project site	All the topsoil has been reused within the Project for development of Greenbelt and Landscaping.
iii	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority	Not Applicable since Construction activity is completed.
iv	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants	Regular monitoring of ground water samples is being carried out to check the levels of heavy metals etc.
v	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water	Not Applicable since Construction activity is completed.
vi	Any hazardous waste including biomedical waste should be disposed of as per applicable Rules & norms with necessary approvals of the Andhra Pradesh Pollution Control Board	Hazardous waste and bio-medical waste is being stored separately and disposed to authorized vendors of CPCB/TSPCB.
vii	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should confirm to E (P) Rules prescribed for air and noise emission standards	Not Applicable since Construction activity is completed.
viii	Vehicles hired for bringing construction material to the site should be in good condition and should confirm to applicable air and noise emission standards and should be operated only during non-peak hours	Not Applicable since Construction activity is completed.

ix	Ambient noise levels should confirm to the 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 measure should be made to reduce ambient air and noise level during construction phase, so as to confirm to the stipulated standards by the CPCB	Not Applicable since Construction activity is completed. However regular Monitoring of Ambient Noise Levels is being carried out.
x	Ready mixed concrete must be used in building construction	Not Applicable since Construction activity is completed. However Ready mix concrete was used for construction.
xi	Storm water control and its re-use as per CGWB and BIS standards for various applications	A Proper Stormwater Management Plan has been implemented in the Project
xii	Water demand during construction should be reduced by use of pre-mixed concrete, during agents and other best practices referred	Not Applicable since Construction activity is completed.
xiii	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water	Dual plumbing system and Low flow fixtures have been implemented in all the Buildings of the Project
xiv	Treatment of 100% grey water should be done	<p>The Project has implemented STP's of a total capacity of 1680 KLD as per the following details for treatment of sewage from the entire campus</p> <ul style="list-style-type: none"> <li>a) MBR : 1100 KLD</li> <li>b) Conventional Activated Sludge Process – 400 KLD (Emergency Standby)</li> <li>c) SBR : 180 KLD (Emergency Standby)</li> </ul> <p>Presently we are operating our MBR based STP of 1100 KLD Capacity at 50 % capacity.</p>
xv	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices of sensor based control	All the CP fittings and showers are designed low flow and to save water.
xvi	Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in window	<p>Glass with the following specifications have been used in the Project.</p> <p>Light factors - reflection external-23, reflection internal-15 and solar energy U V – transmission (VLT) 60%, solar energy reflectance 13%, shading co-efficient 0.27 and summer 'U'-value 1.3 W/sq.mt/kelvin, solar heat gains co-efficient 0.36. shading devices and low e-glazing</p> <p>Glazing all around with open able windows have been proposed in the project for natural light and ventilation.</p>
xvii	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement	<p>The roof of all buildings are provided with R-15 insulation (thermo seal) above the deck+ High Albedo paint on top to give overall U factor of 0.06 BTU/Hr/sq.ft</p> <p>The ECBC guidelines have been adopted for the design of building envelope.</p>

xviii	Adequate measures to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits	Not Applicable since Construction activity is completed.
xix	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement	The buildings of the project are LEED Platinum certified and GRIHA 5 started certified.

## II. Occupational Phase:

S.No	EC conditions	Compliance status
i	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 SEIAA before the project is commissioned for operation. Discharge of treated sewage shall conform to the norms & standards of the Andhra Pradesh Pollution Board. The excess treated wastewater is to be allowed into a pond provided within the premises, which can be utilized for recreational purpose. Sewage Treatment Plant should be monitored on a regular basis. No waste water shall be discharged outside the premises	<p>The Project has implemented STP's of a total capacity of 1680 KLD as per the following details for treatment of sewage from the entire campus</p> <ul style="list-style-type: none"> <li>a) MBR: 1100 KLD</li> <li>b) Conventional Activated Sludge Process – 400 KLD (Emergency Standby)</li> <li>c) SBR: 180 KLD (Emergency Standby)</li> </ul> <p>The Treated wastewater from the STP conforms to norms Prescribed by TSPCB.</p> <p>The Treated Wastewater is utilized for Green belt and Make up water for HVAC.</p> <p>The test report of Analyses of Treated wastewater is enclosed as <b>Annexure -1</b>.</p>
ii	Rain water harvesting of 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	<p>Rainwater harvesting has been implemented in the Project as per details given below:</p> <ol style="list-style-type: none"> <li>1. Rainwater from roof top from SDB 2,3 5 &amp; ECC West wing is collected in Lake 1 on the west side of ECC – 1.25 cr litre capacity.</li> <li>2. Rainwater from roof top from SDB 1, 2, 4, ECC East wing is collected in Lake 2 on the east side of ECC – 0.75 cr litre capacity.</li> <li>3. Rainwater from roof top from SDB 6A, 6B and FC3 is collected in Lake 6A North side lake -1.29 cr litre capacity.</li> </ol> <p>Photographs are given as <b>Annexure-2</b></p>

iii	<p>The solid waste generated should be properly collected &amp; segregated before disposal to the City Municipal Facility. The in-vessel bio-conversion technique should be used for composting the organic waste</p>	<p>All the Solid waste are collected and segregated within the Project.</p> <p>The inorganic waste from the Project is disposed off to TSPCB approved vendors.</p> <p>The organic waste is partly treated in the organic waste converter and the manure is utilized for Green Belt.</p> <p>The balance organic waste is processed in the Biogas Plant and the fuel is utilized in the Kitchen of the Food Court.</p> <p>Mixed food waste (bones etc.) will be sent to piggeries.</p> <p>Sludge generated from Sewage Treatment Plant (SPT) is being treated in Solar sludge drying bed and utilized as manure for Greenbelt.</p> <p>The Following DG Sets for emergency backup power supply have been implemented as per CPCB Norms</p>												
iv	<p>The D.G. Sets shall be provided with adequate stack height as per CPCB norms</p>	<table border="1"> <thead> <tr> <th>DG Sets</th><th>No. of Chimney</th><th>Height (m)</th></tr> </thead> <tbody> <tr> <td>2 x 2000 kVA</td><td>1</td><td>31.50</td></tr> <tr> <td>2 x 3000 kVA</td><td>1</td><td>31.50</td></tr> <tr> <td>2 x 2000 kVA</td><td>2</td><td>31.50</td></tr> </tbody> </table>	DG Sets	No. of Chimney	Height (m)	2 x 2000 kVA	1	31.50	2 x 3000 kVA	1	31.50	2 x 2000 kVA	2	31.50
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v	<p>Any hazardous waste including biomedical waste should be disposed of as per applicable Rules &amp; norms with necessary approvals of the Andhra Pradesh Pollution Control Board.</p>	<p>The Hazardous waste is stored separately in a dedicated storage place and disposed to TSPCB authorized vendors.</p> <p>Biomedical Waste Management Authorization is obtained from TSPCB vide order no. Lr. No.272/BMW/PCB/R.O.I-RRD/2018-2322 dated 19.06.2018 (valid upto 30.06.2023).</p> <p>The BMW is being disposed to GJ Multiclaves, a TSPCB authorized vendor.</p>												
vi	<p>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.</p>	<p>The total greenbelt has been developed in an area of 95 acres out of total plot area of 150.23 acres comprising <b>52.25 acres of lawn, 10 acres of shrubs and about 80,727 trees</b>. The greenbelt is about 63% of the total plot area of 150.23 acres.</p> <p>Apart from the above landscaping in the following area has been done</p> <ol style="list-style-type: none"> <li>1) Solar power plant area,</li> <li>2) operational areas,</li> <li>3) Mass plantation,</li> <li>4) Mango &amp; guava orchard,</li> <li>5) C- Bit plants and</li> <li>6) Plantation done in Haritha Haram Scheme.</li> </ol>												

		<p>Photographs are attached as <b>Annexure – 3.</b></p> <p>The ambient noise levels of the project are being monitored regularly and the report is enclosed as <b>Annexure-4.</b></p>
vii	Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.	<p>The Ambient Air quality, Ambient Noise quality and water quality are monitored regularly.</p> <p>Copy of the Report is attached as <b>Annexure- 5.</b></p>
viii	Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision for solar water heating. A hybrid system or fully solar system for a portion of the apartments should be provided.	<p>The Project has implemented Solar Power generation within the Project as per the following details for captive use.</p> <ul style="list-style-type: none"> <li>✓ 555 KW solar power system has been installed at MLCP terrace. MLPL Building Electrical Consumption is being fed from the Solar Plant.</li> <li>✓ Solar Water heaters where installed on terrace of all the SDB's to cater the Pantry operations, hence avoided Geysers.</li> <li>✓ Solar LED Street lights of 85 W are installed (Total Nos. 615).</li> <li>✓ 346 KW roof top solar power system has been installed at SDB-4 and SDB-5.</li> <li>✓ 223 KW roof top solar power system has been installed at SDB-6A &amp; 6B.</li> <li>✓ A 6.6 MW solar power plant has been installed within the project site.</li> </ul>
ix	Funds allocated for providing the environmental protection measures shall be kept in a separate account and shall not be diverted to any other purposes.	The funds allocated for implementation of environmental protection measures are maintained separately and utilized for greenbelt development, maintenance of pollution control equipment like STP, Organic waste convertor etc.
x	Adequate number of parking spaces shall be provided for visitor vehicles, Rest room facilities should be provided for service population. The proponent shall provide public convenience facilities such as toilets, bathrooms, waiting rooms etc., for the drivers, workers etc., so as to maintain cleanness/hygienic conditions in the surroundings of the project.	<ul style="list-style-type: none"> <li>✓ Parking space for 50 buses has been provided which can be used for buses and cabs.</li> <li>✓ Separate parking for Personal vehicles has been provided at Multi Level Car Parking (MLCP) facility</li> <li>✓ Rest room facilities, waiting rooms, toilets, bathrooms for drivers &amp; service providers .</li> </ul>
xi	The proponent shall comply with Energy efficient practices and energy audit practices. Wherever feasible, green building concepts shall be adapted.	<p>SDB1, 2, 3 are certified for LEED platinum Rating from IGBC (Indian Green Building Council).</p> <p>SDB1,4,5 are certified for 5* Rating by GRIHA</p> <p>Obtained Vishwakarma award for SDB 4 and 5.</p> <p>The IGBC certificate is enclosed as <b>Annexure-6.</b></p>

**Part – B General Conditions:**

S.No	EC conditions	Compliance status
i	This order is valid for a period of 5 years	Noted.
ii	"Consent for Establishment" shall be obtained from Andhra Pradesh Pollution Control Board before the start of any construction work at site.	CFE for the project has been received vide order no. 294/PCB/CFE/R)-I-RRC/HO/2009 - 2287 dated 15.01.2010 from APPCB, Hyderabad before the commencement of construction at the Project.
iii	Officials from the Regional Office of MoE&F, Bangalore who would be monitoring the implementation of environmental safeguards should be given full co-operation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoE&F should be forwarded to the CCF, Regional Office to MoEF, Bangalore.	Complied.
iv	The proponent shall submit half-yearly compliance reports in respect of the terms and conditions stipulated in this order & monitoring reports in hard and soft copies to the SEIAA and Ministry's Regional office, Bangalore on 1st June and 1st December of each calendar year.	The half-yearly compliance reports are being submitted to the Ministry's Regional Office, Chennai and TSPCB regularly.
v	In the case of any change (s) in the scope of the project, the project would require a fresh appraisal by this SEIAA.	Agreed.
vi	The SEIAA reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the Environment Clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Agreed.
vii	All the statutory clearances shall be obtained, as applicable by project proponents from the competent authorities.	The project has obtained all statutory clearances like building approvals from HMDA, Power sanction from TSCPDCL, Water supply from HMWS&SB, building height clearance from Airport Authorities, NOC from Fire Dept.,

viii	<p>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 the Andhra Pradesh Pollution Control Board. The advertisement should be made within 7 days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bangalore.</p>	<p>The advertisement was published in Deccan Chronicle on 04.02.2010 in English and Eenadu in Telugu on 03.02.2010.</p>
ix	<p>Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986 without any prior notice.</p>	<p>Noted.</p>
x	<p>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.</p>	<p>The project has obtained a combined order of consents for air, water, and HMW management from TSPCB vide Lr. Order No: 190521875609 dated 29-05-2019 valid upto 31<sup>st</sup> August 2023.</p>



## **LIST OF ANNEXURES**

<b>ANNEXURE NUMBER</b>	<b>DESCRIPITON</b>
<b>ANNEXURE NO -1</b>	Copy of the test report for STP treated waste water quality
<b>ANNEXURE NO -2</b>	Photographs of the rainwater harvesting lakes/ponds
<b>ANNEXURE NO -3</b>	Photographs of the Greenbelt and Landscaping
<b>ANNEXURE NO -4</b>	Copy of the test Report showing the Ambient Noise level of the Project
<b>ANNEXURE NO -5</b>	Copy of Test Reports
<b>ANNEXURE NO -6</b>	Copy of the IGBC Certificate