F.No.21-67/2012-IA.III
Government of India
Ministry of Environment, Forest & Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi - 3

Dated: 21st July, 2015

To

The Executive Engineer – II,
Karnataka Industrial Areas Development Board (KIADB),
14/3A, 2nd Floor, CFC Building,
Maharshi Aravinda Bhavan, Opp. RBI, N.T. Road,
Bangalore – 1

Sub: 'Development of 2nd & 3rd Stage Industrial Areas' at Vasanthanarasapura, District Tumkur (Karnataka) by Karnataka Industrial Areas Development Board – Environmental Clearance - Reg.

Sir,

This has reference to your application submitting the above mentioned proposal to this Ministry for grant of Environmental Clearance (EC) in terms of the provisions of the Environment Impact Assessment Notification (EIA), 2006 under the Environment (Protection), Act, 1986.

2. The proposal for **'Development of 2nd & 3rd Stage Industrial Areas' at Vasanthanarasapura, District Tumkur (Karnataka) by Karnataka Industrial Areas Development Board,** was considered by the Expert Appraisal Committee (EAC) in the Ministry for Infrastructure Development, Coastal Regulation Zone, Building/ Construction and Miscellaneous projects, in its 148th meeting held on 19th – 21st May, 2015.

3. The details of the project, as per the documents submitted by the Project Proponents (PP), and also as informed during the above said EAC meeting, are reported to be as under:-

(i) ToR were granted for preparation of EIA/EMP report vide F.No. 21-67/2012-IA-III in the EAC meeting held on 9th November, 2012.
(ii) The project involves development of Stage II & Stage III Industrial Area' at Vasanthanarasapura, Tumkur District (Karnataka) by Karnataka Industrial Areas Development Board (KIADB).
(iii) Karnataka Industrial Areas Development Board, are proposing for the development of Vasanthanarasapura Industrial Area (IA) of Stage II & Stage III envisaged is an Industrial theme park with a vision of providing "Hassle free production environment" for IT/BT Precision & Electronic Industries, Garments and Food Processing/Chemicals, & Other General Industries Such as Engineering Industries like Machine parts, Automobile industry, etc.
(iv) Total area acquired for the development is 1164.84 Ha. The land identified for the proposed industrial Area is barren area and not suitable for agricultural purpose. There are no Archaeological monuments, National parks & Sanctuaries,

Biosphere reserves, Hill resorts, Scenic areas, etc. KIADB will notify the Industrial lands through Gazette Notification. No alternative sites identified and evaluated. The site and its environs are falling in the Eastern dry agro climatic Zone. It experiences a semi-arid climate, characterized by typical monsoon tropical weather with hot summers & mild winters, the average annual rainfall is 771 mm.

(v) Latitude & Longitude:

(a) Stage I - 13° 29" 00'N Latitude and 77° 01" 58' E Longitude.
(b) Stage II - 13° 29" 53'N Latitude and 77° 02" 51' E Longitude.
(c) Stage III - 13° 28" 58'N Latitude and 77° 02" 07' E Longitude.

(vi) Reserve Forests:

(a) Kalasesaudanapalya Reserve Forest 5.5 Km(S)
(b) Hiregundagal Reserve Forest 8.0 Km (SE)
(c) Maradigudda Reserve Forest 5.5 Km (W)
(d) Madhugiri Reserve Forest 7.5Km (NE)
(e) Badavanahalli Reserve Forest 7.0 Km (N)
(f) Kavaragal Reserve Forest 9.0 Km (E)
(g) Kolikal Reserve Forest 7.0 Km (NE)

(vii) The project activity is covered under item 7 (c), Category A - Industrial Estates/Parks/Complexes/Areas, Export Processing Zones, Special Economic Zones, Biotech Parks, Leather complexes of the Schedule of EIA Notification, 2006.

(viii) Total water required for the facility is 4 MLD, (Source Hemavathi River to Kuppor Tank which is 20 km S from site).

(ix) It is estimated that the wastewater generation will be 2.38 MLD from various stages of the industrial operations, and it is proposed to develop a CETP of 2.5 MLD and 1 MLD CSTP, and most of the wastewater is treated and recycled to minimize the usage of groundwater. For treatment of wastewater (domestic and industrial) and solid waste at industrial area level in an area of 1.21 Ha for solid waste and 2.43 Ha for STP/ETP in 1st Phase, 4.75 Ha for solid waste and 2.30 Ha for STP/ETP in 2nd Phase and 4.3 Ha for solid waste in 3rd Phase land is being allotted. A common 1.5 MLD CSTP and 2.0 MLD CETP at Phase – I and 1.0 MLD CSTP and 2.0 MLD CETP at Phase – II is proposed to cater the needs of the industrial area. The industrial units will have primary treatment at their premises, the treated water meeting the standards prescribed by KSPCB, will be sent to CETP through pipelines. After secondary and tertiary treatment the treated water will be supplied to industrial units for cooling, flushing, gardening, etc.

(x) The wastes generated at industrial level will be segregated into recyclable, compostable, and inerts. The recyclables will be sold to authorized dealers, compostable will be sent to compost plant (municipal yard for composting) and inerts will be sent local municipal bin /landfill. In case any industry is generating more decomposable wastes, it will be advised to explore for generation of biogas from the waste. The hazardous waste generated at industrial level will be stored in designated areas at respective units in elevated covered platform. The platform will be provided with a dyke at the edge to contain spills in case of accidents, etc The hazardous waste will be disposed to TSDF/E-waste facility at regular intervals as per PCB norms.

(xi) For control of noise and dust pollution an 30 m wide greenbelt will be developed along the boundary of the industrial area, and 2 m wide greenbelt along the internal main roads. Individual industrial units will develop 15% of the area as green belt, whereas on industrial park level 15% will be used as

greenbelt. Plantation will be taken up immediately after obtaining necessary statutory clearances. Local species of 2 to 3 years old will be used for plantation. Individual industries will be asked to provide additional greenbelt in open places and along the internal roads and their unit boundaries. Greenbelt will be three tier having different height plants of local species. Thicker greenbelt will be provided around the CETP and STP.

(xii) The total power required for the proposed project is 221 MW will be taken from Karnataka Power Transmission Corporation Limited (KPTCL).

(xiii) In 1st Phase -28.55 Ha, 2nd Phase- 22.56 Ha and 3rd Phase-16.45 Ha parking areas will be provided for trucks and buses.

(xiv) Road studs/Reflectors/Solar blinkers will be introduced along the road.

(xv) Sewage and industrial effluents will be collected through network of pipes along either side of road. Sewage and industrial effluents will be treated in Effluent Treatment Plant Phase – I (CSTP-1.5 MLD & CETP- 2.0 MLD), Phase – II/ III (CSTP-1.0 MLD & CETP- 2.0 MLD).Tertiary Treated water will be used as cooling water for industries and gardening purpose. Storm water drains have been planned along the sides of the roads. Rainwater harvesting pits have been planned along the storm water drain at suitable intervals. The excess water from drains will flow into Rainwater Harvesting Pits. Excess water from the pits will flow into the proposed storm water drains leading to existing water bodies.

(xvi) The aquifer system is developed by bore wells ranging in depth up to 200m. The wells are yielding moderate to poor yields. It is observed that the depth to ground water level during pre-monsoon is more than 20 m bgl. During post monsoon depth to water level ranges from 15 to 20 mbgl.

(xvii) There are two major tanks existing within the study area, one in Stage -II and another one in Stage- III. All the drains from the proposed site is draining to these tanks which in-turn flowing further down streams.

(xviii) During allotment of industrial units an agreement will be made between KIDAB and respective units which includes (i) Compliance of EC conditions laid down by MOEF (ii) Compliance of CFE/CFO conditions given by state PCB (iii) Compliance of conditions given by other statutory bodies (iv) Financial commitments in case of non-fulfilling the above conditions (v) A committee will be formed on industrial estate level to oversee the environmental issues and other issues. For construction of industrial units, locally available building materials will be used (v) fly ash bricks will be used for construction purposes (vi) As per the fly ash notification of MOEF, instructions will be given to construction agencies to use fly ash based products for construction such as Cement or Concrete, Fly ash bricks or blocks or tiles or clay fly ash bricks, Blocks or tiles or cement fly ash bricks or blocks or similar products or a combination or aggregate of them (vii) An area of 30% will be left for development of greenbelt from the total project area.

(xix) At the time of allocation of units, KIADB will insist industries to conserve energy by using energy saving gadgets and to use star rated fans, AC, refrigerators, etc. At park level, solar street lighting will be proposed. For heating water for canteen, guest house, etc solar energy will be suggested for individual units. The existing NH-4 is an two way 4 lane road having width of 15 meters. The internal roads of Industrial Area will have main road width of 30 m (4 way having median in middle), and sub roads are of 24 m/18 m. In 1st Phase -31.79 Ha (10%), 2nd Phase- 60.51 Ha (11.8%) and 3rd phase- 27.66 Ha (8.3%), area has been earmarked for internal roads in the proposed Industrial Areas.

(xx) It is proposed that the industrial area will stick to the Zero Liquid Discharge policy to avoid contamination of the nearby areas and so the

groundwater. A systematic CETP and STP are operational 24 Hours to treat the wastewater generation from different systems. Wastewater treated from these facilities will be used as a secondary purpose in the industries and also for the landscape development.

(xxi) Entire project land is under KIADB, hence no Resettlement and Rehabilitation is involved in this project. In jobs preference will be given to local villagers. Infrastructure development activities (roads, drinking water, training economically weaker sections, etc) will be taken up under CSR funds @ Rs. 11 Crore.

(xxii) **Forest land:** No forest land involved in the project.

(xxiii) **Investment/Cost**: The total cost of the project is Rs.1100 Crores and costs towards environmental mitigation measure is Rs.19.45 Lakhs, and for CSR activities Rs.11 Crores.

(xxiv) **Public Hearing** was conducted at the project site on 03.12.2013. Major issues raised during Public Hearing are enquiry about species of plant proposed in the 1st Phase of the Vasanthanarasapura Industrial Area and entrust the work of green belt development, the disposal of industrial solid waste, and pollution from the industrial activities should be highlighted to villagers, etc.

(xxv) **Employment potential:** The proposed project is coming up adjacent to the existing industrial areas i.e., Vasanthanarasapura Stage-I Industrial Area and Anthrasanahalli Industrial Area. Due to rural nature of the area, surrounding villages are having unemployed educated youth. Due to proposed project the employment opportunities will increase, Self-employment, business opportunities will also increase. Hence, over all socio economic conditions will improve. Around 180550 jobs will be generated due to the proposed industrial park (all stages together).

(xxvi) **Benefits of the project:** Able to attract new business by providing an integrated infrastructure in one location; to set aside industrial uses from urban areas to try to reduce the environmental and social impact of the industrial uses and to provide for localized environmental controls those are specific to the needs of the industrial area.

4. The proposal was considered by the Expert Appraisal Committee (EAC) in its 148th meeting held on 19th – 21st May, 2015 for grant of Environmental Clearance. As per recommendations of the EAC, the Ministry of Environment, Forest & Climate Change hereby accords Environmental Clearance for the above-mentioned project **'Development of 2nd & 3rd Stage Industrial Areas' at Vasanthanarasapura, District Tumkur (Karnataka) by Karnataka Industrial Areas Development Board,** under the provisions of the Environment Impact Assessment Notification, 2006 and amendments thereto and Circulars issued thereon and subject to the compliance of the following specific conditions, in addition to the general conditions mentioned below:-

PART A - SPECIFIC CONDITIONS:

I. Construction Phase

(i) 'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

(ii) The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance

as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six Monthly Monitoring reports.

(iii) Special Purpose Vehicle shall be established for implementation, monitoring and compliance of the environmental safeguards.

(iv) All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to RO, MoEF&CC along with half yearly compliance report.

(v) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

(vi) 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.

(vii) 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.

(viii) Any hazardous waste generated during development/ construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Rajasthan Pollution Control Board.

(ix) The diesel generator sets to be used during development/ construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

(x) 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.

(xi) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.

(xii) 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 development/ 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/SPCB.

(xiii) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003.

(xiv) Ready mixed concrete must be used in site development and building construction.

(xv) Storm water control and its re-use as per CGWB and BIS standards for various applications.

(xvi) Water demand during development/construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

(xvii) Permission to draw ground water, if any, shall be obtained from the competent Authority prior to construction/operation of the project.

(xviii) Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.

(xix) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.

(xx) Use of glass facia may be reduced by upto 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality low E value glass.

(xxi) Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.

(xxii) 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-air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.

(xxiii) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire-fighting equipments, etc. as per National Building Code including protection measures from lightening etc.

(xxiv) Regular supervision of the above and other measures for monitoring should be in place all through the development/ construction phase, so as to avoid disturbance to the surroundings.

(xxv) Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.

(xxvi) The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.

(xxvii) The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.

(xxviii) Corporate Social Responsibility:

a. The Company shall have a well laid down Environment Policy approved by the Board of Directors.

b. The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions.
c. The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
d. To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

II. Operation Phase

(i) The installation of the Effluent Treatment Plant (ETP)/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 operation. Treated effluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.

(ii) Provision shall be made for the housing of construction labour 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. The safe disposal of waste water and solid wastes generated during the development/ construction phase should be ensured.

(iii) A First Aid Room will be provided in the project both during construction and operation of the project.

(iv) All the topsoil excavated during development/construction activities should be stored for use in horticulture/landscape development within the project site.

(v) Disposal of muck during development/construction phase should not create any adverse effect on the neighbouring 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.

(vi) 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 recyclable material.

(vii) Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

(viii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

(ix) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.

(x) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

(xi) 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 borewell for rainwater recharging should be kept at least 4 mts. above the highest ground water table.

(xii) The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.

(xiii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading and unloading should be fully internalized and no public space should be utilized.

(xiv) A Report on the energy conservation measures conforming to energy conservation norms finalised by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months' time. Energy conservation of 20% be attained vis-a-vis the conventional consumption in perpetuity, through regular monitoring by competent authority.

(xv) Energy conservation measures like installation of LEDs, CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.

(xvi) The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

(xvii) The project should be operational with 24x7 monitoring devices as applicable.

PART – B. GENERAL CONDITIONS

(i) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.

(ii) Provision should be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.

(iii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored

data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

(iv) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.

(v) The project proponent shall set up a separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.

(vi) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purpose.

4. Officials from the Regional Office of MoEF&CC, 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 documents submitted to MoEF&CC should be forwarded to the CCF, Regional Office of MoEF&CC, Bangalore.

5. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

6. The Ministry 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 Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

7. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, 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 respective competent authorities.

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.

9. 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 State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest & Climate Change at http://www.envfor.nic.in. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore.

10. This Environmental Clearance is subject 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.

11. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

12. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

13. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

14. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

21/7/2015

(S.K. Srivastava)
Scientist E

Copy to: -

(1) The Secretary, Department of Environment, Govt. of Karnataka, Bangalore.
(2) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32
(3) The Member Secretary, Karnataka State Pollution Control Board, "Parisara Bhavan, 4th & 5th Floor, # 49, Church Street, Bangalore-1
(4) Additional PCCF (C), Ministry of Environment, Forest and Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wing, 17th Main Road, Koramangala II Block, Bangalore - 34
(5) IA Division, Monitoring Cell, MOEFCC, New Delhi - 3.
(6) Guard file.

21/7/2015

(S.K. Srivastava)
Scientist E