KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD

(A Government of Karnataka Undertaking)

 # 49, 4th & 5th Floors, 'East Wing', Khanija Bhavan, Race Course Road, Bengaluru - 560 001

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KIADB/JDTP/FCN:20456/ 701 /2021-22 Date: 13-01-2022

To,

State Level Environment Impact Assessment Authority (SEIAA)
Room No. 706, 7th Floor,
4th Gate, M. S. Building,
Bengaluru -560001, Karnataka.

Sir,

Subject: Submission of Half yearly point wise Environmental Compliance report for all the conditions stipulated in the Environmental Clearance issued with respect to Formation of "Housing Layout" Project at Raichur Growth Centre, KIADB atYaramarus&Potagal Villages of Raichur Taluk, Raichur District, Karnataka to an extent of 253.32 Acres.

Ref.:
1. ToRissued bySEIAA on 22nd May 2013 and was extended till 01st July 2016.
2. Environmental Clearance reference no.: No. SEIAA 49 CON 2012 dated 23th January 2019.
3. General Condition imposed in the Environmental Clearance for submission of Half yearly Compliance @ Condition No. 4.
4. This Office first Half-yearly compliance report No.5693 dated:13-08-2021.

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With reference to above subject, it is to be informed that SEIAA has issued Environmental Clearance for Formation of "Housing Layout" Project at Raichur Growth Centre, KIADB at Yaramarus & Potagal Villages of Raichur Taluk, Raichur District, Karnataka to an extent of 253.32 Acres, after finalizing the ToR granted by SEIAA on 22nd May 2013 and was extended till 01st July 2016andafter conducting the public hearing.

In the said Environmental Clearance at the General Condition No. 4, it is stipulated that KIADB has to submit half yearly compliance report to all the conditions stipulated in the EC issued on 23th January 2019. Earlier on 13-08-2021, KIADB has submitted 1st Half-yearly compliance report as per the condition of EC.

Hence, the detailed 2nd Half-yearly point wise compliance report to all the conditions stipulated in the Environmental Clearance issued to "Housing Layout" Project at Raichur Growth Centre is being submitted to SEIAA for information in the form of soft copy.

Kindly acknowledge the same.

Yours faithfully,

Chief Engineer-1
KIADB, Bengaluru.

Half Yearly Environmental Compliance Report for all theConditions Stipulated in the Environmental Clearance issued with respect to Formation of "Housing Layout"Project Yaramarus&Potagal Villagesof Raichur Taluk, Raichur District, Karnataka- 2nd Term.

For

KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD (KIADB)

#49, 4th & 5th Floors, 'East Wing', KhanijaBhavan, Race Course Road,
Bengaluru – 560001.

Submission to

The APCCF, Regional office,
Ministry of Environment, Forest and Climate Change (MoEF&CC)

KendriyaSadan, IV Floor, E & F wings, 17th Main Road, Koramangala II Block,
Bangalore- 560 034.

Prepared by

ROBUST MATERIALS TECHNOLOGY PRIVATE LIMITED

(A **MoEF&CC, DSIR**-Recognized | **FSSAI, ISO 45001:2018**-Certified | **NABL-**Accredited |**Drugs Control Department-** Approved Company.)

Plot No.94, Thirumala Complex, 2nd Floor, NGEF Layout, Nagarabhavi Main Road,
Bengaluru - 560 072.

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1.0. PROJECT DETAILS:

1. **Name of the Project:** Formation of "Housing Layout" project, Raichur Growth Centre at Yaramarus & Potagal villages of Raichur Taluk, Raichur District, Karnataka.
2. **Environmental Clearance reference no.**: No. SEIAA 49 CON 2012 dated 23rd January 2019.
3. **Total Plot Area:** 253.32 Acres.
4. **ToR issued**: Issued by SEIAA on 22nd May 2013 and was extended till 01st July 2016.
5. **Category of Industries:** Red, Orange and Green category.
6. **Total Water requirement for the Industrial area**: 2.1 MLD (Fresh water & Recycled water) will be met from Raichur Corporation.
7. **Total Wastewater generation**: 1.68 MLD.
8. **Total Power Requirement**: 7500 KVA will be sourced from BESCOM.
9. **Project Cost:** Rs. 123 Crores.
10. **Schedule & Category:** 7 (C) & B category.
11. **Address of the Correspondence:**

    Chief Development Officer & Chief Engineer,

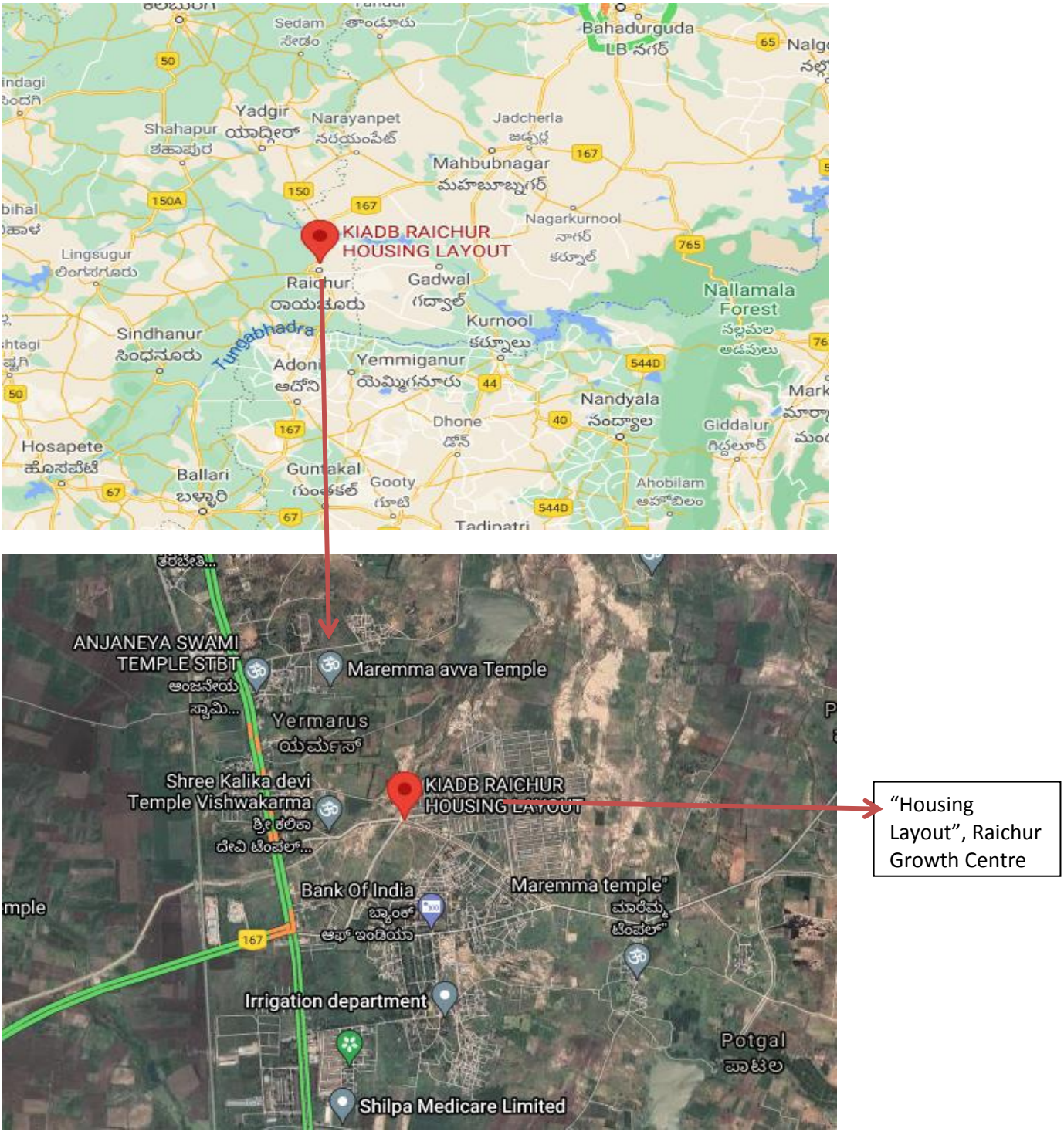
    Karnataka Industrial Areas Development Board (KIADB),

    #49, 4th & 5th floors,

    KhanijaBhavan, Race Course road,

    Bengaluru- 560 001.

2.0. LOCATION MAP:



<u>Fig.1:</u> Map showing "Housing Layout", Raichur Growth Centre, Raichur District.

3.0. Half Yearly Environmental Compliance Report for all the Conditions Stipulated in the Environmental Clearance issued with respect to Formation of "Housing Layout" Project Yaramarus & Potagal Villages of Raichur Taluk, Raichur District, Karnataka. (Ext-253.32 Acres).

Sl. No.	CONDITIONS STIPULATED IN THE EC	COMPLIANCE STATUS
A	**SPECIFIC CONDITIONS:**	
I	**Construction Phase:**	
1	Set up an Environment Management cell and ensure that the cell manages/ maintains all environmental aspects such as sewage treatment, solid waste disposal, maintenance of green belt areas, etc., and in case the commercial space is sold/ leased, then enter into an agreement with the prospective buyers to ensure that they maintain the cell and take care of the environmental concerns during the operation phase of the project. In addition, sufficient fees must be levied so as to raise a corpus fund to maintain the Environmental cell.	Complied. KIADB has already setup an Environment management cell with necessary facilities and qualified personnel to look after the Environmental aspects to maintain all the environmental aspects such as sewage treatment, solid waste disposal, maintenance of green belt area etc.
2	Appoint an Environment and safety engineer during the construction phase to take care of environment and safety aspects.	Complied. Competent person has been appointed to take care of environment and safety aspects.
3	The project authority should ensure that during the construction phase utmost care is taken to ensure that there is no air and water pollution and no disturbance to the nearby inhabitants. In case of violation, the project construction activity may have to be directed to be stopped	Noted. Necessary actions/ steps and care will be taken to ensure that there is no disturbance to the neighbouring communities and pollution to air and water environment.
4	The project authority should cover the project site from all sides by raising sufficient tall barricades with sheets to ensure that pollutants do not spill to the surroundings.	Noted. Adequate measures will be taken as mentioned wherever required to reduce any kind of pollutant spillage into the environment.
5	Provide at the main entrances bell gates, which are located at least 12' inside the boundary of the project to enable smooth flow of traffic on the main road leading to the entrance.	Complied. Depending on the width of the roadways surrounding the project site and traffic conditions in the proposed area, entry and exit points have been provided and the roads inside the project area will be well built to avoid any kind of traffic congestion.

6	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase. Sufficient number of toilets/bathrooms shall be provided with required mobile toilets, mobile STP for construction work force.	Complied. All necessary infrastructure facilities and basic sanitary facilities will be provided to the workers in the site during the construction phase of the industrial area.
7	A First Aid room should be provided in each of the three proposal project areas both during construction and operation of the Project.	Noted.
8	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.	Noted and complied. All necessary infrastructure facilities and basic sanitary facilities will be provided for all the construction workers during the construction phase. The safe disposal of wastewater and solid wastes generated during the construction phase will be ensured as per the CFE conditions.
9	Provision shall be made for the housing of construction labourers within the site with all necessary infrastructures and facilities. The housing maybe in the form of temporary structures to be removed after the completion of the project. The facilities shall include the crèche.	Complied. Mostly construction labourers/workers from the surrounding villages will be hired during the construction phase that were in not need of the temporary housing and Temporary Labour camps will be provided with basic sanitary facilities and water supply.
10	Provision should be made for the supply of fuel (kerosene or cooking gas); utensils such as pressure cookers etc. to the labourers during construction phase.	Noted and complied. Required infrastructure facility and fuel will be provided to all the labourers for cooking during construction phase.
11	All the labourers to be engaged for constructions should be screened for health and adequately treated before engaging them to work at the site and detailed report submitted to SEIAA. Safety standards as per National Building Code (NBC) should be ensured.	Noted.
12	For dis-infection of wastewater which is not meant for recycling the for toilet flushing, use ultraviolet radiation and not chlorination. For treated wastewater meant for reuse for toilet flushing, disinfect by using chlorination.	Noted. During the operation phase of the industrial area, individual Industrial units will be advised to adopt these methods wherever possible for water conservation.

13	All the topsoil excavated during the construction activities should be stored for use in horticulture/ landscape development within the project site.	Complied. The topsoil excavated will be used for landscaping, levelling and plantation purposes with in the project site.
14	Disposal of muck construction debris during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Noted and complied. The construction debris will be reused / recycled for backfilling and for construction of roads and when necessary the debris is disposed in safe and secure manner as per the Construction and Demolition rules 2016.
15	Soil and ground water samples should be tested at the project site during the construction phase to ascertain that there is no threat to ground water quality by leaching of heavy metals and or other toxic contaminants and the reports should be submitted to SEIAA.	Noted and Complied. All necessary precautions will be taken to ensure that there is no contamination of soil and ground water.
16	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.	Noted and complied. All the construction debris generated during the construction phase will be used for filling up of low lying area. However, all the construction and hazardous waste generated during the operation phase of industries will be directed to store in safe and secure manner after carrying out proper segregation of each category of waste and disposed scientifically, to prevent the contamination of the ground water.
17	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	Noted and Complied. DG sets used during construction phase will use low sulphur diesel and it is ensured that air and noise emissions will be within the prescribed norms, so that there was no disturbance created due to operation of DG sets. DG sets with acoustic enclosures only will be used to comply with the norms.
18	Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Individual vehicle owners will be directed to keep the hired vehicles in good condition and emission documents will be maintained by the vehicle owner which conforms to the prescribed standards and the workers will be advised to use the vehicles during the non-peak hours as per the guidelines of Honourable High court of Karnataka in WP. No. 1958/2011 (LB-RES-PIL) on 04.12.2012 for different activities involved in construction work.

19	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 to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits.	Contractor & all the Construction workers at the Project site will be advised to take necessary precautions and measures to reduce the noise and air emission levels, contributed during construction and adequate measures were taken to keep the emission within the stipulated standards.
20	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.	Noted and complied. Industrial units will be advised to follow the provisions of Fly ash notification and use the fly ash products for building and construction purposes.
21	Ready mixed concrete must be used in building construction.	Noted.
22	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Noted.
23	Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices.	Noted and followed as suggested.
24	No ground water is to be drawn without permission from the Central/ State Ground Water Authority.	Noted and followed as suggested. Necessary permission will be obtained by KIADB for digging the new Borewell, from Central Ground Water Authority and no ground water will be drawn without permission from the Central/ State Ground Water Authority. Also, during the operation phase, industries will also be informed about the same.
25	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Noted and Industries operating in the area will be informed to provide dual plumbing system wherever possible for efficient use of water.
26	Treatment of 100% grey water by decentralized treatment should be done.	Noted. The issue will not arise during the construction phase, during the operation phase, Individual industries will be treating the wastewater generated in the in-house Wastewater treatment plant installed as per the requirement and it is ensured that the treated water shall meet to prescribed norms notified by competent authority.
27	Fixtures for showers, toilet flushing and drinking should be low flow either by use of aerators or pressure reducing devices or sensor based control.	Noted and complied. To reduce the water consumption & wastewater generation, latest technologies are installed for efficient and limited use of water wherever possible. Industries will also be directed to conserve the water resource by adapting the same.

28	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 reflective coating in windows.	Noted and adapted wherever applicable. Industries are also advised to
29	The provision of Energy Conservation Building code 2006 shall be fully complied with.	Noted and will be adapted wherever possible. During the operation phase, individual industries will be provided directions before allotting the plots, so as to comply with the Energy conservation measures as per ECBC, 2006 and its amendments.
30	Roof should meet prescriptive requirement as per Energy Conservation Building Code, 2007 by using appropriate thermal insulation material.	Noted and during the operation phase, Individual industries will adapt wherever possible as per ECBC, 2007 and its amendments.
31	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 fulfil requirement.	Noted and during the operation phase, individual industries will adopt wherever possible.
32	Facilities such as ramps and separate parking shall be provided for the benefit of physically challenged.	Noted.
33	The project shall be made operational only after necessary infrastructure/ connection for water supply and sewerage line is provided and commissioned by the competent authorities.	Noted.
34	The project authority shall maintain and operate the common infrastructure facilities created including the STP and solid waste management facility for a period of at least 5 years after commissioning the project.	Noted and will be Complied.
35	The project authority shall incorporate a suitable condition in the Sale agreement/ deed to be made with the buyers that the occupier/ buyer holds the responsibilities jointly with other users to maintain common infrastructure facilities created including STP and the solid waste management facility.	Noted and complied. Industries will be informed regarding the said condition and the condition will be mentioned in the lease or sale deed while allotting plots to the proposed projects.

36	The Proponent shall obtain the construction material such as stones and jelly etc. only from the approved quarries and other construction material shall also be procured from the authorized agencies/traders.	Complied. Construction materials such as stones, jelly and other construction material will be obtained from the approved quarries and construction materials shall also be procured from the authorized agencies/traders.
37	The project authorities shall obtain approval from the competent authorities for structural safety of the building due to earthquake, adequacy of firefighting equipment's etc. as per the National Building Code (NBC) including protection measures for lightening etc.	Noted and the same will be informed to the industries before allotment of the plots.
38	The project authority shall ensure that no water bodies are polluted due to project activities.	Noted. As suggested in the EC and industrial plots allotted in the Industrial area will be advised to take care of the water bodies as part of their Corporate Environment Responsibility. No alterations of natural drainage pattern will be done during the Project Construction activities. Sufficient buffer as per the zoning regulations of local bodies will be kept around the water bodies to prevent pollution of any water body and required area will be left untouched for natural conservation.
39	Safety standards as per National Building Code (NBC), 2005 should be followed and ensured.	Noted and will be followed.
40	The project Authorities shall ensure that the National Building Code, 2005 is complied with and adhered to.	Noted and followed. Individual industries will also be advised to follow the same as per instructions in NBC, 2005 and its amendments.
41	The project authorities shall not use Kharab land if any, for any purpose and keep available to the general public duly displaying a board as public property. No structure of any kind be put up in the Kharab land arid shall be afforested and maintained as green belt only.	Agreed. No such land is used by KIADB for the project proposed and green belt is developed wherever possible.
42	The Project Authority shall obtain NOC before commencement of the construction activity and clearance after the completion of construction from the Fire and Safety Service Department, if applicable.	Noted and will be followed.
43	The Project Authority shall ensure the time specification prescribed by the Honourable High Court of Karnataka in WP. No. 1958/ 2011 (LB-RES-PIL) on 14.02.2012 for different activities involved in construction work.	Noted.

44	The proponent shall take up the construction activity only after obtaining NOC or clearance from the competent authority for assured supply of water as the case may be.	Complied. All necessary approvals from the competent authority were obtained before the starting any kind of construction activities.
45	The Project Authority shall ensure that the construction activity is undertaken strictly in accordance with the approved site plan/ layout drawing annexed to Environmental clearance letter. However, it is subject to compliance to the provisions of local authorities regarding setbacks, FAR etc. shall be adhered to.	Noted and will be followed.
46	The existing water body, canals, rajakaluve and other drainage and water bound structures shall be retained unaltered with due buffer zone of 15 meter around maintained under tree cover.	Noted. No alterations are made in case of existing natural drainage patterns, water bodies, rajakaluve etc. and the buffer zone are provided in the required areas.
47	The project authorities shall leave 30 mtrs buffer from the boundary of lake and 15 meters on either side of the channel / nala and other water bodies as per the BDA norms and this shall be free from any permanent structures. The buffer so maintained shall be planted with indigenous tree species such as Neem, AkashMallige, Mahagoni, Honge, KadambaFicus, etc. and maintained as green belt.	Noted. It is proposed to develop 15 m green belt all along the boundary of the industrial area. During the construction and development of the industrial area, plantation will be undertaken in a phased manner. Green belt is developed with the local tree and shrub species. Avenue plantation has done along the adjoined roads of the project site. Also, individual industrial units are also advised to maintain green belt for 33% of the allotted plot area as applicable.
48	The natural sloping pattern of the project site shall remain unaltered and the natural hydrology of the area be maintained as it is to ensure natural flow of storm water.	Noted and as suggested. No alterations of natural drainage pattern will be done during the Project Construction activities.
49	Lakes and other water bodies within and/or at the vicinity of the project area shall be protected and conserved.	Noted. All the required protective/ conservative measures are taken so that there will be no harm to the natural environment which are existing before the project.
50	The Project Authority shall build in infrastructure required for the use of piped natural gas (PNG) such as pipelines and space for installation of PNG distribution equipment for both domestic/ commercial purpose and DG set and shall ensure that PNG is supplied for both commercial and DG sets instead of other type of fuels.	Noted and will be followed wherever possible.

51	The Project Authorities shall undertake activities under Corporate Environment Responsibility (CER) with total cost of not less than Rs. 2,10,00,000 towards providing drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification, including solar power, solid waste management facilities, rain water harvesting, soil moisture conservation work, avenue plantation, plantation in community areas etc. within five years around the project site in accordance with the O.M.F. No. 22-65/2017- IA.III dated 1st May 2018 and report be submitted to the Authority.	Noted and will be complied as suggested.
II	**Operation Phase**	
1	The installation of Sewage treatment plant (STP) of capacity of 2 MLD should be carried out and the plant shall be got certified by an independent expert and a report in this regard should be submitted to the SEIAA immediately. Discharge of treated wastewater shall conform to the norms & standards of the Karnataka State Pollution Control Board. Treated wastewater should be used for flushing, gardening, etc., as proposed, using dual plumbing line.	Noted. ETP and STP of required capacity will be provided in the proposed industrial area. Required land area has already been allotted for establishment of ETP and STP at the site. At present as there are limited number of industries which are generating waste water. Once industrial area is completely occupied by all the industries and there is a sufficient load, the treatment plants will be installed. The industries transporting wastewater to CETP is also less as individual industries have agreed to install in-house STP/ ETP to treat the wastewater generated within the industry. The industries are also advised to adapt Zero Liquid discharge technology wherever possible/ applicable for efficient treatment of wastewater, so that the treated water conform to the norms and standards prescribed by KSPCB/CPCB and also so that there is zero discharge of effluent from the industry & 100% reuse/recycle of the treated water.

2	Rainwater harvesting for roof run-off with appropriate capacity of tanks at ground level for rainwater collection and also surface run-off harvesting as per the plan submitted should be implemented with sufficient no's recharge pits and pre-treatment must be done to remove suspended matter, oil and grease before recharging the surface run-off.	Noted. The project area and the industries proposed to operate within the area will be directed to provide with rain water harvesting systems and the industries will be advised to adapt pre-treatment facility as per the guidelines set by KSPCB/CPCB. The rainwater recharge well of sufficient capacity will be dug as per the guidelines.
3	Ensure that the excess runoff rainwater from the greenbelt area, which is irrigated by treated water, does not get into recharge pits and contaminate the ground water. Such excess flow should be safely let into the storm water drains.	Noted. All precautions measures will be taken to ensure that, there is not contamination of ground water due to these activities. Industries will also be informed the same.
4	The Solid waste generated should be properly collected and segregated insitu. The Biodegradable organic waste be composted by installing bio converter in site and used. The non- biodegradable waste is disposed to the authorized recycler.	Noted. During the construction phase, all the solid wastes generated from construction activity will be collected systematically in a safe and secured manner and will be disposed to authorized vendors/ disposers. Industries are informed to follow the guidelines issued by KSPCB/ CPCB or the local authority.
5	Any hazardous waste including Biomedical waste should be disposed off as per the applicable rules and norms with necessary approvals of the Karnataka State Pollution Control Board.	Agreed and complied as suggested. Necessary approvals from the competent authority will obtained for the safe disposal of generated hazardous waste as per the applicable rules and regulations.
6	The project proponent shall develop a minimum of 33% of the project area for green belt. If the area for increasing the green belt is not available then the Authority shall compensate by undertake planting in the civic amenity area such as school, playground, and avenue plantation in addition to the proposed in house area. The Authority shall undertake plantation of heavy foliage indigenous tree species such as Mahagony, Honge, Neem, AkashMallige, KadambaFicus and Ashoka etc., at an escapement of 3mts* 3mts i.e., 1111 plants/hectare. 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 the vegetation of indigenous variety.	Noted. It is proposed to develop 15 m green belt all along the boundary of the industrial area. During the construction and development of the industrial area, plantation will be undertaken in a phased manner. Green belt is developed with the local tree and shrub species. Avenue plantation has done along the adjoined roads of the project site. Also, individual industrial units are also advised to maintain green belt for 33% of the allotted plot area as applicable.

7	Incremental pollution loads on the ambient air quality; noise and water quality should be periodically monitored after commissioning of the project.	Contractor & all the Construction workers at the Project site will be advised to take necessary precautions and measures to reduce the noise and air emission levels, contributed during construction and adequate measures were taken to keep the emission within the stipulated standards.
8	Application of solar energy should be incorporated for illumination of common areas, lighting for gardens and street lighting in addition to provision of solar water heating. A hybrid system or fully solar system for lighting and heating should be provided. Details in this regard should be submitted to SEIAA.	Noted. Solar energy will be used wherever possible for lighting and heating systems and the industries established in the project area will also be advised to use solar energy wherever applicable/ possible.
9	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.	Noted. Depending on the width of the roadways surrounding the project site and traffic conditions in the proposed area, entry and exit points have been provided and the roads inside the project area will be well built to avoid any kind of traffic congestion. Individual industries are strictly advised to provide parking facilities only in the allotted plot areas and not to use public space.
10	A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc. and submit to the SEIAA, Karnataka in three month's time.	Noted and will be followed.
11	All toilets should have dual plumbing line for using treated water and no wastewater is discharged from the unit.	Noted and Industries operating in the area will be informed to provide dual plumbing system wherever possible for efficient use of water.
12	The Environmental Management Plan including the human health and safety management plan and Fire safety and Protection plan proposed by the Authority shall be strictly implemented.	Noted and followed.

B	**GENERAL CONIDITIONS:**	
1	The issuance of Environmental Clearance doesn't confer any right to the project authority to operate/ run the project without obtaining Statutory clearances/ sanctions from all other concerned authorities.	Noted. All necessary approvals will be obtained from the concerned authorities before the operation of the project and the same shall be informed to the industrial units. CFE from KSPCB was obtained on 12th November 2019.

2	The Environmental safeguards contained in the application should be implemented in letter and in spirit.	Noted. The suggestions/observations and concerns made during the public hearing will be duly considered and all relevant measures are being taken to improve the socio-economic conditions of the project and surrounding area.
3	All commitments made by the Authorities in their application, and subsequent letters addressed to the SEAC/ SEIAA should be accomplished before the construction work of the project is completed.	Noted and followed.
4	Half yearly monitoring reports should be submitted to SEIAA and the APCCF, Regional Office, MoEF, Bengaluru.	Noted and will be complied.
5	Officials from the Department of Environment and Ecology, Bengaluru / APCCF, Regional office of MoEF, Bengaluru who would be monitoring the implementation of Environmental safeguards should be given full cooperation, facilities and documents / data by the project Authorities during their inspection. A complete set of all the documents submitted to MoEF/ SEIAA should be forwarded to APCCF, Regional Office of MoEF, Bengaluru/ Department of Environment and Ecology, Bengaluru.	Noted. Required Full cooperation, facilities & all the necessary documents will be provided during the inspection and whenever required by the concerned authorities. As suggested complete set of all the required documents has been submitted to Regional Office- MoEF&CC at Bangalore.
6	In case of any changes in the scope of the project, the project would require fresh appraisal by this Authority.	Noted. Any changes in the project approved, will be made as a fresh appraisal in front of the Competent Authority.
7	Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environmental (protection) Act, 1986.	Noted.
8	The authority reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the environmental 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.	Noted.

9	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 authorities from the competent authorities.	Noted. All the necessary approvals and clearances applicable will be obtained from the concerned authorities. Industrial units in the project area are also strictly informed to do the same before starting any kind of activities.
10	The Project Authority 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 the clearance letters are available with the Karnataka State Pollution Control Board and may also be seen on the website of the SEIAA, Karnataka athttp://seiaa.karnataka.gov.inThe 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 APCCF, Regional Office of MoEF at Bengaluru/ Department of Environment and Ecology, Bengaluru.	Noted and complied.
11	The Project Authority should display the conditions prominently at the entrance of the project on a suitable size board for the information of the public.	Noted and will be followed.
12	Any appeal against this environmental 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.	Noted.
13	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.	Noted.
14	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it is found that construction of the project has been started without obtaining environmental clearance.	Noted. No such activities will be carried out without the prior approval from the concerned authorities.

4.0. Environmental Monitoring Details:

The MoEF&CC/ SEIAA has made mandatory to submit Six-monthly Compliance reports for everyone who has obtained Environmental Clearance. For this purpose of preparing Compliance report and Environmental Monitoring, the KIADB has provided the work to M/s. Robust Materials Technology Pvt. Ltd. to carry out Environmental Monitoring for Industrial Areas.

4.1. Ambient Air Quality Monitoring:

The Ambient Air Quality Monitoring is carried out for parameters such as Respirable Particular Matter (PM 10), Fine Particulate Matter (PM 2.5), Sulphur Dioxide (SO_2) and Nitrogen Dioxide (NO_2) at 8 Locations.

The monitoring results reveal the following pollutant concentration with respect to PM, SOx and NOX:

Sl. No.	Parameters	Limits (As Per NAAQS) for 24hrs	Minimum Value	Maximum Value	Average Value
1	Particulate Matter PM_{10}, µg/m_3	100	60.8	73.5	66.1
2	Particulate Matter $PM_{2.5}$, µg/m_3	60	23.8	30.2	25.7
3	Nitrogen Dioxide NO_2, µg/m_3	80	16.7	25.5	20.6
4	Sulphur dioxide as SO_2, µg/m_3	80	9.4	15.7	12.7

The above table reveals that all the monitored values are within the standards prescribed under National AAQM Standards notified on 18.09.2002.

4.2. Ambient Noise Level Monitoring:

The Ambient Noise is carried out at 8 Locations and the detailed compiled results are tabulated below. The monitoring results reveal the following ambient noise concentration at different locations:

Sl.No	Locations	Noise Level in db (A) Leq		CPCB Standard	
		Day	Night	Lday (Ld)	LNight (Ln)
1	Near Raichur Village Growth Centre-Project site	65.2	56.1	75	70
2	Near Yermuras Village	55	44.2	55	45
3	Near Raichur Village	54.2	43.2	75	70
4	Near Shakawadi Village	53	43.5	55	45
5	Near Manslapur Village	52.6	41.7	55	45
6	Near Chikkasugur Village	54.9	47.1	55	45
7	Near Katlukur Village	53.2	44.3	55	45
8	Near Potgal Village	51.2	41.8	55	45

Note: Noise Level Stipulated by KSPCB for Residential area is 55 dB (A) (During day time) and 45 dB (A) (During night time), For Commercial area 65 dB (A) (During day time) and 55 dB (A) (During night time), For Industrial area 75 dB (A) (During day time) and 70 dB (A) (During night time).

The above table reveals that all the monitored values are within the standards prescribed under Noise Rules, 2000.

4.3. Water Quality Monitoring:

Water quality in the industrial area is monitored. The Ground and Surface water samples are collected and analysed for water quality parameters.

The water quality monitoring was carried out at 8 bore wells (different villages) spread across the study area and the following table gives the details of Maximum, Minimum and Average concentrations of different water quality parameters and the analysis reports reveals that all the parameters are well within the standards prescribed under IS 10500.

Sl. No.	Parameters	Minimum Value	Maximum Value	Average Value
1	Color (hazen units)	<2.0	<2.0	<2.0
2	Odour	Agreeable	Agreeable	Agreeable
3	pH Value	6.9	8.2	7.46
4	Turbidity, NTU	0.4	0.9	0.60
5	Chloride as Cl, mg/L	71.5	455.6	227.24
6	Total hardness as $CaCO_3$, mg/L	265.4	596.2	454.29
7	Calcium as Ca, mg/L	62.1	140.6	98.09
8	Magnesium as Mg, mg/L	9.9	78.4	50.73
9	Total dissolved Solids, mg/L	387	1268	820.75
10	Sulphate as SO_4, mg/L	40.4	219.1	96.44
11	Nitrate as NO_3, mg/L	13.8	53.2	27.73
12	Fluoride as F, mg/L	0.2	0.6	0.39
13	Iron as Fe, mg/L	0.13	0.26	0.21
14	Lead as Pb, mg/L	BDL	BDL	BDL
15	Copper as Cu, mg/L	BDL	BDL	BDL
16	Zinc as Zn, mg/L	0.4	0.4	0.40
17	Chromium as Cr, mg/L	BDL	BDL	BDL
18	Dissolved oxygen, mg/L	2.8	4.6	3.78

4.4. Soil Quality Monitoring:

Soil quality in the industrial area is monitored. The soil samples are collected and analysed for different parameters.

The soil quality monitoring was carried out at 8 locations (different villages) spread across the study area and the following table gives the details of Maximum, Minimum and Average concentrations of different soil quality parameters and the analysis reports reveals that all the parameters are well within the standards prescribed.

Sl. No.	Soil Parameters	Minimum Value	Maximum Value	Average Value
1	pH (20% Suspension)	7.2	8.4	7.7
2	Conductivity, µmhos/cm	123	229	166.5
3	Chloride as Cl, mg/Kg	312.4	401.6	353.5
4	Moisture, %	2.2	23.6	8.5
5	Organic Matter, %	0.5	1.4	0.9
6	Calcium as Ca, mg/Kg	684.12	967.6	782.1
7	Magnesium Mg, mg/Kg	152.4	472.8	351.3
8	Colour	Brown	Brown	Brown
9	Sulphur as S, mg/Kg	4.1	6.7	5.7
10	Nitrogen as N, %	0.009	0.016	0.0
11	Phosphorous as P, mg/Kg	17.83	29.03	24.8
12	Potassium as K, mg/Kg	128	207.8	170.0
13	Copper as Cu, mg/Kg	3.79	17.44	9.7
14	Chromium as Cr, mg/Kg	1.39	9.24	5.6
15	Zinc as Zn, mg/Kg	36.73	45.34	40.0
16	Lead as Pb, mg/Kg	8.38	14.75	11.6
17	Nickel as Ni, mg/Kg	0.9	3.09	1.5
18	Cadmium as Cd, mg/Kg	<0.1	<0.1	<0.1