# KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD



(A Government of Karnataka Undertaking) # 49, 4th & 5th Floors, 'East Wing', Khanija Bhavan, Race Course Road, Bengaluru - 560 001 Phone : 080-22265383 Fax : 080-22267901 Website : www.kiadb.in email: ceoemkiadb@gmail.com

No. KIADB/JDTP/FCN:20456/ 669 2/2021-22

Date: 13/08/2021

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

Sir,

To,

- 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 at Yaramarus & Potagal Villages of Raichur Taluk, Raichur District, Karnataka to an extent of 253.32 Acres.
- **Ref.:** 1. ToR issued by SEIAA on 22<sup>nd</sup> May 2013 and was extended till 01<sup>st</sup> 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.

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 22<sup>nd</sup> May 2013 and was extended till 01st July 2016 and after 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.

Hence, the detailed 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 and the same is attached for your kind perusal and for information.

Kindly acknowledge the same.

Yours faithfully,

Chief Engineer-2 KIADB, Bengaluru

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.

For

# KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD (KIADB)

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

## Submission to

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

Kendriya Sadan, 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.

# TABLE OF CONTENTS:

SI.No.	List of Contents	Page No.
1.0	Project Details.	1
2.0	Location Map.	2
3.0	Half yearly Compliance reports with stipulated EC Conditions.	3-14
4.0	Environmental Monitoring Details:	15-18
4.1	Ambient Air Monitoring reports.	15
4.2	Ambient Noise Monitoring reports.	16
4.3	Surface/ Ground Water Analysis reports.	17
4.4	Soil Analysis reports.	18

# LIST OF ANNEXURES:

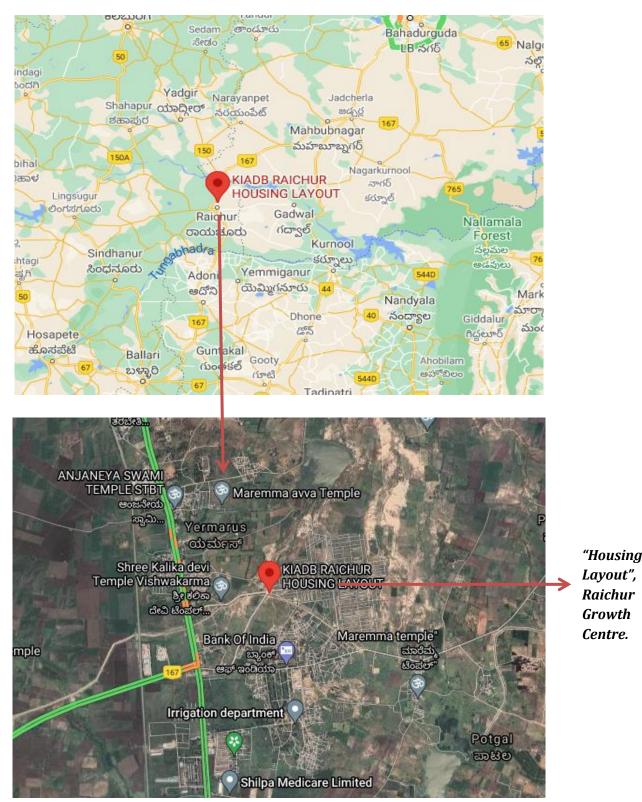
Annexure	List of Contents
Annexure-1	Copy of Environmental Clearance.
Annexure-2	"Consent for Establishment" obtained from KSPCB.
Annexure-3	Copy of Newspaper Advertisement.
Annexure-4	Ambient Air Quality Monitoring reports.
Annexure-5	Ambient Noise Quality Monitoring reports.
Annexure-6	Water Quality Monitoring reports.
Annexure-7	Soil Quality Monitoring reports.

# **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 23<sup>rd</sup> January 2019.
- 3) Total Plot Area: 253.32 Acres.
- **4) ToR issued**: Issued by SEIAA on 22<sup>nd</sup> May 2013 and was extended till 01<sup>st</sup> 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, 4<sup>th</sup> & 5<sup>th</sup> floors, Khanija Bhavan, Race Course road, Bengaluru- 560 001.

# 2.0. LOCATION MAP:



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

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
Α	SPECIFIC CONDITIONS:	
Ι	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 d. 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. 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. 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. 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 do the same during the operation phase.
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.

	1	
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 fire fighting 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, Akash Mallige, Mahagoni, Honge, Kadamba Ficus, 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 year 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	<b>Operation Phase</b>	
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.

	1	
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, Akash Mallige, Kadamba Ficus 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 months' 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.

В	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 12 <sup>th</sup> 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 at http://seiaa.karnataka.gov.in 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 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 (SO2) and Nitrogen Dioxide (NO2) at 8 Locations and the detailed reports are attached as **Annexure-4**.

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 <sub>10</sub> , μg/m <sup>3</sup>	100	55.1	67.2	60.2
2	Particulate Matter PM <sub>2.5</sub> , μg/m <sup>3</sup>	60	20.5	28.3	23.8
3	Nitrogen Dioxide NO <sub>2,</sub> μg/m <sup>3</sup>	80	15.2	24.6	19.2
4	Sulphur dioxide as SO <sub>2</sub> , μg/m <sup>3</sup>	80	8.1	14.5	11.7

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	e monitoring results reveal the f	ollowing ambient noise concen	itration at different locations:	

SI. No.	Locations	Noise leve Le	• •	CPCB Standard		
		Day	Night	Lday (Ld)	LNight (Ln)	
1	Near Raichur Village Growth Centre- Project site	63.0	55.1	55	45	
2	Near Yermuras Village	52.7	43.6	55	45	
3	Near Raichur Village	53.2	44.1	55	45	
4	Near Shakawadi Village	51.7	42.0	75	70	
5	Near Manslapur Village	51.2	42.9	75	70	
6	Near Chikkasugur Village	52.2	43.7	55	45	
7	Near Katlukur Village	52.3	43.5	55	45	
8	Near Potgal Village	52.1	43.2	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.

Ambient Noise Level is monitored and the detailed reports are attached as Annexure-5.

### 4.3. Water Quality Monitoring:

Water quality in the industrial area is monitored. The Ground and Surface water samples are collected and analyzed for water quality parameters. The Compiled test reports are attached as **Annexure-6**.

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	6.82	7.85	7.4
4	Turbidity, NTU	0.52	1.7	0.9
5	Chloride as Cl, mg/L	34.5	477.9	230.2
6	Total hardness as CaCO <sub>3,</sub> mg/L	240.0	608.9	457.9
7	Calcium as Ca, mg/L	51.59	160.1	102.5
8	Magnesium as Mg, mg/L	15.6	75.5	48.8
9	Total dissolved Solids, mg/L	355.0	1329.0	803.5
10	Sulphate as SO <sub>4</sub> , mg/L	36.8	257.9	125.1
11	Nitrate as NO <sub>3</sub> , mg/L	15.3	92.8	36.0
12	Fluoride as F, mg/L	0.65	1.37	1.0
13	Iron as Fe, mg/L	BDL	BDL	BDL
14	Lead as Pb, mg/L	BDL	BDL	BDL
15	Copper as Cu, mg/L	BDL	BDL	BDL
16	Zinc as Zn, mg/L	BDL	BDL	BDL
17	Chromium as Cr, mg/L	BDL	BDL	BDL
18	Dissolved oxygen, mg/L	1.0	2.6	2.09

### 4.4. Soil Quality Monitoring:

Soil quality in the industrial area is monitored. The soil samples are collected and analysed for different parameters. The compiled test reports are attached as **Annexure-7**.

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.

SI. No.	Soil Parameters	Minimum Value	Maximum Value	Average Value
1	pH (20% Suspension)	7.81	8.4	8.1
2	Conductivity, µmhos/cm	103.2	245.6	161.6
3	Chloride as Cl, mg/Kg	312.3	391.8	355.6
4	Moisture, %	2.2	20.3	5.6
5	Organic Matter, %	0.22	0.45	0.4
6	Calcium as Ca, mg/Kg	656.3	936	765.1
7	Magnesium Mg, mg/Kg	158.4	448.8	359.3
8	Colour	Brown	Brown	Brown
9	Sulphur as S, mg/Kg	2.6	4.1	3.3
10	Nitrogen as N, %	0.001	0.013	0.006
11	Phosphorous as P, mg/Kg	27.3	35.7	31.0
12	Potassium as K, mg/Kg	138.1	220.3	170.3
13	Copper as Cu, mg/Kg	2.62	22.74	10.1
14	Chromium as Cr, mg/Kg	0.52	7.5	4.8
15	Zinc as Zn, mg/Kg	37.3	44.4	40.4
16	Lead as Pb, mg/Kg	8.4	12.65	10.8
17	Nickel as Ni, mg/Kg	0.29	0.49	0.4
18	Cadmium as Cd, mg/Kg	<0.1	<0.1	<0.1



# State Level Environment Impact Assessment Authority-Karnataka

(Constituted by MoEF, Government of India, under section 3(3) of E(P) Act, 1986)

No. SEIAA 49 CON 2013

Date: 28-01-2019

#### To,

Chief Development Officer & Chief Engineer Karnataka Industrial Area Development Board (KIADB) No. 49, 4<sup>th</sup> & 5<sup>th</sup> Floor, Khanija Bhavan Race Course Road, Bangalore - 560 001.

Sir,

Sub: Proposed "Formation of Housing Layout" project at Raichur Growth Centre, Survey Numbers 93/1, 93/2, 93/3, 94/1, 94/2, 95/1, 95/2, 114/2B, 115/2, 116/1B, 96/1, 96/2 of Yaramarus Village and Survey Numbers 267/1, 267/2, 267/3, 267/4, 267/5, 267/6, 268, 269, 270, 271/1, 271/2, 271/3, 272/1, 272/2, 273/A, 275, 276/1, 276/2, 276/3, 276/4, 277/1, 277/2, 284, 285, 286/1, 286/2, 307, 308, 309/1A, 309/1AA, 309/2, 309/3, 311, 312, 253(part), 266/4, 274/1, 274/2, 278/1, 310/1, 310/2 of Potagal Village, Raichur Taluk, Raichur District by M/s. Karnataka Industrial Area Development Board (KIADB) - Issue of Environmental Clearance – Reg.

\* \* \* \* \*

This has reference to your application received on 16<sup>th</sup> March 2013 addressed to SEIAA, Karnataka and subsequent letters addressed to SEIAA/SEAC Karnataka furnishing further information/seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of the provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., the Application in Form 1, Form 1A, conceptual plan, EIA study report for proposed "Formation of Housing Layout" project and the additional clarifications furnished in response to the observations of the SEIAA and SEAC, Karnataka.

2. It is, inter-alia, noted that M/s. Karnataka Industrial Area Development Board (KIADB) have proposed for "Formation of Housing Layout" project on a plot area of 253.32 Acres (Suvey Number wise land break up is annexed). Out of 253.32 Acres of area, 115.37 Acres area is earmarked for Residential Development, 6.5 Acres area is for Commercial area, 17.41 Acres area is for Civie Annexides 3.43 Acres of area is for Utility, 26.48 Acres area is earmarked for Packa e open space and 84.13 Acres area is for Traffic & Transportation (Layout Plan is enclosed as Annexure) Total estimated water requirement for the project is 2.1 MLD (Fresh water & Recycled water) will be met from Raichur Corporation. The total wastewater discharge is 1.68 MLD. It is proposed to construct Sewage Treatment Plant with a capacity of 2 MLD. Total power requirement 7500 KVA will be courced from BESCOM. The project cost is 123 Crores.

Room No. 706, 7th Floor, 4th Gate, M.S. Building, Bangalon, 560,001 Phone : 080-22032497 Fax: 080-22254377 Website : http://seiaa.kar.nic.in http://seiaa.karnataka.com/in.http://phytronmentclearance.nic.in e-mail: msseiaakarnataka@gmail.com SEIAA 49 CON 2013

Proposed "Formation of Housing Layout" Project at Raichur Growth Centre of KIADB

3. The project proposal has been considered by SEAC during the meeting held on 26<sup>th</sup> April 2013 for issue of ToRs. Accordingly the ToR was issued on 22<sup>nd</sup> May 2013. Subsequently the proponent vide letter dated 19-03-2016 requested to for extension of validity of ToR for one more year to complete the EIA report, as they are not able to finalize the draft EIA report due to delay in finalizing certain design details. The Authority during the meeting held on 31<sup>st</sup> March 2016 decided to extend the validity period for further period of one year ie., till 21.05.2017. Accordingly ToR was extended vide letter dated 01-07-2016. The proponent has submitted the EIA report on 11-05-2017 and subsequently on 14-03-2018 incorporating the correction.

4. Based on the information submitted by you, presentation made by you and your consultant. The State Level Expert Appraisal Committee (SEAC) examined the proposal in the meeting held on 13<sup>th</sup>, 14<sup>th</sup> & 15<sup>th</sup> March 2018 and has recommended for issue of Environmental Clearance.

5. The SEIAA during the meeting held on 26<sup>th</sup> June 2018 decided to close the file and delist from the pendency. Subsequently the proponent vide letter dated 02-11-2018 requested to re-open the file and to issue Environmental Clearance.

6. The SEIAA Karnataka during the meeting held on 10<sup>th</sup> January 2019 duly considering the relevant documents submitted by the project Authority, additional clarifications furnished in response to its observations and the appraisal and recommendation of the SEAC has decided to accord Environmental Clearance in accordance with the provisions of Environmental Impact Assessment Notification-2006 and its subsequent amendments, subject to strict compliance of the following terms and conditions:

# Part A- SPECIFIC CONDITIONS:-

### I. Construction Phase:-

- 1. Set up an environment management cell and ensure that the cell manages/maintains all the 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 all environment concerns during the operation phase of the project. In addition, sufficient fees should be levied so as to raise a corpus fund to maintain the Environment cell.
- 2. Appoint an Environment and safety engineer during the construction phase 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 noise nuisance, the area water pollution and no disturbance to the proper inhabitants, the case of violation, the project construction activity way have to be directed to be stopped.
- 4. The project Authority should cover the project site from all sides by faising sufficiently tall barricades with sheets to ensure that pollutants do not spill to the surroundings.

2

SEIAA 49 CON 2013

Proposed "Formation of Housing Layout" Project at Raichur Growth Centre of KIADB

- 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.
- 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 workforce.
- 7. A First Aid Room should be provided in the Project both during construction and operation of the project.
- 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.
- 9. Provision shall be made for the housing of construction labourers within the site with all necessary infrastructures. The housing may be in the form of temporary structures to be removed after the completion of the project. The facilities shall include the crèche.
- 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.
- 11. All the labourers to be engaged for construction 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.
- 12. For dis-infection of wastewater which is not meant for recycling for toilet flushing, use ultraviolet radiation and not chlorination. For treated wastewater meant for reuse for toilet flushing, disinfect by using chlorination.
- 13. All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.
- 14. Disposal of muck, construction debris 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.
- 15. Soil and groundwater samples should be tested at the project site during the construction phase to ascertain that there is no threat to groundwater quality by leaching of heavy metals and or other toxic contaminants and report submitted to SEIAA.
- 16. Construction spoils, including bituminous material 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 into the groundwater.
- 17. 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.
- 18. Vehicles hired for bringing construction material 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.

ALC A HARNATAKA A

SEIAA 49 CON 2013

Proposed "Formation of Housing Layout" Project at Raichur Growth Centre of KIADB

- 19. Ambient noise levels should conform 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 measures to reduce air and noise pollution during construction keeping in mind CPCB norms on noise limits.
- 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 August 2003.
- 21. Ready mixed concrete must be used in building construction.
- 22. Storm water control and its re-use as per CGWB and BIS standards for various applications.
- 23. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices.
- 24. No groundwater is to be drawn without permission from the Central /State Ground Water Authority.
- 25. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- 26. Treatment of 100% grey water by decentralized treatment should be done.
- 27. 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.
- 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 special reflective coating in windows.
- 29. The provision of Energy Conservation Building code, 2007 shall be fully complied with.
- 30. Roof should meet prescriptive requirement as per Energy Conservation Building Code, 2007 by using appropriate thermal insulation material.
- 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 fulfill requirement.
- 32. Facilities such as ramps and separate parking shall be provided for the benefit of physically challenged.
- 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
- 34. The project Authority shall maintain and operate the common infrastructure facilities created including STP and solid waste management facility for a period of at least 5 years after commissioning the project.
- 35. The project Authority shall incorporate a suitable condition in the Sale Agreement/Deed to be made with the buyer that the occupier/buyer holds the responsibilities jointly with other users to maintain complete infrastructure facilities created including STP and solid waste management facility.
- 36. The Project Authority shall obtain the construction material such as stones and aggregates etc. only from the approved quarries and other construction material shall also be procured from the authorized agencies/traders.

ALSA MARNATAKA

4

**SEIAA 49 CON 2013** 

Proposed "Formation of Housing Layout" Project at Raichur Growth Centre of KIADB

- 37. The Project Authority shall obtain approval from the competent authorities for structural safety of the building due to earthquake, adequacy of fire fighting equipment etc. as per the National Building Code (NBC) including protection measures for lightening etc.
- 38. The project Authority shall ensure that no water bodies are polluted due to project activities.
- 39. Safety standards as per National Building Code (NBC), 2005 should be followed and ensured.
- 40. The project Authority shall ensure that the National Building Code, 2005 is fully complied with and adhered to.
- 41. The project Authority 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 and shall be afforested and maintained as green belt only.
- 42. The project Authority shall obtain NOC before commencement of the construction activity and clearance after the completion of the construction from the Fire and Emergency Services Department, if Applicable.
- 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 04.12.2012 for different activities involved in construction work.
- 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.
- 45. The project Authority shall ensure that the construction activity is undertaken strictly in accordance with the approved site plan/layout drawing annexed to this Environmental Clearance letter. However, it is subject to compliance to the provisions of local authorities regarding setbacks, FAR etc. Shall be adhered to.
- 46. The existing water body, canals and rajakaluve and other drainage and water bound structures shall be retained unaltered with due buffer zone as applicable and maintained under tree cover.
- 47. The project authorities shall leave the appropriate buffer from the boundary of lake and on either side of the channel / nala and other water bodies as per the local planning Authority norms and this shall be free from any permanent structures. The buffer so maintained shall be planted with indigenous tree species such as Neem, Akash Mallige, Mahagoni, Honge, Kadamba Ficus, etc. and maintained as green belt.
- 48. The natural sloping pattern of the project site other than the area excavated for the purpose of construction of proposed layout shall remain unaltered and the natural hydrology of the area be maintained as it is to ensure natural flow of stormwater TAL IMPAC
- 49. Lakes and other water bodies within and or at the vicinity of the project area shall be protected and conserved.
- 50. The Project Authority shall build in infrastructure required for 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 for DG sets instead of other type of fuels. NOT A MARNATAKA

5

SEIAA 49 CON 2013

Proposed "Formation of Housing Layout" Project at Raichur Growth Centre of KIADB

- 51. The project authorities shall undertake activities under Corporate Environment Responsibility (CER) with a 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 works, avenue plantation, plantation in community areas etc. within five year 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.
- II. Operation Phase:-
  - 1. The installation of Three 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.
  - 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.
  - 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 groundwater. Such excess flow should be safely let into the stormwater drains.
  - 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 recyclers.
  - 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.
  - 6. The project Authority 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, play ground and avenue plantation in addition to the proposed in house area. The Authority shall undertake plantation of heavy foliage indigenous tree species such as Mahagoni, Honge, Neem, Akash Mallige, Kadamba, Ficus and Ashoka, etc at an espacement of 3 mts x 3 mts i.e. 1111 plants/hectare.

The green belt design along the periphery of the plot shall achieve attenuation factor confirming to the day and night noise tandards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.

7. Incremental pollution loads on the ambient air quality; noise and water quality should be periodically monitored after commissioning of the project.



6

SEIAA 49 CON 2013

Proposed "Formation of Housing Layout" Project at Raichur Growth Centre of KIADB

- 8. 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 the complex should be provided. Details in this regard should be submitted to the SEIAA.
- 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.
- 10. A Report on the energy conservation measures confirming to energy conservation norms finalized by the Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the SEIAA in three months time.
- 11. All toilets should have dual plumbing line for using treated water and no wastewater is discharged from the unit.
- 12. The Environment Management Plan including the human health and Safety management plan and Fire Safety and Protection plan proposed by the Authority shall be strictly implemented.

### PART - B. GENERAL CONDITIONS:

- The issuance of Environment Clearance doesn't confer any right to the project 1. Authority to operate/run the project without obtaining Statutory clearances/sanctions from all other concerned authorities.
- The Environmental safeguards contained in the application should be 2. implemented in letter and spirit.
- 3. All commitments made by the Authoritys in their application, and subsequent letters addressed to the SEAC/SEIAA should be accomplished before the construction work of the project is completed.
- 4. Half yearly monitoring reports should be submitted to the SEIAA and the APCCF, Regional Office, MoEF, Bengaluru.
- Officials from the Department of Environment and Ecology, Bengaluru / 5. 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 Authority during their inspection. A complete set of all the documents submitted to MoEF / SEIAA should be forwarded to the APCCF, Regional Office of MoEF, Bengaluru / Department of Environment and Ecology, Bengaluru.
- 6. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this 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 The Authority reserves the right to add additional safeguard measures 8. subsequently, if found necessary and to take action including revoking of the environmental clearance unter the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

संबन्ध जधते

KARNATAKA \*

7

SEIAA 49 CON 2013

Proposed "Formation of Housing Layout" Project at Raichur Growth Centre of KIADB

- 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 proponents from the competent authorities.
- 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 clearance letters are available with the Karnataka State Pollution Control board and may also be seen on the website of the SEIAA, Karnataka at http://seiaa.karnataka.gov.in or http://environmentclearance.nic.in 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 APCCF, Regional Office of the MoEF at Bengaluru/ Department of Environment and Ecology, Bengaluru.
- 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.
- 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.
- 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.
- 14. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project Authority if it is found that construction of the project has been started without obtaining environmental clearance.



Yours faithfully,

(N.L.Shanthakumar) Member Secretary, SEIAA, Karnataka.

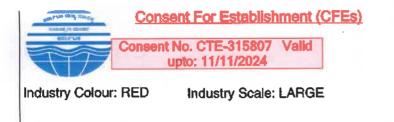
### Copy to:

- The Secretary, Ministry Common Forests and Climate Change, Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj, New Delhi – 110 003.
- 2. The Member Secretary, Karnataka State Pollution Control Board, Bengaluru.
- The APCCF, Regional Office, Ministry of Environment & Forests (SZ), Kendriya Sadan, IV Floor, E & F wings, 17<sup>th</sup> Main Road, Koramangala II Block, Bengaluru - 560 034.
- 4. Guard File.

Consent No. CTE-31 upto: 11/11/2		Pari	State Pollution Control Board sara Bhavana,No.49, Church Street,Bengaluru-560001 le : 080-25589112/3, 25581383 Fax:080-25586321 email id: ho@kspcb.gov.in
This document contains4 pagesConsent OrderCTE-315807	including annexure & exclud PCB ID:	ing additional conditions	) Date. 12/11/2019
No.		77100	
Γο,			
The Applicant			
ormation Of Housing Layout At Raich	hur Growth Centre, Ralchur D	lstrict	
The Development Officer, Plot No. 49, Hyderabad Road, Raichur Industrial Area, R	-1.15		
Bir,			
<ol> <li>Inspection of the project s</li> <li>3.Proceedings of the CCM da</li> <li>With reference to the above, Karnata new Activity under the Water (Prevention)</li> </ol>	ated 02/11/2019 ,held on ka State Pollution Control Bo ntion & Control of Pollution)	Act, 1974 & the Air (Pro	evention & Control of
Pollution) Act, 1981 at the location in	ndicated below subject to the	following terms & condi	tions.
ocation:			
Name of the Applicant:	formation Of Housing Layo		
Address:	93/1, 93/2, 93/3, 94/1, 94/2 Village, Raichur Taluk & D		5/2, 11, Yeramarus & Potaga
ndustrial Area:	Raichur Growth Centre I.A,	Yeramarus 8	Potagal,
aluk:	Raichur,	District: Rai	chur
Conditions:			
1. This consent for establishment is	s valid up to 11/11/2024	from the date of issue	
<ol> <li>The applicant shall not undertake</li> <li>The applicant shall obtain necess law.</li> </ol>	sary license/clearance from of	ithout the prior consent of the prior consent of the prior constant statutory ag	of the Board. encies as required under the
4. This consent is granted consider	0		
4. This consent is granted consider Sr Product		Applied Qty/Month	Unit
		Applied Qty/Month 0.000	Unit NOS

DOM:

Particulars	Water consumption(KLD)		
Domestic Purpose	2100.0		



(This document contains 4 pages including annexure & excluding additional conditions)

#### VII. GENERAL:

- 1. The applicant shall transport and store the raw materials in a manner so as not to cause any damage to environment, life property. The applicant shall be solely responsible for any damages to environment.
- 2. The applicant shall not commission the proposed plant for trial or regular production unless necessary Water & air pollucontrol equipments are installed as specified in the Consent Order.
- 3. The applicant shall ensure that the treatment plant and control equipments are completed and commissioned simultaneou along with construction of the factory and erection of machineries.
- 4. The applicant shall not change or alter (a) raw materials or manufacturing process, (b) change the products or product m the quality, quantity or rate of discharge/emissions and (d) install/replace/alter the water or air pollution control equipme without the prior approval of the Board.
- 5. The applicant shall immediately report to the Board of any accident or unforeseen act or event resulting in release of discharge of effluents or emissions or solid wastes etc. in excess of the standards stipulated. And the indu shall immediately take appropriate corrective and preventive actions under intimation to the Board.

6. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the ter conditions.

- 7. This CFE does not give any right to the Party/Project Authority/Industry to forego any other legal requirement, that is ne for setting/operation of the plant.
- 8. The applicant shall furnish pointwise compliance to the conditions given under this consent for establishment along with application for Consent to operate.

9. The applicant is liable to reinstate or restore, damaged or destroyed elements of environment at his cost, failing which, applicant/occupier as the case may be shall be liable to pay the entire cost of remediation or restoration in advan amount equal to the cost estimated by Competent Agency or Committee.

10. The applicant shall comply with all the Conditions and guidelines issued from time to time.

11. The applicant must create structure/facility for rain water harvesting and ground water recharge.

12. The applicant shall develop extensive green belt within the periphery of the plant.

13. This consent is issued without prejudice to Court Cases pending in any Hon'ble Court.

Please note that this is only consent for establishment issued to you to proceed with the formalities for establishment of the industry and does not give any right to proceed with trial/regular production. For this purpose, separate consents of the Board for discharge of liquid effluent and the emissions to the air shall have to be obtained by remitting prescribed consent fee. The application for consent has to be made 45 days in advance of commissioning for trial production of the plant.

The receipt of this letter may please be acknowledged.

Consent Fee paid

: Rs. 75000

Note:



(This document contains 4 pages including annexure & excluding additional conditions)

### **COPY TO:**

- 1. The Environmental Officer, KSPCB, Regional Office, Raichur for information and to inspect the industry during your next visit to the area.
- 2. Master copy (Dispatch).
- 3. Office copy.

Chi m.N o.	Chimne y attached	KVA	Minimum chimney height to be	Constituents to be controlled in the emission	Tolerance limits mg/NM3	Fuel	Control	Date of which air pollution corrol equipments snall
	to		provided above ground level (in Mts)	ರಿಯಂತ (	n II	20054	be installed,in addition to chimney height as per col.(4)	be provided to achieve the stipulated tolerance limits and chimney heights
	-			6405	E 83	ð		conforming to stipulated heights.
1		No Stack is Propose d	0	PM(mg/NM3),SO2 (PPM),NOx(PPM)	NA		N.A	Before commissioning.

# ANNEXURE- II

Note:

N.A Not Applicable

### LOCATION OF SAMPLING PORTHOLES, PLATFORMS, ELECTRICAL OUTLET,

1. Location of Portholes and approach platform:

Portholes shall be provided for all chimneys, stacks and other sources of emission. These shall serve as the sampling points. The sampling point should be located at a distance equal to atleast eight times the stack or duct diameters downstream and two diameters upstream from source of low disturbance such as a Bend, Expansion, Construction Valve, Fitting or Visible Flame or rectangular stacks, the equivalent diameter can be calculated from the following equation.

Equivalent Diameter = 2 (Length x Width) (Length + Width)

- 2. The diameter of the sampling port should not be less than 100mm dia". Arrangements should be made so that the porthole is closed firmly during the non sampling period.
- 3. An easily accessible platform to accommodate 3 to 4 persons to conveniently monitor the stack emission from the portholes shall be provided. Arrangements for an Electric Outlet Point of 230 V 15 A with suitable switch control and 3 Pin Point shall be provided at the Porthole location.
- 4. The ladder shall be provided with adequate safety features so as to approach the monitoring location with ease.

#### ANNEXURE - I

KIADB, Raichur NO. PCB/75/CNP/19/

Date:

- Sub: Consent for Establishment (CFE) to develop Formation of Residential Layout with 3087 Nos. of sites in an extent of an area 253.32 Acres located at Sy. No. 93/1, 93/2, 93/3, 94/1, 94/2, 95/1, 95/2, 114/2B, 115/2, 116/1B, 96/1, 96/2 of Yaramarus Village and Sy. No. 267/1, 267/2, 267/3, 267/4, 267/5, 267/6, 268, 269, 270, 271/1, 271/2, 271/3, 272/1, 272/2, 273/A, 275, 276/1, 276/2, 276/3, 276/4, 277/1, 277/2, 284, 285, 286/1, 286/2, 307, 308, 309/1A, 309/1AA, 309/2, 309/3, 311, 312, 253(Part), 266/4, 274/1, 274/2, 278/1, 310/1, 310/2 of Potagal Village, Raichur Taluk & District by M/s. Karnataka Industrial Area Development Board (KIADB).
- Ref: 1. CFE applications received at Regional Office, KSPCB, Raichur on 29.08,2019.
  - Inspection of the proposed project site by Officer of the Regional Office, KSPCB, Raichur on 01.08.2019.
  - 3. EC No. SEIAA 49 CON 2013 dated 28.01.2019.
  - 4. The proceedings of consent committee meeting held on 24.10.2019.

 $\diamond \diamond \diamond \diamond$ 

With reference to the above, it is to be informed that this Board hereby accords Consent for Establishment under the Water (Prevention & Control of Pollution) Act 1974, to develop Formation of Residential Layout with 3087 Nos. of sites in an extent of an area 253.32 Acres located at Sy. No. 93/1, 93/2, 93/3, 94/1, 94/2, 95/1, 95/2, 114/2B, 115/2, 116/1B, 96/1, 96/2 of Yaramarus Village and Sy. No. 267/1, 267/2, 267/3, 267/4, 267/5, 267/6, 268, 269, 270, 271/1, 271/2, 271/3, 272/1, 272/2, 273/A, 275, 276/1, 276/2, 276/3, 276/4, 277/1, 277/2, 284, 285, 286/1, 286/2, 307, 308, 309/1A, 309/1AA, 309/2, 309/3, 311, 312, 253(Part), 266/4, 274/1, 274/2, 278/1, 310/1, 310/2 of Potagal Village, Raichur Taluk & District by M/s. Karnataka Industrial Area Development Board (KIADB)., subject to the following conditions.

#### I. Environmental Aspects and Management during the course of construction:

a) The applicant shall arrange services like housing facility, water supply, sewage facilities on a temporary basis at construction site and same shall be maintained without any adverse impact on the environment.

toursel SENIOR ENVIRONMENTAL OFFICER lur

- b) The applicant shall control the movement of vehicles carrying construction materials in order to avoid noise pollution in the surrounding.
- c) The applicant shall obtain Consent for Operation (CFO) from the Board before handing over to residents Association.
- d) This CFE is issued only from the point of water pollution control and does not have any relevance over land dispute, any pending cases with any Departments/Hon'ble Courts.
- e) Sewage Treatment Plant (STP) and solid waste processing facility (for Organic) shall be provided and operated satisfactorily by the project proponent himself before it is handed over to Association/Company.
- f) The applicant shall strictly adhere to the zoning Regulation with respect to buffer zone towards any Lake, Nala, drain or any other water bodies as per the local planning authority guidelines.
- g) The applicant shall submit final approved plan from competent authority to the Board before taking up any construction activities.

#### II. WATER CONSUMPTION:

1. The water consumption for the above project activity shall not exceed **2100 KLD**. The applicant shall not draw water from borewell without permission of CGWA.

#### **III. WATER POLLUTION CONTROL:**

1. The total quantity of sewage shall not exceed 1680 KLD and shall be treated in the sewage treatment plant of capacity 2000 KLD with the treatment scheme as submitted in the STP proposal to meet the standards stipulated below before utilizing for Urban Reuse viz., landscape irrigation, vehicle washing, toilet flushing, use in fire protection and commercial air conditioners. STP shall be constructed on modular basis to cater to phase-wise development and applicant shall follow STP construction and operation guidelines published by the Board and the location of the STP should be above ground level & should be easily accessible to the inspecting officer.

Table-I					
SI. No	Parameter	Parameters Limit.			
01.	pH	6.5 - 9.0			
02.	BOD (mg/l)	Not more than 10			
03.	COD (mg/l)	Not more than 50			
04.	TSS (mg/l)	Not more than 20			
05.	NH4-N (mg/l)	Not more than 5			
06,	N-Total (mg/l)	Not more than 10			
07.	Fecal Coliform (MPN/100 ml).	Less than 100			

SENIOR ENVIRO **NTAL OFFICER** 

- 2. Applicant shall add appropriate disinfectant to treated sewage to ensure some residual chlorine preferably in the range of 1 mg/l. to 3 mg/l.
- 3. If the treatment plant do not achieve the effluent standards stipulated under conditions (1) above or if it is found to be inadequate, then the applicant shall have to modify the units so as to meet the standards with prior consent of the Board.
- 4. All the treatment units shall be made impervious and there shall not be any discharge of sewage outside the premises.
- 5. Separate energy meter shall be provided to STP's also flow meters and a log book on reading of energy meter and flow meters shall be maintained.
- 6. The applicant shall adhere to the CFE/CFO conditions even after handing over Layout/Plots to individual persons.

#### IV. AIR POLLUTION CONTROL:

- 1. There shall not be any air pollution sources without prior approval from the Board.
- 2. The applicant shall provide dust suppression systems with water sprinkling system during construction period.
- 3. The applicant should make provisions for dual piping system to use the treated sewage water for toilet flushing, gardening and other secondary purposes
- V. NOISE POLLUTION CONTROL:
- The applicant shall ensure that the ambient noise levels and ambient air quality within its premises during construction and after construction shall not exceed the limits specified in the Environment (Protection) Rules, i.e., the noise level from the noise generating equipments viz., DG sets, AC units etc., shall not exceed 55 dB(A) Leq during day time and 45 dB(A) Leq during night time.

#### VI. SOLID WASTE DISPOSAL & Hazardous Waste Disposal:

- 1. The applicant shall collect, treat and dispose off all solid waste generated during construction i.e. Muck, and Garbage after construction if any in such manner so as not to cause environmental pollution.
- The applicant shall apply and obtain authorization for management & handling of waste oil under Hazardous & other Waste (Management & Transboundary Movement) Rules, 2016.
- The applicant shall earmark sufficient place for segregation and processing and convert the bio-degradable solid waste generated from unit into compost within their premises with scientific method.

Anway SENIOR ENVIRONMENTAL OFFICER A 1.M

- 4. The applicant shall strictly follow the Government Notification No. FEE 17 EPC 2012 Bangalore dated 11.03.2016 with regard to plastics ban.
- 5. (a). The applicant shall strictly follow Construction & Demolition Waste Management Rules, 2016.

(b). The applicant shall display the C& D waste Management Rules in site and ensure the compliances.

### VII. HEALTH & SAFETY:

- The applicant shall provide all necessary healthcare facilities to workers and shall carry out routine health survey among workers.
- 2. The applicant shall provide all safety measures including personal protective equipments to workers during construction.

### VIII. GENERAL:

- 1. The applicant shall maintain natural nallah and other such features as in the revenue survey map and adopt zonal regulations of the concerned Planning Authorities.
- 2. The applicant must create structure/facility for rain water harvesting and ground water recharge.
- 4. The applicant shall provide dual piping system in the layout in order to use the treated sewage for toilet flushing, gardening and other secondary purposes.
- The applicant shall arrange for alternate power supply in the form of D.G.Set to run and operate the essential units of sewage treatment plant, in event of brake down of regular supply from Electricity Board.
- Exact date of commissioning of the sewage treatment plant shall be informed to this Board 45 days in advance so as to make necessary inspection of the plant and the pollution control measures provided by the applicant
- 7. The applicant shall appoint a qualified Environmental Engineer/ Scientist for the Management of Environmental aspects and also establish Environmental Cell to oversee the operation of STP.
- 8. The applicant shall make provisions for wooded Buffer zone all along the periphery of the layout.
- 9. The applicant shall implement the Environmental Management Plan during construction and after construction as given under EMP report.
- 10. The applicant shall not change or alter (a) number of Sites (b) Layout plan (c) the quality, quantity or rate of discharge/ emissions and (d) install/replace/alter the water or air pollution control measures without the prior approval of the Board.

Jument SENIOR ENVIRONMENTAL OFFICER

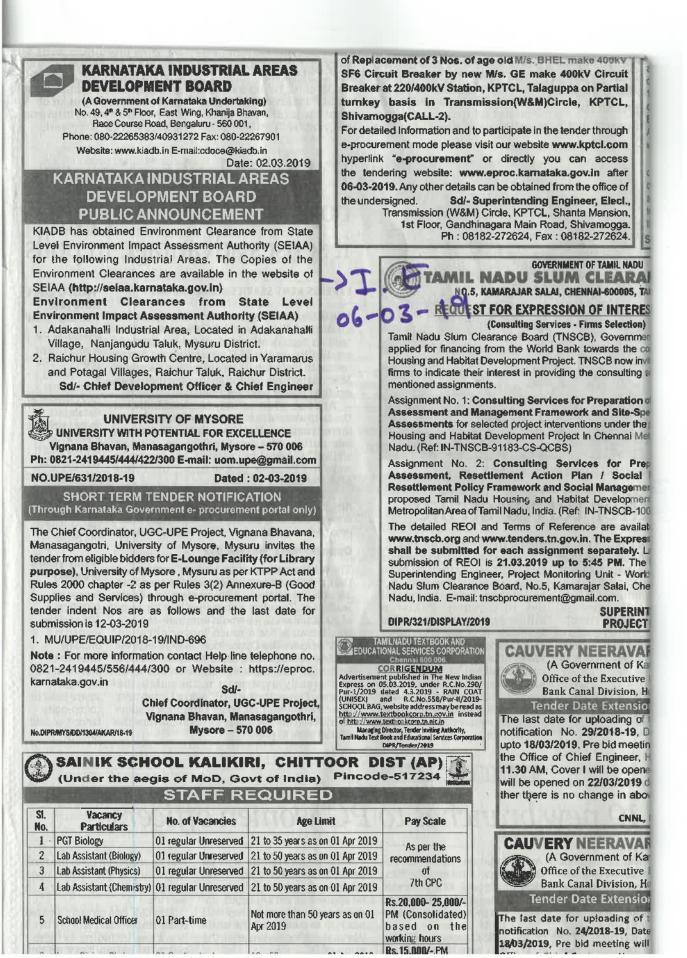
- 11. The applicant shall immediately report to the Board of any accident or unforeseen act or event resulting in release of discharge of effluents or emissions or solid wastes etc., in excess of the standards stipulated, and the applicant shall immediately take appropriate corrective and preventive actions under intimation.
- 12. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions.
- 13. This CFE does not give any right to the Party/Project Authority to forego any legal requirement, which is necessary for setting/operation of the project.
- 14. The project authorities shall dispose scientifically Bio-Medical waste and electronic waste to authorized common disposal facility and authorized recyclers respectively by entering into agreement as per new Bio Medical Waste Management Rules, 2016 and E- Waste (Management) Rules, 2016.
- 15. 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 and shall be afforested and maintained as green belt only.
- 16. The applicant is liable to reinstate or restore, damaged or destroyed elements of environment at his cost, failing which, the applicant/occupier as the case may be shall be liable to pay the entire cost of remediation or restoration and pay in advance an amount equal to the cost estimated by Competent Agency or Committee.
- 17. The CFE is issued without prejudice to the Court case pending in any Hon'ble Court.
- 18. The applicant shall maintain 30m buffer distance from edge of the lake.
- 19. The applicant shall take all necessary steps not to cover the storm water drains within the vicinity of the project site & are desilted & kept clean at all times.
- 20. No sewage, solid waste and C & D waste should be put in the storm water drains and these drain should be encroachment free.
- The project proponent shall provide necessary electrical charging facilities for battery operated vehicles in the car parking area.

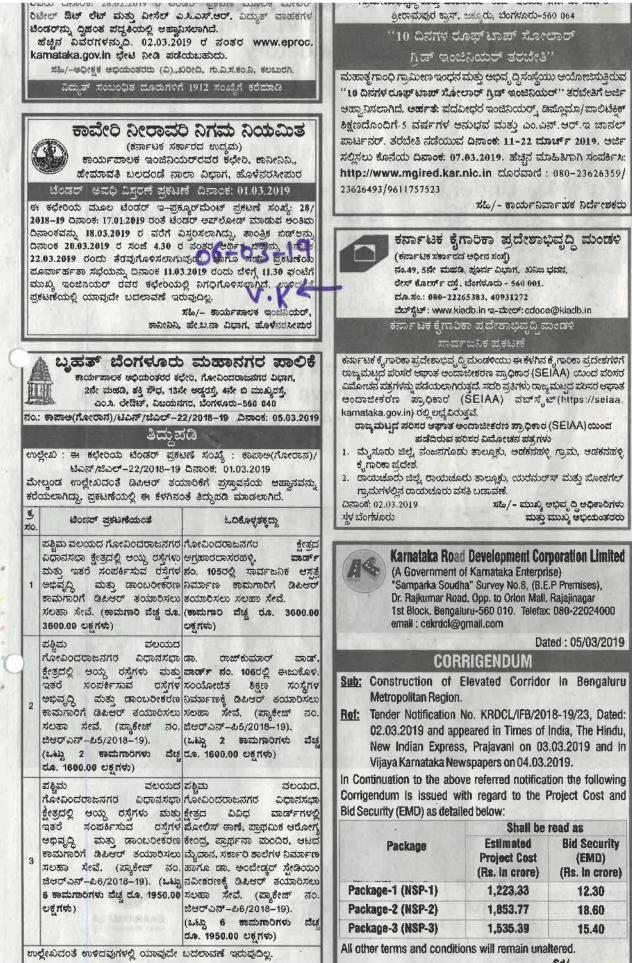
Please note that separate consent of the Board for discharge of liquid effluent shall have to be obtained by remitting prescribed consent fee. The application for consent has to be made 45 days in advance to completion of Residential Layout. Issue of consent will be considered only after completion of sewage treatment plant, solid waste management facilities.

The receipt of this letter may please be acknowledged.

For and on behalf of Karnataka State Pollution Control Board

SENIOR ENVIRONMENTAL OFFICER. A\_ INU





Sd/-



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

Limite

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00682
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00682
Karnataka 560 001.	Date of Receipt	:26/06/2021
	Analysis Start date	:26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Raichur Growth Centre Housing Layout,	Raichur District, Karnataka. (Ex	(t-253.32 A).
Sample Location: Near Raichur Village Growth Centre- Project site.		

SI. No.	Parame	ters	Results	(As Per NAAQS) For 24hrs		Protocol
1	Particulate Matter PM	И10, µg/m <sup>3</sup>	67.2	100		IS-5182 (P-23)
2	Particulate Matter PM	M <sub>2.5</sub> , μg/m <sup>3</sup>	28.3	60		IS-5182 (P-24)
3	Nitrogen Dioxide NO:	2, μg/m <sup>3</sup>	24.6	80		IS-5182 (P-06)
4	Sulphur dioxide as SC	) <sub>2</sub> , μg/m <sup>3</sup>	14.5	80		IS-5182 (P-02)
	tails of Equipment used	values for the above tested	parameters a	e within as per the NAAC	2 Stanuarus	
Na	me of the equipment	Respirable Dust Sampler	Fine Parti	iculate Sampler		
Mo	del	Thermo TEI-108 NL	Ther	mo TEI-121		
SI.	No.	222-TEA-21	21	1-TEA-21		

25-01-2021

22.01.2022

-----END OF THE REPORT-----

25-01-2021

23.01.2022

Verified by

**Calibrated on date** 

Calibration due date

5-8B29/06/21 Authorized Signatory



## **ROBUST MATERIALS TECHNOLOGY PVT. LTD.**

(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel: 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00683
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00683
Karnataka 560 001.	Date of Receipt	:26/06/2021
	Analysis Start date	:26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Raichur Growth Centre Housing Layout,	Raichur District, Karnataka. (Ex	t-253.32 A).

Sample Location: Near Yermuras Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM10, µg/m <sup>3</sup>	64.8	100	IS-5182 (P-23)
2	Particulate Matter PM <sub>2.5</sub> , µg/m <sup>3</sup>	25.6	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO <sub>2</sub> , µg/m <sup>3</sup>	21.4	80	IS-5182 (P-06)
4	Sulphur dioxide as SO <sub>2</sub> , µg/m <sup>3</sup>	13.2	80	IS-5182 (P-02)

INFERENCE: The measured values for the above tested parameters are within as per the NAAQ Standards

Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler
Model	Envirotech APM-460 BL	Envirotech APM-550
SI. No.	2475-DTJ-2012	1406-DTJ-2013
Calibrated on date	12-11-2020	07-11-2020
Calibration due date	11-11-2021	06-11-2021

-- END OF THE REPORT---

Verified by

5-8B29/06/1 Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00684
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00684
Karnataka 560 001.	Date of Receipt	:26/06/2021
	Analysis Start date	:26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Raichur Growth Centre Housing Layout,	Raichur District, Karnataka. (Ex	(t-253.32 A).

### Sample Location: Near Raichur Village.

SI. No.	Parame	ters F	Results	Limits (As Per NAA For 24hrs	AQS) Protocol	
1	Particulate Matter Pl	M <sub>10</sub> , μg/m <sup>3</sup>	63.1	100	IS-5182 (P-23)	
2	Particulate Matter Pl	M <sub>2.5</sub> , μg/m <sup>3</sup>	24.7	60	IS-5182 (P-24)	
3	Nitrogen Dioxide NO	2, μg/m <sup>3</sup>	20.5	80	IS-5182 (P-06)	
4	Sulphur dioxide as SC	D <sub>2</sub> , μg/m <sup>3</sup>	12.8	80	IS-5182 (P-02)	
	ails of Equipment used		Eine Deuti	late Canadaa	<b>≝</b> 240.	
	ne of the equipment	Respirable Dust Sampler	Fine Particu	late Sampler		
Mod		Ecotech AAS 217-BL	Envirotech	AAS 127-mini		
SI. N	lo.	16-L-415	18	-889		
Calil	brated on date	25-08-2020	21-01	-2021		
Calil	bration due date	24-08-2021	20-01	L-2022		
	6		-END OF THE I	REPORT		
	Q			¥)	÷.	
	22/4/2	8			C RB addit	8
	Verified by				Authorized Signatory	



## **ROBUST MATERIALS TECHNOLOGY PVT. LTD.**

(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT



Report No.	: RE/2021/00685
Report date	: 29/06/2021
Ref.	: Test Request Form
Date of Sampling	: 23/06/2021 to 24/06/2021
Job Order No	: RE/2021/00685
Date of Receipt	:26/06/2021
Analysis Start date	:26/06/2021
Analysis Completed date	: 29/06/2021
Raichur District, Karnataka. (Ex	(t-253.32 A.).
	Report date Ref. Date of Sampling Job Order No Date of Receipt

Sample	Location:	Near	Shakawadi	Village.	

SI. No.	Paramet	ters	Re	sults	Limit (As Per N/ For 24	AAQS)	Pro	tocol
1	Particulate Matter PM	Λ <sub>10</sub> , μg/m <sup>3</sup>	. 6	51.8	100		IS-518	2 (P-23)
2	Particulate Matter PM	Λ <sub>2.5</sub> , μg/m <sup>3</sup>	2	3.9	60		IS-518	2 (P-24)
3	Nitrogen Dioxide NO:	2, μg/m <sup>3</sup>	2	20.2	80		IS-518	2 (P-06)
4	Sulphur dioxide as SC	D <sub>2</sub> , μg/m <sup>3</sup>	1	2.2	80		IS-518	2 (P-02)
Deta	ils of Equipment used	for monitoring				]	5	
Nam	e of the equipment	Respirable Dust S	ampler	Fine Part	culate Sampler			
Mod	el	Ecotech AAS 21	17 NL	Ecote	ch AAS 217			
SI. N	0.	20-1-932		20	)- -1165	]		
Callib	rated on date	16-12-2020	D	16	12 2020			
Callb			T (A)	10	-12-2020			

END OF THE REPORT ----

Verified by

508329/06/21 Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230. Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT



M/s. Karnataka Industrial Areas Development Board	Report No.	:RE/2021/00686
•	Report date	: 29/06/2021
(KIADB).	Ref.	: Test Request Form
4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	:RE/2021/00686
Karnataka 560 001.	Date of Receipt	:26/06/2021
	Analysis Start date	:26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253	3.32 A).

Sample Location: Near Manslapur Village.

Verified by

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM <sub>10</sub> , µg/m <sup>3</sup>	55.3	100	IS-5182 (P-23)
2	Particulate Matter PM <sub>2.5</sub> , µg/m <sup>3</sup>	20.5	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO <sub>2</sub> , µg/m <sup>3</sup>	15.2	80	IS-5182 (P-06)
4	Sulphur dioxide as SO <sub>2</sub> , µg/m <sup>3</sup>	8.1	80	IS-5182 (P-02)

Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler Ecotech AAS 217 20-I-1166	
Model	Ecotech AAS-217 NL		
SI. No.	20-1-933		
Calibrated on date	16-12-2020 16-12-20	16-12-2020	
Calibration due date	15-12-2021	15-12-2021	

-----END OF THE REPORT-----

Note:1. The results listed refer only to the tested samples and applicable parameters. 2. Test certificate should not be reproduced except in full, without written approval of the laboratory. 3. The submitted samples are drawn by the laboratory unless otherwise specified. 4. Endorsement of product is neither inferred nor implied. 5. Samples will be destroyed after 15days from the date of issue of test report unless otherwise specified. 6. This report cannot be used as evidence in the court of law & should not be used in any advertising media without our permission in writing. 7. Total liability of our lab is limited to the invoice amount and any disputes arising out of this report are subject to Bangalore jurisdiction only. 8. Laboratory is not responsible for the authenticity of photocopied test reports.

5-8329/06/21 Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



	-	DE /2021 /00C07
M/s. Karnataka Industrial Areas Development Board	Report No.	:RE/2021/00687
	Report date	: 29/06/2021
(KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00687
Karnataka 560 001.	Date of Receipt	:26/06/2021
	Analysis Start date	:26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253	.32 A).
Sample Location: Near Chikkasugur Village.		<u>#</u> #

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	· Protocol
1	Particulate Matter PM <sub>10</sub> , µg/m <sup>3</sup>	57.2	100	IS-5182 (P-23)
2	Particulate Matter PM <sub>2.5</sub> , µg/m <sup>3</sup>	22.8	60	· IS-5182 (P-24)
3	Nitrogen Dioxide NO <sub>2</sub> , µg/m <sup>3</sup>	18.1	80	IS-5182 (P-06)
10.	Sulphur dioxide as SO <sub>2</sub> , µg/m <sup>3</sup>	12.3	80	IS-5182 (P-02)

INFERENCE: The measured values for the above tested parameters are within as per the NAAQ Standards.

Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler	
Model	Envirotech AAS-217 NL	Envirotech AAS 127-mini	
SI. No.	18-J-739	18-J-889	
Calibrated on date	16-03-2021	21-01-2021	
Calibration due date	15-03-2022	20-01-2022	

-----END OF THE REPORT-----

Verified by

5-8329/06/21 Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00688
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form : 23/06/2021 to 24/06/2021 : RE/2021/00688
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	
Race Course Road, Bengaluru,	Job Order No	
Karnataka 560 001.	Date of Receipt	:26/06/2021
/	Analysis Start date :26/06/2021	
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Raichur Growth Centre Housing Layout,	Raichur District, Karnataka. (E	xt-253.32 A).
Sample Location: Near Katlukur Village.		

oumpre sous	ioni neur nationa	 	_
	5		
CI I			

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM <sub>10</sub> , µg/m <sup>3</sup>	56.8	100	IS-5182 (P-23)
2	Particulate Matter PM <sub>2.5</sub> , µg/m <sup>3</sup>	. 22.3	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO <sub>2</sub> , µg/m <sup>3</sup>	17.1	80	IS-5182 (P-06)
4	Sulphur dioxide as SO <sub>2</sub> , µg/m <sup>3</sup>	10.9	80	IS-5182 (P-02)

Details of Equipment used for monitoring					
Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler Envirotech APM-550			
Model	Envirotech APM-460 BL				
SI. No.	2475-DTJ-2012	1406-DTJ-2013			
Calibrated on date	12-11-2020	07-11-2020			
Calibration due date	11-11-2021	06-11-2021			

END OF THE REPORT

Verified by

5-8329/06/21 Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00689
<b>Board (KIADB).</b> No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 23/06/2021 to 24/06/2021
	Job Order No	: RE/2021/00689
	Date of Receipt	:26/06/2021
	Analysis Start date	:26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Raichur Growth Centre Housing Layout, I	Raichur District, Karnataka. (Ex	(t-253.32 A).
Sample Location: Near Potgal Village.	10	

SI. No.	Parame	ters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter Pl	Λ <sub>10</sub> , μg/m <sup>3</sup>	55.1	100	IS-5182 (P-23)
2	Particulate Matter Pl	Λ <sub>2.5</sub> , μg/m <sup>3</sup>	22.4	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO	2, μg/m <sup>3</sup>	16.6	80	· IS-5182 (P-06)
4	Sulphur dioxide as SC	)2, μg/m <sup>3</sup>	9.3	. 80	IS-5182 (P-02)
	RENCE: The measured	values for the above tested	parameters are w	ithin as per the NAAQ	Standards
	ne of the equipment	Respirable Dust Sampler	Fine Particulate	Compler	
1401	ne of the equipment	Respirable Dust Sampler	i ine raiticulate	Sampler	

Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler
Model	Envirotech APM-550	Envirotech APM-550
SI. No.	2476-DTJ-2012	1159-DTG-2012 ·
Calibrated on date	16-03-2021	16-03-2021
Calibration due date	15-03-2022	15-03-2022

-----END OF THE REPORT-----

Verified by

5-8329/06/21 Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



## M/s. Karnataka Industrial Areas Development Board (KIADB).

No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.

1	Report No.	:RE/2021/00690
	Report date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 23/06/2021 to 24/06/2021
	Job Order No	: RE/2021/00690
	Date of Receipt	:26/06/2021
	Analysis Start date	:28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	Leq dB(A)
RE/2021/00690	Near Raichur Village	6:01 AM to 10:00 PM	53.6	74.1	63.0
	Growth Centre- Project site	10:01 PM to 6:00 AM	44.5	68.3	55.1

**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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear

INFERENCE	As per CPCB Standards, Report Status: - The measured values for	the above locations are within the standards.
END O	THE REPORT	
2	28	5-0 16 29/06/21
Verified by		Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



## M/s. Karnataka Industrial Areas Development Board (KIADB).

No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.

Report No.	:RE/2021/00691
Report date	: 29/06/2021
Ref.	: Test Request Form
Date of Sampling	: 23/06/2021 to 24/06/2021
Job Order No	: RE/2021/00691
Date of Receipt	:26/06/2021
Analysis Start date	:28/06/2021
Analysis Completed date	: 28/06/2021
Disting Komentalia / Fut	252 22 4)

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2020/00691		6:01 AM to 10:00 PM	43.8	63.5	52.7
	Near Yermuras Village -	10:01 PM to 6:00 AM	37.8	50.2	43.6

**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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear

INFERENCE	As per CPCB Standards, Report Status: - The measured values for the above locations are within the standards.
	END OF THE REPORT
0	
X	
21/121	( printerior
28101	Sold 29/06/21 Authorized Signatory
Verified by	Authorized Signatory

Robust innovative solution for mankind

# **ROBUST MATERIALS TECHNOLOGY PVT. LTD.**

(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00692
•	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00692
Karnataka 560 001.	Date of Receipt	:26/06/2021
Kamataka 500 001.	Analysis Start date	:28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	Leq dB(A)
		6:01 AM to 10:00 PM	42.7	66.2	53.2
E/2021/00692	Near Raichur Village	10:01 PM to 6:00 AM	38.0	51.1	: 44.1

**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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear

INFERENCE	As per CPCB Standards, Report Status: - The mea	sured values for the above locations are within the standards.
10		
	E	ND OF THE REPORT
1		
Q:		
J121	3	A Kash(D)
29 61		Authorized Signatory
Verified by		Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00693
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00693
Karnataka 560 001.	Date of Receipt	:26/06/2021
Kamataka 500 001.	Analysis Start date	:28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
25/2021/20222		6:01 AM to 10:00 PM	41.3	64.6	51.7
RE/2021/00693	Near Shakawadi Village	10:01 PM to 6:00 AM	35.9	49.2	42.0

**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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.l
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear

INFERENCE	As per CPCB Standards,
INFERENCE	Report Status: - The measured values for the above locations are within the standards.
	END OF THE REPORT
Verified by	Authorized Signatory
Varified by	Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT



## M/s. Karnataka Industrial Areas Development Board (KIADB).

No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.

Report No.	: RE/2021/00694
Report date	: 29/06/2021
Ref.	: Test Request Form
Date of Sampling	: 23/06/2021 to 24/06/2021
Job Order No	: RE/2021/00694
Date of Receipt ·	:26/06/2021
Analysis Start date	:28/06/2021
Analysis Completed date	: 28/06/2021
	Report date Ref. Date of Sampling Job Order No Date of Receipt Analysis Start date

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00694	Near Manslapur	6:01 AM to 10:00 PM	40.5	64.7	51.2
	Village	10:01 PM to 6:00 AM	36.7	50.2	42.9

**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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear

INFERENCE	As per CPCB Standards, Report Status: - The measured values for the above locations are within the standard
	END OF THE REPORT
2	
· A	
Verified by	21 Sold B 29 06/21 Authorized Signatory
	Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT



## M/s. Karnataka Industrial Areas Development Board (KIADB).

No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.

-	Report No.	: RE/2021/00695
	Réport date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 23/06/2021 to 24/06/2021
	Job Order No	: RE/2021/00695
	Date of Receipt	:26/06/2021
	Analysis Start date	:28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00695 Near Chikkasugur Village		6:01 AM to 10:00 PM	41.3	. 66.1	52.2
	10:01 PM to 6:00 AM	37.2	51.3	43.7	

**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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear.

INFERENCE	As per CPCB Standards, Report Status: - The measured values for the above locations are within the standards	
Q	END OF THE REPO	DRT
410		Sal 1 29/06/2/ Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00696
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 23/06/2021 to 24/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00696
Karnataka 560 001.	Date of Receipt	:26/06/2021
Kamataka 500 001.	Analysis Start date	:28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24 hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00696 Ne		6:01 AM to 10:00 PM	40.8	67.1	52.3
	Near Katlukur Village	10:01 PM to 6:00 AM	36.8	51.4	43.5

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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear.

INFERENCE	As per CPCB Standards,		
INFERENCE	Report Status: - The measured values for the above locations are within the standards.		
÷.			
	END OF THE REPORT		
1000			
$\bigcirc$			
. 5		÷	
46121		Signatory	
790 ×1		18 0 - 29/00/21	
Verified by		Authorized Signatory	



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



#### : RE/2021/00697 Report No. M/s. Karnataka Industrial Areas Development : 29/06/2021 Report date Board (KIADB). : Test Request Form Ref. No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, : 23/06/2021 to 24/06/2021 Date of Sampling : RE/2021/00697 Job Order No Race Course Road, Bengaluru, :26/06/2021 Date of Receipt Karnataka 560 001. Analysis Start date :28/06/2021 Analysis Completed date : 28/06/2021

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: Noise Monitoring for 24 hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00697		6:01 AM to 10:00 PM	· 41.0	66.2	. 52.1
	Near Potgal Village	10:01 PM to 6:00 AM	36.6	51.1	43.2

**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)

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leq: It is energy mean of the noise level over a specified period.
- \*-dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A "decibel" is a unit in which noise is measured.
- "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear.

INFERENCE	As per CPCB Standards, Report Status: - The measured values for the above locations are within the standards.
3	
0	END OF THE REPORT
Q.	
0.121	*
29/6/	S-81 Jalach
Verified by	Authorized Signatory



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00698
(KIADB).	Report date	: 28/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00698
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka, (Ext-2	53.32 A)

Sample Particulars: One sample of Borewell Water - Near Raichur Growth Centre- Project site.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.25	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.8	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	221.7	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	475.5	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	80.06	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	66.9	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	695.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	75.3	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO <sub>3</sub> , mg/L	55.9	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	0.65	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.2	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff. 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	15	IS 3025 (Part – 49): 1994 Reaff. 2019

ajSal Verified by

S-015 28/06/2/ Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

	<sup>r</sup> s. Karnataka Indust ADB).	rial Areas	Development	Board	Report Report	date	: RE/2021/00698 : 28/06/2021
3 <b>7</b>	49, 4th & 5th Floor, Eas	t Wing Kha	nija Phavan		Refere		: Test Request Form
Doc	German David D	t wing, kilai	iija Briavan,		Sample	e receipt date	: 23/06/2021
	e Course Road, Bengalu	ru,		Job Or	der No	: RE/2021/00698	
Karnataka 560 001.						f Sampling	: 23/06/2021
					Analys	is start date	: 24/06/2021
-			Analys	is completion da	ate: 28/06/2021		
Sample Qty: 2 Ltrs						ng Protocol	: E/WP/65
Nan	ne of the Industrial Area: Rai	chur Growth C	entre Housing Layou	ut, Raichur Di	strict, Kar	nataka. (Ext-25	3.32 A).
Sam	ple Particulars: One sample	of Borewell W	ater – Near Raichur	Growth Cent	tre- Proje	ct site.	
SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012		Protocol	
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation		APHA 23 <sup>rd</sup> Edition	
18	Dissolved oxygen, mg/L	1.98	-	-		APHA 23 <sup>rd</sup> Edition	
lote	e: BDL for Cr: 0.05, Fe: 0.05, P	b:0.01. Zn:0.0	5. SO4: 5.0. NO3:5.0	E-0 1			IA 25 LUILION
lem	arks: The given water sampl	e complies to	S: 10500-2012 speci	fication for a	hove test	od parameters	
			END OF TH				
	1						
	Rais						
	Jouest w Rais						RV sele(b)
	Lowestow Rais Revestor 28/1/21 Verified by					Ş	5 8 <sup>13</sup> 28/06/21 thorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00699
KIADB).	Report date	: 28/06/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 23/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00699
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka, (Ext-2	53 32 A)

Sample Particulars: One sample of Borewell Water - Near Yermuras Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part - 5): 1983 Reaff.2018
3	pH Value	6.82	6.5 - 8.5	No relaxation	IS 3025 (Part - 11): 1983 Reaff.2017
4	Turbidity, NTU	0.6	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	261.2	250	1000	IS 3025 (Part – 32): 1984 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	577.8	200	600	IS 3025 (Part - 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	106.7	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	75.5	30	100	IS 3025 (Part - 46): 1991 Reaff.2019
9	Total dissolved Solids, mg/L	961.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	116.5	200	400	IS 3025 (Part - 24): 1986 Reaff.2019
11	Nitrate as NO3, mg/L	92.8	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	0.68	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.18	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	
15	Copper as Cu, mg/L	BDL	0.05	1.5	IS 3025 (Part – 47) : 1994 Reaff 2019 APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	1.5	IS 3025 (Part – 49) : 1994 Reaff 2019

verified by

5-8528/06/21 Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

	's. Karnataka Industi ADB).	rial Areas	Development	Board	Report N Report c		: RE/2021/00699 : 28/06/2021
S	and a second				Reference		: Test Request Form
	49, 4th & 5th Floor, East		nija Bhavan,		Sample	eceipt date	: 23/06/2021
	e Course Road, Bengalu	ru,			Job Orde	er No	: RE/2021/00699
Karnataka 560 001.						Sampling	: 23/06/2021
					Analysis	start date	: 24/06/2021
			Analysis	completion d	late: 28/06/2021		
	ple Qty: 2 Ltrs	Sampling	g Protocol	: E/WP/65			
Nam	ne of the Industrial Area: Rai	chur Growth C	entre Housing Layou	it, Raichur Di	strict, Karna	ataka. (Ext-25	3.32 A).
Sam	ple Particulars: One sample	of Borewell W	ater – Near Yermur	as Village.			
SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maxim Permissib IS 10500	e Limit		Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation		APHA 23 <sup>rd</sup> Edition	
18	Dissolved oxygen, mg/L	2.5	-	-			HA 23 <sup>rd</sup> Edition
lote	: BDL for Cr: 0.05, Fe: 0.05, P	b:0.01, Zn:0.0	5, SO4: 5.0, NO3:5.0.	F:0.1.		7.1	The Eardon
lema	arks: The given water sample	e complies to	S: 10500-2012 speci	fication for a	bove tester	narameters	
			END OF TH	E REPORT			
	Laughter 28/121 Verified by						5-3B 28/06/2) thorized by
-							

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**



e : 28/06/2021 : Test Request Form
eipt date : 23/06/2021
No : RE/2021/00700
npling : 23/06/2021
art date : 24/06/2021
mpletion date: 28/06/2021
rotocol : E/WP/65
-

Sample Particulars: One sample of Borewell Water - Near Raichur Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.77	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.9	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	251.3	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	608.9	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	120.9	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	74.4	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	1163.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	257.9	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO <sub>3</sub> , mg/L	21.7	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	1.37	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.11	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47) : 1994 Reaff 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	1.5	IS 3025 (Part – 49) : 1994 Reaff 2019

5-8028/06/21 Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

111/	s. Karnataka Industr	Board	Report No.		: RE/2021/00700		
	ADB).		A 1.000		Report date		: 28/06/2021
÷			Reference		: Test Request Form		
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,					Sample recei	pt date	: 23/06/2021
					Job Order No	)	: RE/2021/00700
Karnataka 560 001.				Date of Samp	oling	: 23/06/2021	
					Analysis star	t date	: 24/06/2021
					Analysis completion date: 28/06/2021		te: 28/06/2021
	ple Qty: 2 Ltrs				Sampling Pro	Sampling Protocol : E/WP/65	
Nan	e of the Industrial Area: Raid	chur Growth C	entre Housing Lavou	t Raichur D	istrict Karnatak	. /Eut 255	22.41
-	1		entre nousing Layou	n, naichui D	istrict, Karnalaka	a. (EXT-253	0.32 A).
Sam	ple Particulars: One sample of	of Borewell W	ater – Near Raichur	Village.		a. (EXT-253	5.32 A).
Sam	ple Particulars: One sample of Tests	Results	ater – Near Raichur Maximum Desirable Limit IS 10500: 2012	Village. Maxin Permissib IS 10500	num Ie Limit	a. (EXT-253	Protocol
Sam	ple Particulars: One sample of	of Borewell W	ater – Near Raichur Maximum Desirable Limit	Village. Maxin Permissib	num Ile Limit I: 2012		Protocol
Sam SI. No.	ple Particulars: One sample o Tests	Results	ater – Near Raichur Maximum Desirable Limit IS 10500: 2012	Village. Maxin Permissib IS 10500	num Ile Limit I: 2012	APH	Protocol
<b>Sam</b> <b>SI.</b> <b>No.</b> 17 18	Tests Chromium as Cr, mg/L Dissolved oxygen, mg/L	Results BDL 2.2	Ater – Near Raichur Maximum Desirable Limit IS 10500: 2012 0.05	Village. Maxin Permissib IS 10500 No relay	num Ile Limit I: 2012	APH	Protocol
Sam SI. No. 17 18 Note	Tests Chromium as Cr, mg/L	Results BDL 2.2 b:0.01, Zn:0.05	ater – Near Raichur Maximum Desirable Limit IS 10500: 2012 0.05 - 5, SO4: 5.0, NO3:5.0, I	Village. Maxin Permissib IS 10500 No relay - F:0.1.	num Ile Limit I: 2012 Kation	APH APH	Protocol

Verified by

5-8428/06/21 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00701
KIADB).	Report date	: 28/06/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 23/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00701
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka, (Ext-2	53 32 A)

Sample Particulars: One sample of Borewell Water - Near Shakawadi Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.4	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	1.7	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	34.5	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	262.2	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	64.05	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	24.82	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	373.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	120.3	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO <sub>3</sub> , mg/L	17.5	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	1.12	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.13	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	15	IS 3025 (Part – 49): 1994 Reaff 2019

5-0128/06/21 Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00701	
(KIADB).	Report date	: 28/06/2021	
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form	
	Sample receipt date	: 23/06/2021	
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00701	
Karnataka 560 001.	Date of Sampling	: 23/06/2021	
	Analysis start date	: 24/06/2021	
	Analysis completion da	ate: 28/06/2021	
Sample Qty: 2 Ltrs	Sampling Protocol District, Karnataka. (Ext-253	: E/WP/65	

Sample Particulars: One sample of Borewell Water – Near Shakawadi Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 <sup>rd</sup> Edition
18	Dissolved oxygen, mg/L	2.3	-	-	APHA 23 <sup>rd</sup> Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, P	b:0.01, Zn:0.0	5, SO4: 5.0, NO3:5.0,	F:0.1.	
Rem	arks: The given water sample	e complies to	S: 10500-2012 speci	fication for above tested r	parameters
			END OF THE	REPORT	and meters.
	Verified by				5-8328106/21

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00702
(KIADB).	Report date	: 28/06/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 23/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00702
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka, (Ext-2	53.32 A).

Sample Particulars: One sample of Borewell Water - Near Manslapur Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.15	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.9	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	59.13	250	1000	IS 3025 (Part - 32): 1984 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	240.0	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	51.59	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	26.97	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	355.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	36.8	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO <sub>3</sub> , mg/L	32.8	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	0.93	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.14	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	1.5	IS 3025 (Part – 49): 1994 Reaff 2019

Verified by

5- 31 28/06/24 Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00702
(KIADB).	Report date	: 28/06/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 23/06/2021
Race Course Road, Bengaluru, Karnataka 560 001.	Job Order No	: RE/2021/00702
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	· E/M/D/65
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur I	District, Karnataka (Ext-25)	3 32 4)
Sample Particulars: One sample of Borewell Water - Near Manslapur Village.	interior, Ramataka. (Ext 25.	0.52 AJ.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 <sup>rd</sup> Edition
18	Dissolved oxygen, mg/L	1.9	-	-	APHA 23 <sup>rd</sup> Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, Pb	0:0.01, Zn:0.0	5, SO4: 5.0, NO3:5.0,	F:0.1.	Latit Lo Earton
Rem	arks: The given water sample	complies to	IS: 10500-2012 speci	fication for above tested p	arameters
	Verified by				So 83 28/06/21 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00703
(KIADB).	Report date	: 28/06/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 23/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00703
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
ample Qty: 2 Ltrs Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur I	Sampling Protocol	: E/WP/65

Sample Particulars: One sample of Borewell Water - Near Chikkasugur Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part - 5): 1983 Reaff.2018
3	pH Value	7.85	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	BDL	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	477.9	250	1000	IS 3025 (Part – 32): 1984 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	568.8	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	160.1	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	41.0	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	1329.0	500	2000	IS 3025 (Part – 16): 1994 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	47.9	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO <sub>3</sub> , mg/L	15.3	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	1.19	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.13	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	1.5	IS 3025 (Part – 49): 1994 Reaff 2019

Verified by

5-81328/06/21 Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00703
(KIADB).	Report date	: 28/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00703
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur I	District, Karnataka (Ext-25)	3 32 4)
Sample Particulars: One sample of Borewell Water - Near Chikkasugur Village	Land Contraction (Ext 25)	

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 <sup>rd</sup> Edition
18	Dissolved oxygen, mg/L	2.2	-	-	APHA 23 <sup>rd</sup> Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, P	b: 0.01, Zn: 0.0	05, SO4: 5.0, NO3:5.0	. E: 0.1	ATTAZO Edition
Rem	arks: The given water sampl	e complies to	IS: 10500-2012 speci	fication for above tested n	aramotors

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**



		: RE/2021/00704
M/s. Karnataka Industrial Areas Development Board (KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 28/06/2021
	Reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00704
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion da	ate: 28/06/2021
Sample Qty: 2 Ltrs Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichu	Sampling Protocol	: E/WP/65

Sample Particulars: One sample of Borewell Water – Near Katlukur Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.31	6.5 - 8.5	No relaxation	IS 3025 (Part - 11): 1983 Reaff.2017
4	Turbidity, NTU	0.52	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	280.3	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	324.8	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	115.6	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	65.2	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	390.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	90.3	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO <sub>3</sub> , mg/L	29.0	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	1.12	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.15	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	15	IS 3025 (Part – 49): 1994 Reaff 2019

Verified by

5-81328/06/21 Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

M/s. Karnataka Industrial Areas	Development Boa	rd Report	No.	: RE/2021/00704
(KIADB).	Report	date	: 28/06/2021	
	Referer	nce	: Test Request Form	
No.49, 4th & 5th Floor, East Wing, Kh	Sample	receipt date	:23/06/2021	
Race Course Road, Bengaluru,	Job Ord	ler No	: RE/2021/00704	
Karnataka 560 001.	Date of	Sampling	:23/06/2021	
		Analysis	s start date	:24/06/2021
-	Analysis	Analysis completion date: 28/06/2021		
Sample Qty: 2 Ltrs	Samplin	g Protocol	: E/WP/65	
Name of the Industrial Area: Raichur Growth	Centre Housing Layout, Ra	ichur District, Karr	nataka. (Ext-253	3.32 A).
Sample Particulars: One sample of Borewell	Water – Near Katlukur Villa	ge.	1	
ci i	Maximum	Maximum		

Chromium as Cr, mg/L Dissolved oxygen, mg/L	BDL	0.05	No relevation	
	2.6		No relaxation	APHA 23 <sup>rd</sup> Edition
	2.6	-	-	APHA 23 <sup>rd</sup> Edition
BDL for Cr: 0.05, Fe: 0.05, F	b:0.01, Zn:0.0	5, SO4: 5.0, NO3:5.0,	F:0.1.	
ks: The given water sampl	e complies to I	S: 10500-2012 speci	fication for above tested pa	irameters.
			E REPORT	
auchin Pais				S-8328/06/2/ Authorized by
	auchen Pais	Loweshow Pais 28/6/21	autoshui Pais 28 le le 1	Verified by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00705
(KIADB).	Report date	: 28/06/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00705
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date: 28/06/2021	
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka, (Ext-2	53.32 A).

Sample Particulars: One sample of Borewell Water - Near Potgal Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.42	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.92	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	255.5	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO <sub>3</sub> , mg/L	605.2	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	121.3	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	15.6	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	1162.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO <sub>4</sub> , mg/L	255.8	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO <sub>3</sub> , mg/L	22.7	45.0	No relaxation	APHA 23 <sup>rd</sup> Edition
12	Fluoride as F, mg/L	1.0	1.0	1.5	APHA 23 <sup>rd</sup> Edition
13	Iron as Fe, mg/L	0.15	0.3	No relaxation	APHA 23 <sup>rd</sup> Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 <sup>rd</sup> Edition
16	Zinc as Zn, mg/L	BDL	5	15	IS 3025 (Part – 49): 1994 Reaff 2019

Verified by

S=0B 28 06 21 Authorized by

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

## **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00705	
<b>(KIADB).</b> No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Report date	: 28/06/2021	
	Reference	: Test Request Form	
	Sample receipt date	: 23/06/2021	
	Job Order No	: RE/2021/00705	
Karnataka 560 001.	Date of Sampling	: 23/06/2021	
	Analysis start date	: 24/06/2021	
	Analysis completion date: 28/06/2021		
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65	
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur D	District Karnataka (Ext-25	2 32 ()	

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 <sup>rd</sup> Edition
18	Dissolved oxygen, mg/L	1.0	-	-	APHA 23 <sup>rd</sup> Edition
Note	e: BDL for Cr: 0.05, Fe: 0.05, P	b:0.01, Zn:0.0	5, SO4: 5.0, NO3:5.0,	F:0.1.	
	arks: The given water sample				arameters
	Loughter Bais Verified by				S-RY328/06/21
	Verified by				1000000
					SBY 28/06/21 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board (KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report No.	: RE/2021/00706
	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	:RE/2021/00706
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample- Near Raichur Growth Centre- Project site.

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.		× *
1	pH (20% Suspension)	7.82	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	115.8	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	391.8	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	20.3	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.29	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	732.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	158.4	Practical Manual for Hands on training GKVK Bengaluru

5-8528/06/21 Authorized Signatory

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00706
	Report date	: 28/06/2021
(KIADB).		: Test Request Form : 23/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,		
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00706
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample- Near Raichur Growth Centre- Project site.

SI. No.	Ťest	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	3.6	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.010	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	30.1	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	220.3	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	2.62	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	6.7	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	37.3	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	11.4	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.3	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

-----END OF THE REPORT-----

Verified by

S- 8 B 28 06 b

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### TEST REPORT



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00707
(KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00707
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample - Near Yermuras Village.

SI. No.	Test	Result	Protocol
Descr	ription: Brown Colored Soil.		
1	pH (20% Suspension)	8.2	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	158.3	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	380.2	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	2.2	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.45	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	824.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	448.8	Practical Manual for Hands on training GKVK Bengaluru

Verified by

5-0028/06/21

Authorized Signatory

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00707
	Report date	: 28/06/2021
(KIADB).		: Test Request Form : 23/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,		
Race Course Road, Bengaluru,	Job Order No	:RE/2021/00707
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample - Near Yermuras Village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	4.1	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.01	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	31.4	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	156.1	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	7.06	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	6.2	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	39.5	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	10.4	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.33	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

-----END OF THE REPORT-----

5-8B2866/21 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

#### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00708
(KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00708
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
3	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample - Near Raichur Village.

SI. No.	Test	Result	Protocol
Desci	ription: Reddish brown Colored Soil.	S.	
1	pH (20% Suspension)	8.3	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	103.2	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	318.5	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	4.2	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.39	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	936.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	435.6	Practical Manual for Hands on training GKVK Bengaluru

Verified by

S-8B28/06/2) Authorized Signatory

Page 1 of 2

Note:1. The results listed refer only to the tested samples and applicable parameters. 2. Test certificate should not be reproduced except in full, without written approval of the laboratory. 3. The submitted samples are drawn by the laboratory unless otherwise specified. 4. Endorsement of product is neither inferred nor implied. 5. Samples will be destroyed after 15days from the date of issue of test report unless otherwise specified. 6. This report cannot be used as evidence in the court of law & should not be used in any advertising media without our permission in writing. 7. Total liability of our lab is limited to the invoice amount and any disputes arising out of this report are subject to Bangalore jurisdiction only. 8. Laboratory is not responsible for the authenticity of photocopied test reports.

RMT-QP26-TRT/R3/10.03.2021



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230. Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00708
(KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00708
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample - Near Raichur Village.

SI. No.	Test	Result	Protocol
8	Colour	Reddish brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	3.9	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.001	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	35.7	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	174.6	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	12.58	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	0.54	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	42.3	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	12.65	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.36	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

-----END OF THE REPORT-----

Verified

5-8128/06/21 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00709
	Report date	: 28/06/2021
(KIADB).	reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00709
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253	.32 A).

Sample Particulars: One Soil Sample - Near Shakawadi Village.

SI. No.	Test	Result	Protocol	
Desci	ription: Reddish brown Colored Soil.			
1	pH (20% Suspension)	8.15	Practical Manual for Hands on training GKVK Bengaluru	
2	Conductivity, µmhos/cm	245.6	Practical Manual for Hands on training GKVK Bengaluru	
3	Chloride as Cl, mg/Kg	348.8	Practical Manual for Hands on training GKVK Bengaluru	
4	Moisture, %	4.1	Practical Manual for Hands on training GKVK Bengaluru	
5	Organic Matter, %	0.35	Practical Manual for Hands on training GKVK Bengaluru	
6	Calcium as Ca, mg/Kg	656.3	Practical Manual for Hands on training GKVK Bengaluru	
7	Magnesium Mg, mg/Kg	331.2	Practical Manual for Hands on training GKVK Bengaluru	

Verified by

5-8328/06/21 Authorized Signatory

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-JSO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

#### **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00709
	Report date	: 28/06/2021
(KIADB).	Sample receipt date : Job Order No :	: Test Request Form : 23/06/2021 : RE/2021/00709 : 23/06/2021 : 24/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,		
Race Course Road, Bengaluru,		
Karnataka 560 001.		
	Analysis start date	
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	. Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253	.32 A).
Sample Particulars: One Soil Sample - Near Shakawadi Village.		

SI. No.	Test	Result	Protocol
8	Colour	Reddish brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	2.6	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.0012	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	28.9	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	139.3	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	22.74	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	5.6	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	44.4	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	8.4	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.36	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

---END OF THE REPORT-----

Verified b

S-8B28/06/21 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board (KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report No.	:RE/2021/00710
	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	:RE/2021/00710
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample – Near Manslapur Village.

SI. No.	Test	Result	Protocol	
Desci	ription: Brown Colored Soil.			
1	pH (20% Suspension)	8.4	Practical Manual for Hands on training GKVK Bengaluru	
2	Conductivity, µmhos/cm	184.2	Practical Manual for Hands on training GKVK Bengaluru	
3	Chloride as Cl, mg/Kg	356.1	Practical Manual for Hands on training GKVK Bengaluru	
4	Moisture, %	3.4	Practical Manual for Hands on training GKVK Bengaluru	
5	Organic Matter, %	0.29	Practical Manual for Hands on training GKVK Bengaluru	
6	Calcium as Ca, mg/Kg	704.2	Practical Manual for Hands on training GKVK Bengaluru	
7	Magnesium Mg, mg/Kg	367.2	Practical Manual for Hands on training GKVK Bengaluru	

5-81528/06/2)

Authorized Signatory

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

#### **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00710
<b>(KIADB).</b> No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date :	: 23/06/2021
	Job Order No	:RE/2021/00710
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol : E/WP/77	
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253	.32 A).
Seconda Bestigulare, One Sail Seconda - Near Mandanur Villago		

Comple Particulars: One	Sail Comple Near	Mandanur Villago
Sample Particulars: One	Soli Sample - Near	wansiapur village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	2.8	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.013	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	32.1	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	175.2	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	12.9	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	7.5	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	41.1	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	9.9	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.29	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

-----END OF THE REPORT-----

Verified by

5-0122/06/21 Authorized by

Page 2 of 2

Note:1. The results listed refer only to the tested samples and applicable parameters. 2. Test certificate should not be reproduced except in full, without written approval of the laboratory. 3. The submitted samples are drawn by the laboratory unless otherwise specified. 4. Endorsement of product is neither inferred nor implied. 5. Samples will be destroyed after 15days from the date of issue of test report unless otherwise specified. 6. This report cannot be used as evidence in the court of law & should not be used in any advertising media without our permission in writing. 7. Total liability of our lab is limited to the invoice amount and any disputes arising out of this report are subject to Bangalore jurisdiction only. 8. Laboratory is not responsible for the authenticity of photocopied test reports.

RMT-QP26-TRT/Ry/10.03.2021



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

#### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board (KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report No.	: RE/2021/00711
	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00711
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample – Near Chikkasugur Village.

SI. No.	Test	Result	Protocol	
Desci	ription: Reddish brown Colored Soil.			
1	pH (20% Suspension) 8.0 Practical Manual for Hands on training GKVK Beng		Practical Manual for Hands on training GKVK Bengaluru	
2	Conductivity, µmhos/cm	134.5	Practical Manual for Hands on training GKVK Bengalur	
3	Chloride as Cl, mg/Kg	385.65	Practical Manual for Hands on training GKVK Bengalur	
4	Moisture, %	3.7	Practical Manual for Hands on training GKVK Bengaluru	
5	Organic Matter, %	0.45	Practical Manual for Hands on training GKVK Bengaluru	
6	Calcium as Ca, mg/Kg	782.0	Practical Manual for Hands on training GKVK Bengaluru	
7	Magnesium Mg, mg/Kg	400.8	Practical Manual for Hands on training GKVK Bengaluru	

Verified b

S-8 15 28 | 06 )2) Authorized Signatory

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

#### **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00711
(KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
Race Course Road, Bengaluru,	Job Order No	:RE/2021/00711
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253	.32 A).

Sample Particulars: One Soil Sample - Near Chikkasugur Village.

SI. No.	Test	Result	Protocol
8	Colour	Reddish brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	3.2	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.012	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	32.8	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	182.9	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	7.08	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	6.9	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	40.3	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	12.2	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.49	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

-----END OF THE REPORT-----END OF THE REPORT-----

Verified h

5-8128/08/21 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	:RE/2021/00712
<b>(KIADB).</b> No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	:RE/2021/00712
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Lavout, Raichur	District Karnataka (Ext-253 3	2 4)

Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur District, Karnataka. (Ext-253.32 A). Sample Particulars: One Soil Sample – Near Katlukur Village.

SI. No.	Test	Result	Protocol
Descr	ription: Brown Colored Soil.		
1	pH (20% Suspension)	7.93	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	173.6	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	312.3	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	3.9	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.22	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	724.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	348.0	Practical Manual for Hands on training GKVK Bengaluru

5-8128/06/21

Authorized Signatory

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

#### **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00712
( <b>KIADB).</b> No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	: RE/2021/00712
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample - Near Katlukur Village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	3.3	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.0017	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	29.5	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	138.1	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	5.66	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	4.5	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	40.2	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	11.3	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.47	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

-----END OF THE REPORT-----

/erified h

50328/06/24 Authorized by

Page 2 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230. Email : info@robustmaterials.com Website : www.robustmaterials.com

### **TEST REPORT**



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00713
<b>KIADB).</b> No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	:RE/2021/00713
Karnataka 560 001.	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur	District, Karnataka. (Ext-253.	32 A).

Sample Particulars: One Soil Sample - Near Potgal Village.

SI. No.	Test	Result	Protocol
Desci	ription: Reddish brown Colored Soil.		
1	pH (20% Suspension)	7.81	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	177.7	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	351.3	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	3.33	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.36	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	762.3	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	384.5	Practical Manual for Hands on training GKVK Bengaluru

C 8B28/06/21

Authorized Signatory

Page 1 of 2



(Recognised by MoEF&CC, DSIR-Government of India & Notified by FSSAI) (Approved by Drug Control Department-GoK ; Certified by OHSAS-ISO 45001:2018)

No. 94, 2nd Floor, Thirumala Complex, Nagarabhavi Main Road, NGEF Layout, Nagarabhavi, Bengaluru - 560 072. Tel : 080 2318 6230 Email : info@robustmaterials.com Website : www.robustmaterials.com

#### **TEST REPORT**

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00713
<b>KIADB).</b> No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 28/06/2021
	reference	: Test Request Form
	Sample receipt date	: 23/06/2021
	Job Order No	:RE/2021/00713
	Date of Sampling	: 23/06/2021
	Analysis start date	: 24/06/2021
	Analysis completion date	: 28/06/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Raichur Growth Centre Housing Layout, Raichur I	District, Karnataka. (Ext-253.32	2 A).

Sample Particulars: One Soil Sample - Near Potgal Village.

SI. No.	Test	Result	Protocol
8	Colour	Reddish brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	3.2	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.0011	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	27.3	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	175.6	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	9.9	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	0.52	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	37.8	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	10.2	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	0.43	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru

-----END OF THE REPORT------

5-83 28/06/21 Authorized by

Page 2 of 2