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/ 5693/2021-22

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 Establishment of Vemagal Industrial Area, KIADB at Villages of Kuragal, Harjenahalli, Perjenahalli and Singihalli of Vemagal Taluk, Kolar District by Karnataka to an extent of 666.41 Acres.
- **Ref.:** 1. Environmental Clearance reference no.: No. SEIAA 29 IND 2012 dated 20th September, 2014.
 - 4. 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 Establishment of Vemagal Industrial Area, KAIDB at Villages of Kuragal, Harjenahalli, Perjenahalli and Singihalli of Vemagal Taluk, Kolar District by Karnataka to an extent of 666.41 Acres, after finalizing the ToR 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 20th September, 2014.

Hence, the detailed point wise compliance report to all the conditions stipulated in the Environmental Clearance issued to Vemagal Industrial Area 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-1

KIADB, Bengaluru

Half Yearly Environmental Compliance Report for all the Conditions Stipulated in the Environmental Clearance issued with respect to Development of Vemagal Industrial Area at Villages of Kuragal, Harjenahalli, Perjenahalli and Shingihalli of Vemagal Taluk, Kolar District by 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.	3-15
4.0	Environmental Monitoring Details:	16-19
4.1	Ambient Air Monitoring reports.	16
4.2	Ambient Noise Monitoring reports.	17
4.3	Surface/ Ground Water Analysis reports.	18
4.4	Soil Analysis reports.	19

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:** Development of Vemagal Industrial Area at Villages of Kuragal, Harjenahalli, Perjenahalli and Shingihalli of Vemagal Taluk, Kolar District by Karnataka.
- 2) Environmental Clearance reference no.: No. SEIAA 29 IND 2012 dated 20th September, 2014.
- **3)** Total Plot Area: 269.69 Ha (666.41 Acres).
- 4) Category of Industries: Orange and Green category.
- 5) Total Water requirement for the Industrial area: 350 KLD for the domestic purpose is proposed to be met from the extraction of ground water and the estimated water demand of around 10 MLD for the industrial use is proposed to be met from the BWS&SB tertiary treated water.
- 6) Total Power Requirement: 2,850 KVA will be sourced from Karnataka Power Transmission Corporation Limited (KPTCL).
- 7) Schedule & Category: 7 (C) & B category.
- 8) Address of the Correspondence:

Chief Development Officer & Chief Engineer, Karnataka Industrial Areas Development Board (KIADB), #49, 4th & 5th floors, Khanija Bhavan, Race Course road, Bengaluru- 560 001.

2.0. LOCATION MAP:

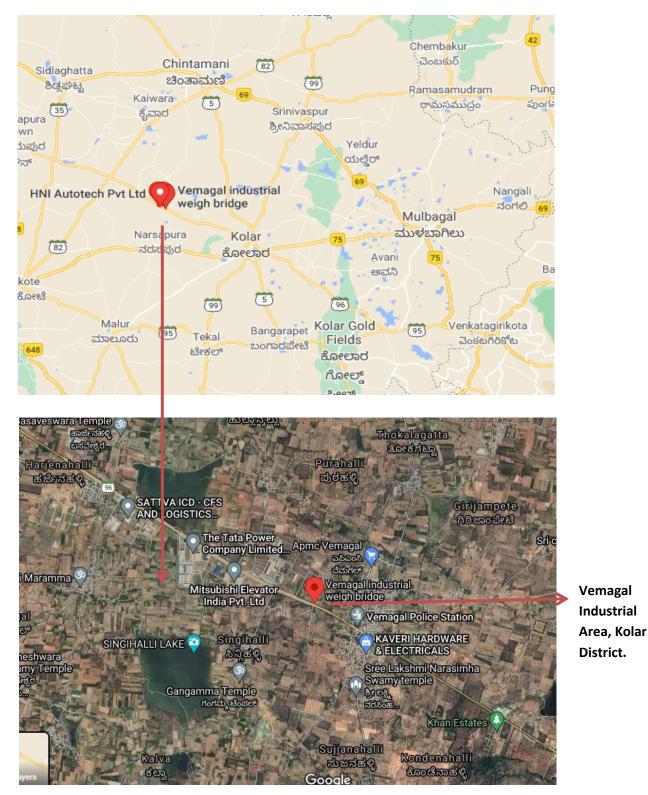


Fig.1: Map showing Vemagal Industrial Area, Kolar District.

3.0. Half Yearly Environmental Compliance Report for all the Conditions Stipulated in the Environmental Clearance issued with respect to Development of Vemagal Industrial Area at Villages of Kuragal, Harjenahalli, Perjenahalli and Singihalli of Vemagal Taluk, Kolar District by Karnataka. (Ext-666.41 Acres).

Sl. No.	CONDITIONS STIPULATED IN THE EC	COMPLIANCE STATUS
Α	SPECIFIC CONDITIONS:	
I	Construction Phase:	
1	"Consent for Establishment" shall be obtained from Karnataka State Pollution Control Board under Air and Water Act and a copy shall be submitted to the SEIAA, Karnataka before start of any construction at the site.	Noted. Consent for Establishment from Karnataka State Pollution Control Board under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, have been obtained on 30 th January 2018. Copy has been submitted to SEIAA, Karnataka.
2	Set up an Environment Management cell with appropriate lab facility shall be created as the project starts. It shall monitor all necessary parameters and activities during construction and operational phases from day one. The cell also ensures that the cell manages / maintains all the environmental aspects such as sewage treatment, solid waste disposal, maintenance of green belt areas, etc.	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.
3	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 at the site during the construction phase of the industrial area.
4	A First Aid room should be provided in each of the three proposal project areas both during construction and operation of the Project.	Noted.
5	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. 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.

6	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, so that it is not required to provide temporary housing and Temporary Labour camps will be provided with basic sanitary facilities and water supply.
7	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. Required infrastructure facility and fuel will be provided to all the labourers for cooking during construction phase.
8	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.
9	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 informed to adopt these methods wherever possible for water conservation.
10	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 during the development stage will be used for landscaping, levelling and plantation purposes with in the project site.
11	Disposal of muck construction debris during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Noted. 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.
12	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. All necessary precautions will be taken to ensure that there is no contamination of soil and ground water.

13	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. 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.
14	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. The fuel used in individual 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.
15	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.	Complied. All the required Necessary precautions will be taken to store diesel in safe and secure manner, so that there are no accidents or harm to the environment. Individual industries in the notified area are also advised to take necessary precautions and to obtain clearances from competent authority for the safe storage of diesel.
16	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.
17	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 will be taken to keep the emission within the stipulated standards.

Karnataka Industrial Areas Development Board (KIADB)

18	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. As far as possible Fly ash will be used as building material during the construction phase. The individual Industrial units will be informed to strictly follow the provisions of Fly ash notification and use the fly ash products for building and construction purposes.
19	Ready mixed concrete must be used in building construction.	Noted.
20	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Noted.
21	Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices and only tertiary treated water shall be used for construction as per G.O. No. FEE 188 ENV 2003 dated 14.08.2003.	Noted.
22	No ground water is to be drawn without permission from the Central/ State Ground Water Authority.	Noted. Necessary permission will be taken by KIADB for digging 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.
23	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.
24	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.
25	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 informed before allotting the plots, so as to comply with the Energy conservation measures as per ECBC, 2006 and its amendments.

26	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 be informed to adopt wherever possible as per ECBC, 2007 and its amendments.
27	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 be informed to adopt wherever possible.
28	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.
29	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.
30	Safety standards as per National Building Code (NBC), 2005 should be followed and ensured.	Noted and will be followed.
31	The project Authorities shall ensure that the National Building Code, 2005 is complied with and adhered to.	Noted. Individual industries will also be advised to follow the same as per instructions in NBC, 2005 and its amendments.
32	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.
33	The authorities should include the condition while issuing plots to the prospective individual industries that they should develop greenbelt of at least 33 % of the plot area.	Noted and greenbelt is developed as per the EC conditions and the condition will be included in the agreement during the allotment of plots for the projects.

34	The industrial units in the industrial area and the associated facilities shall be strictly in accordance with the norms laid down by the Karnataka State Government and KSPCB/CPCB.	Noted. Each industrial unit are advised to comply with the same. All industries shall follow the conditions & norms laid down by the Competent Authority.
35	The project authorities shall strictly adhere to the commitments made in the letter No. IADB/IDTP/EC/ 90/3479/2013-14 dated 04-06-2013 with regard to establishment of STP/CETP, buffer zone, green belt, conditions to be incorporated in the lease document while allotting plots to individual industries, environment safety aspects etc.	Agreed and complied as suggested with regard to establishment of STP/CETP, buffer zone, green belt. Each industrial unit was informed about the conditions with laid down with respect to Environment safety and protection and the conditions are incorporated in the lease document as well during the allotment of plots.
36	KIADB should allot the plots only for orange and green category industries in the proposed industrial area. If red category industry has to come up in the same industrial area, that particular industry requires taking a separate clearance from appropriate authorities	Agreed. No such land is allotted to Red Category industries except Orange and Green category industries. Any modifications with respect to allotment of red category industries in the EC obtained in industrial area will only be done after obtaining necessary approvals from the Competent Authority.
37	There should be fire stations in civic amenity sites provided in the layout taking into account the direction of wind as fire hazard industries are also to be located in safe zones not affecting any other immediate neighbourhood as per wind rose diagram.	Noted.
38	The existing water body, canals, drainages and any other structures shall be retained unaltered with due buffer zone of 15 meter around maintained under tree cover.	Noted. No alterations will be made in case of existing natural drainage patterns, water bodies, rajakaluve etc. and required distance of buffer zone are provided in the required areas.
39	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.

40	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. No alterations to natural drainage pattern will be done during the Project Construction activities.
41	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 is existing before the project.
42	The project Authorities shall undertake activities towards the Corporate Social Commitment Plan made vide letter dated 22nd February 2013 with a total budget not less than Rs.14 Lakhs and shall be executed within a period of 2012- 2017 as committed and report be submitted to the Authority.	Noted. The suggestions/observations and concerns made during the public hearing will be duly considered and all required measures are being taken to improve the socio-economic conditions of the project and surrounding area.
II	II Operation Phase	
1	The Company shall implement all the recommendations made in the Environmental Impact Assessment /EMP report and risk assessment report.	Noted and complied with all the recommendations made in the Environmental Management Plan and applicable mitigation measures are adapted wherever required.

2	The installation of the Common Sewage Treatment Plant (CSTP) shall be got certified by an independent expert and a report in this regard should be submitted to the SEIAA before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled/ reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of treated sewage shall conform to the norms & standards of the Karnataka State Pollution Control Board. Treated sewage should be used for flushing, gardening, etc. as proposed. Necessary measures should be made to mitigate the odour problem from STP.	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.
3	The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	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.
4	Diesel power generating sets proposed as source of back-up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG-sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Karnataka State Pollution Control Board.	Noted. The fuel used in individual DG sets during construction phase will have low sulphur content and it will be ensured that the air and noise emissions will be within the prescribed norms, so that there was no disturbance created due to use of DG sets. The industries are advised to install Pollution Control Equipment's wherever necessary and acoustic enclosures are provided to DG sets to reduce the environmental pollution (Air and Noise) as per the guidelines of KSPCB/ CPCB. Stack height for DG sets are provided as per CPCB/ KSPCB norms.

5	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Noted. Each individual industry will be informed to maintain the noise levels as per the CPCB/KSPCB norms.
6	The project proponent shall ensure that the greenery of the area is maintained. Further, 33% of the project area shall be dedicated for green belt development. The local Forest department shall be associated for this purpose and requisite budget earmarked.	Agreed. It is proposed to develop 15 m green belt all along the boundary of the industrial area. Avenue plantation in the adjoining roads can also be seen in the project site and the individual industries have also been advised to do the same in the allotted plot area. Also individual industrial units are also advised to maintain green belt for 33% of the allotted plot area as applicable.
7	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	Noted and weep holes will be provided as suggested. Individual industries are advised to do the same.
8	Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.	Noted. The project area and the industries proposed to operate within the area will be informed 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.
9	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	Noted. Necessary approvals will be obtained from competent authority and CGWA guidelines will be followed to monitor ground water level and its quality. No permission will be provided by KIADB for new Borewell drilling without the prior approval from Central Ground Water Authority.
10	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 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.

11	A Report on the energy conservation measures confirming to energy conservation norms finalise by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc. and submit to the SEIAA, Karnataka in three month's time.	Noted.
12	Energy conservation measures- like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.	Energy conservation measures will be adopted wherever possible. Necessary safety measures will be taken for the disposal of CFLs and TFLs or any type of waste which can lead to contamination. Solar panels will be used wherever possible. Industries units in the project area will also be advised to do the same.
13	Adequate measures should be taken to prevent odour problem from solid waste processing plant and CSTP.	Noted and will be followed. Necessary steps will be taken to prevent odour problem. Individual industries will also be informed to do the same.
14	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Noted and complied as suggested. Individual industries are also advised to do the same.
15	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October 1994 and January 2000. All transportation of Hazardous Chemicals shall be as per the MVA, 1989. Authorization from the KSPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.	Noted. Necessary approvals from the competent authority will be obtained for the safe disposal of hazardous waste as per the applicable rules and regulations.
16	The project authorities must strictly comply with rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the KSPCB must be obtained for collection/treatment/ storage/disposal of Hazardous wastes.	Noted. Necessary information will be given to individual industries to obtain required authorization by individual industries and they will be advised to strictly follow the rules and regulations made under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 & Solid Waste Management Rules, 2016. Hazardous wastes will be collected in safe and secure manner and will be disposed to authorized disposers/ recyclers /vendors etc. for safe disposal.

17	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 the 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.
18	The individual industries shall take all necessary clearances including Environment clearance in accordance with the law. The project Authority shall incorporate such condition in the lease/ sale deed/ Agreement.	Noted. 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.
19	The project authorities shall bifurcate the industrial plots and residential plots, if any with a thick and tall vegetative barrier green belt.	Noted.
20	The project-Authority shall incorporate a condition in the prospective lease/sale deed/Agreement with individual industries that they also shall abide by the conditions of this Environmental Clearance.	Noted.
В	GENERAL CONIDITIONS:	
1	The Project authorities shall strictly adhere to the stipulations made by Karnataka State Pollution Control Board (KSPCB).	Noted. All stipulations made by the KSPCB shall be strictly followed.
2	No further expansion or modifications of the industrial area shall be carried out without prior approval of the SEIAA/Ministry of Environment and Forests as the case may be.	Noted. Prior approval will be obtained from the competent authority before any modification or expansion of the project.
3	The project proponent shall also comply with all the environmental protection measures and safeguards as per the information provided.	Agreed. All protection measures and steps will be taken for Environmental protection.
	The implementation of the project vis-a-vis environmental action plans shall be monitored by	

5	The project proponent shall inform the public that the project has been accorded environmental clearance by the SEIAA and copies of the clearance letter are available with the KSPCB and may also seen at website of the Authority at http://seiaa.Kar.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of same shall be forwarded to the MoEF Regional office at Bangalore/ KSPCB/ CPCB and the Department of Environment & Ecology, Bangalore.	
6	The Project authorities shall inform the MoEF, Regional Office, Bangalore/ KSPCB/ CPCB and the department of Ecology and Environment, Bangalore, the date of financial closure and final approval from the competent authorities and the date of start of the project.	Noted and will be informed as suggested.
7	The SEIAA, Karnataka may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.	Noted.
8	The SEIAA, Karnataka reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	
9	The above conditions will be enforced, inter-alia under the provisions of the water (Prevention & Control of pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance act, 1991 along their amendments and rules.	Noted.
10	The issue of Environment Clearance doesn't confer any right to the project proponent 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.
11	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.

_		
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	Officials from the Department of Environment and Ecology, Bangalore/ Regional office of MoEF, Bangalore who would be monitoring the implementation of Environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of at the documents submitted to MoEF / SEIAA should be forwarded to the CCF, Regional office of MoEF, Bangalore / Department of Ecology and Environment, Bangalore/ Regional Officer, KSPCB Bangalore.	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.
14	In the case of any change(s) in the scope of the project, the project would require a 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.
15	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.
16	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	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.
17	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.
18	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:

SI. No.	Parameters	Limits (As Per NAAQS) for 24hrs	Minimum Value	Maximum Value	Average Value
1	Particulate Matter PM_{10} , µg/m ³	100	58.3	64.8	60.3
2	Particulate Matter $PM_{2.5}$, $\mu g/m^3$	60	17.4	25.3	20.6
3	Nitrogen Dioxide NO _{2,} µg/m ³	80	14.2	20.1	17.9
4	Sulphur dioxide as SO ₂ , μg/m ³	80	9.1	12.5	10.2

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:

SI. No.	Locations	Noise level in dB(A) Leq		CPCB Standard	
		Day	Night	Lday (Ld)	LNight (Ln)
1	Near Singihalli Village	53.5	43.3	55	45
2	Near Harjenahalli Village	53.1	43.0	55	45
3	Near Perjenahalli Village	52.8	42.8	55	45
4	Near Kurugal Village	53.5	44.5	75	70
5	Near Vemagal town	59.4	48.1	75	70
6	Near Sujjanahalli Village	53.0	43.4	55	45
7	Near Thokalagatta Village	54.1	44.6	55	45
8	Near Hullanakallu Village	52	42.9	55	45

The monitoring results reveal the following ambient noise concentration at different locations:

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	6.77	8.27	7.8
4	Turbidity, NTU	0.2	6.2	1.5
5	Chloride as Cl, mg/L	139.95	609.8	223.0
6	Total hardness as CaCO _{3,} mg/L	147.3	874.8	396.0
7	Calcium as Ca, mg/L	35.02	197.2	78.6
8	Magnesium as Mg, mg/L	14.5	93.9	48.5
9	Total dissolved Solids, mg/L	442	1186	641.9
10	Sulphate as SO ₄ , mg/L	8.1	41.6	29.6
11	Nitrate as NO ₃ , mg/L	0.6	9.2	4.3
12	Fluoride as F, mg/L	0.2	0.3	0.3
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	2.36	4.9	3.28

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)	6.72	8.36	7.5
2	Conductivity, µmhos/cm	38	173	103.4
3	Chloride as Cl, mg/Kg	215.6	490.7	364.7
4	Moisture, %	1.01	27	8.8
5	Organic Matter, %	0.44	1.26	0.7
6	Calcium as Ca, mg/Kg	425.7	1157.5	736.4
7	Magnesium Mg, mg/Kg	25.2	116.4	59.3
8	Colour	Brown	Brown	Brown
9	Sulphur as S, mg/Kg	1.5	15.56	5.5
10	Nitrogen as N, %	0.005	0.013	0.008
11	Phosphorous as P, mg/Kg	3.52	5.95	4.8
12	Potassium as K, mg/Kg	32.1	307.7	187.2
13	Copper as Cu, mg/Kg	3.6	20.76	9.5
14	Chromium as Cr, mg/Kg	10.4	28.89	17.4
15	Zinc as Zn, mg/Kg	8.97	22.2	15.8
16	Lead as Pb, mg/Kg	4.54	10.2	7.0
17	Nickel as Ni, mg/Kg	3.83	14.57	8.4
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 29 IND 2012

Date: 20-09-2014

To,

The CEO & Executive MemberKarnataka Industrial Area Development Board (KIADB)No. 14/3, 2nd Floor, Rashtrothana Parishat (RP) BuildingNrupathunga RoadBangalore - 560 001Phone No:080 - 2221 5383, 2221 5679Fax No:080 - 2221 7702E-Mail:kiadb@mail.kar.nic.inWebsite:www.kiadb.in

Sir,

Sub: Development of Vemagal Industrial Area at Survey Numbers of Kuragal, Harjenahalli, Perjenahalli and Shingihalli of Vemagal Taluk, Kolar District by Karnataka Industrial Area Development Board (KIADB) - Issue of Environmental Clearance – Reg.

* * * * *

This has reference to your application No.KIADB/DO&EE-II/1579/2012-13 dated 31st October 2012 addressed to SEIAA, Karnataka and subsequent letters addressed to SEIAA/SEAC, Karnataka 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, prefeasibility report and the additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC), Karnataka.

It is, inter-alia, noted that M/s. Karnataka Industrial Area Development Board (KIADB) have proposed for development of Industrial Area on the plot area 269.69 Ha, out of which 161.71 Ha area is for production blocks of industrial, administration buildings & auxiliary units, 80.86 Ha area is for amenities, utility, parks residential, parking & roads and 27.12 Ha area is as green belt (Sy. No. wise land details annexed). Estimated water requirement of 350 KLD for the domestic purpose is proposed to be met from the extraction of ground water and the estimated water demand of around 10 MLD for the industrial use is proposed to be met from the BWS&SB tertiary treated water. Power requirement is 2,850 KVA supplied through KPTCL.

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

The industrial effluent and domestic sewage shall be treated in the proposed Common Effluent Treatment Plant (CETP) and Common Sewage Treatment Plant (CSTP) respectively. The hazardous solid waste generated are Lead Acid Batteries, Used Oil, Bio-Medical Waste, CETP Sludge shall be send to KSPCB authorized recyclers / incinerators / landfill units. The non hazardous solid waste are CSTP Sludge, Domestic & Canteen Waste shall be used as manure for green belt and disposed to local municipalities / compost plant respectively.

The State Level Expert Appraisal Committee (SEAC) examined the proposal in the meeting held on 20th, 21st & 23rd September 2013 and has recommended for issue of Environmental Clearance.

The SEIAA Karnataka has considered the project in its meeting held on 30th September 2013 and after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations and the appraisal and recommendation of the SEAC, have accorded environmental clearance as per the provisions of Environmental Impact Assessment Notification-2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:-

A- SPECIFIC CONDITIONS

I. Construction Phase:

- "Consent for Establishment" shall be obtained from Karnataka State Pollution Control Board under Air and Water Act and a copy shall be submitted to the SEIAA before start of any construction work at the site.
- 2. Set up an environment management cell with appropriate lab facility shall be created as the project starts. It shall monitor all necessary parameters and activities during construction and operational phases from day one. The cell also ensures that the cell manages / maintains all the environmental aspects such as sewage treatment, solid waste disposal, maintenance of green belt areas, etc.
- 3. 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.
- 4. A First Aid Room should be provided in the Project both during construction and operation of the project.
- 5. 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.
- 6. 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.
- 7. 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.

2

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

- 8. 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.
- 9. For dis-infection of wastewater which is not meant for recycling for toilet flushing, use ultra violet radiation and not chlorination. For treated wastewater meant for reuse for toilet flushing, disinfect by using chlorination.
- 10. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- 11. 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.
- 12. 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 report submitted to SEIAA.
- 13. 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 ground water.
- 14. 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.
- 15. The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. Ready mixed concrete must be used in building construction.
- 20. Storm water control and its re-use as per CGWB and BIS standards for various applications.
- 21. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices and only tertiary treated water shall be used for construction as per G.O. No. FEE 188 ENV 2003 dated 14.08.2003.
- 22. No ground water is to be drawn without permission from the Central/State Ground Water Authority.

3

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

- 23. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- 24. Treatment of 100% grey water by decentralized treatment should be done.
- 25. The provision of Energy Conservation Building code, 2006 shall be fully complied with.
- 26. Roof should meet prescriptive requirement as per Energy Conservation Building Code, 2007 by using appropriate thermal insulation material.
- 27. 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.
- 28. The project authorities 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.
- 29. The project authority shall ensure that no water bodies are polluted due to project activities.
- 30. Safety standards as per National Building Code (NBC), 2005 should be followed and ensured.
- 31. The project Authorities shall ensure that the National Building Code, 2005 is complied with and adhered to.
- 32. 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.
- 33. The authorities should include the condition while issuing plots to the prospective individual industries that they should develop greenbelt of 33 % of the plot area allotted for them.
- 34. The industrial units in the industrial area and the associated facilities shall be strictly in accordance with the norms laid down by the Karnataka State Government and KSPCB/CPCB.
- 35. The project authorities shall strictly adhere to the commitments made in the letter No. IADB/JDTP/EC /90/3480/2013-14 dated 04.06.2013 with regard to establishment of STP/CETP, buffer zone, green belt, conditions to be incorporated in the lease document while allotting plots to individual industries, environment safety aspects etc.
- 36. KIADB should allot the plots only for orange and green category industries in the proposed industrial area. If red category industry has to come up in the same industrial area, that particular industry requires taking a separate clearance from appropriate authorities.
- 37. There should be fire stations in civic amenity sites provided in the layout taking into account the direction of wind as fire hazard industries are also to be located in safe zones not affecting any other immediate neighborhood as per wind rose diagram.
- 38. The existing water body, canals, drainages and any other water bound structures shall be retained unaltered with due buffer zone of 15 meter alround maintained under tree cover

4

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

- 39. 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.
- 40. 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.
- 41. Lakes and other water bodies within and/or at the vicinity of the project area shall be protected and conserved.
- 42. The project Authorities shall undertake activities towards the Corporate Social Commitment Plan made vide letter dated 22nd February 2013 with a total budget not less than Rs.14 Lakhs and shall be executed within a period of 2013-2017 as committed and report be submitted to the Authority.

II. Operation Phase.

- 1. The Company shall implement all the recommendations made in the Environmental Impact Assessment / EMP report and risk assessment report.
- 2. The installation of the Common Sewage Treatment Plant (CSTP) shall be got certified by an independent expert and a report in this regard should be submitted to the SEIAA before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of treated sewage shall conform to the norms & standards of the Karnataka State Pollution Control Board. Treated sewage should be used for flushing, gardening, etc. as proposed. Necessary measures should be made to mitigate the odour problem from STP.
- 3. The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- 4. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Andhra Pradesh Pollution Control Board.
- 5. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- 6. The project proponent shall ensure that the greenery of the area is maintained. Further, 33% of the project area shall be dedicated for green belt development. The local Forest Department shall be associated for this purpose and requisite budget earmarked.

5

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

- 7. Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- 8. Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.
- 9. The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- 10. 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.
- 11. A Report on the energy conservation measures confirming to energy conservation norms finalized by 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.
- 12. Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
- 13. Adequate measures should be taken to prevent odour problem from solid waste processing plant and CSTP.
- 14. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- 15. The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October 1994 and January 2000. all transportation of Hazardous Chemicals shall be as per the MVA, 1989. Authorization from the KSPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.
- 16. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the KSPCB must be obtained for collection/treatment/ storage/disposal of hazardous wastes.
- 17. 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 lighting and heating should be provided. Details in this regard should be submitted to the SEIAA.
- 18. The individual industries shall take all necessary clearances including Environment clearance in accordance with the law. The project Authority shall incorporate such condition in the lease/ sale deed/Agreement.
- 19. The project authorities shall bifurcate the industrial plots and residential plots, if any with a thick and tall vegetative barrier green belt /

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

20. The project Authority shall incorporate a condition in the prospective lease/sale deed/Agreement with individual industries that they also shall abide by the conditions of this E.C.

B. GENERAL CONDITIONS:

- 1. The project authorities shall strictly adhere to the stipulations made by the Karnataka State Pollution Control Board (KSPCB).
- 2. No further expansion or modifications of the industrial area shall be carried out without prior approval of the SEIAA/Ministry of Environment and Forests as the case may be.
- 3. The project proponent shall also comply with all the environmental protection measures and safeguards as per the information provided.
- 4. The implementation of the project vis-à-vis environmental action plans shall be monitored by MoEF, Regional Office at Bangalore / KSPCB/ CPCB and the Department of Environment & Ecology, Bangalore. A six monthly compliance status report shall be submitted to monitoring agencies.
- 5. The project proponent shall inform the public that the project has been accorded environmental clearance by the SEIAA and copies of the clearance letter are available with the KSPCB and may also be seen at Website of the Authority at http://www.seiaa.kar.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the MoEF Regional Office at Bangalore / KSPCB/ CPCB and the Department of Environment & Ecology, Bangalore.
- 6. The project authorities shall inform the MoEF Regional Office at Bangalore / KSPCB/ CPCB and the Department of Ecology and Environment, Bangalore, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- 7. The SEIAA, Karnataka may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 8. The SEIAA, Karnataka reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 9. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- 10. The issue of Environment Clearance doesn't confer any right to the project proponent to operate / run the project without obtaining statutory clearances / sanctions form all other concerned Authorities.
- 11. 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.

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

- 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. Officials from the Department of Environment and Ecology, Bangalore/ Regional Office of MoEF, Bangalore who would be monitoring the implementation of Environmental safeguards should be given full cooperation, facilities and documents/ data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF / SEIAA should be forwarded to the APCCF, Regional Office of MoEF, Bangalore/ Department of Ecology and Environment, Bangalore/ Regional Officer, KSPCB Bangalore.
- 14. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- 15. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- 16. 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.
- 17. 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.
- 18. 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.

Yours faithfully,

mal 20/9/14 (RAMACHANDRA)

Member Secretary, SEIAA – Karnataka,

Copy to:

- 1) The Secretary, Ministry of Environment & Forests, Government of India, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi - 110 003.
- 2) The Member Secretary, Karnataka State Pollution Control Board, Bangalore.
- The APCCF, Regional Office, Ministry of Environment & Forests (SZ), Kendriya Sadan, IV Floor, E & F wings, 17th Main Road, Koramangala II Block, Bangalore - 560 034.
- 4) Guard File.

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

Annexure to Environmental Clearance letter No. SEIAA 29 IND 2012 Dated 20-09-2014

Details of Land of the Proposed Vemagal Industrial Area

Village: Kuragal, Harjenahalli, Perjenahalli & Shingihalli; Taluk: Vemagal; Dist: Kolar;

Name of Village	Survey No.	Extent in Acre Guntas
Kuragal		
	28	5-20
	29	3-23
	30	3-23
	37	7-18
	38	3-15
	39/1	2-02
	39/2	1-35
	40/1	1-03
	40/2	1-08
	41/1A+B	1-21
	41/2	1-31
	41/3	1-07
	42	4-24
	43	1-22
	44	1-02
	45	0-25
	46	2-34
	47	1-03
	48	1-10
	49	0-23
	50	1-14
	51/P1	3-20
	51/ P2	1-20
	51/ P2	3-08
	51/ P3	4-20
	51/ P4	3-16
	51/6	5-35 ಸರ್ಕಾರಿ
	51/7	10-10 ಸರ್ಕಾರಿ
	52	0-38
	53	0-39
	54	2-03
	55	0-38
	56	1-16
	57	1-01
	58/1	2-26
	58/2	2-12

9

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

	59	4-00
	60/1	2-29
	60/2	3-30
	60/3A	0-31
	60/3B	0-20
	60/3C	0-21
	60/4	2-05
	60/5	1-17
	61	3-20
	62	3-05
	63/2	1-30
	64/1	0-37
	64/2	0-26
	64/3	0-34
	65/1	1-00
	65/2	0-29
	65/3	1-18
	66	1-03
	67	1-27
	68	28-08
	69	8-24
		0-26
	70/1A	0-20
	70/1B	0-22
	70/2	0-15
	71/1	0-20
	71/2	0-20
	71/3	1-01
	71/4	0-12
	71/5	1-22
	71/6	0-07
	72/1	0-16
_	72/2	0-17
	72/2	0-17
		0-28
	72/4	
	72/5	0-16
_	73/1A 73/1B	0-31
		0-32
	73/2	0-22
	73/3	0-14
	73/4	0-10
	73/5	0-13
	273/1	12-19
	273/2	6-09
	274/1	0-33 /

SEIA A 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

	274/2	0-25
	274/3	0-25
	274/4	1-00
	297/1	1-33
	297/2	3-15
	297/3	0-35
	312	0-20
	Tota	I 202-31
Harjenahalli		
	18/1	1-38
	18/2	2-11
	19/1	4-15
	20/1	2-34
	20/2	0-11 ਨ ਸ ਰਾ ਨ ਵੀ ਹੈ
	20/3	0-39
	21/1	0-36
	21/2A	1-34
	21/2B	1-34
	85	1-22
	87	1-00
	88/1	2-07
	88/2	2-33
	89/P2	2-19
	89/P	2-16
	90/1	2-03
	90/2	1-30
	91	4-06
	92/1	2-16
	92/2A	1-29
	92/2B	1-31
	93/1	3-00
	93/2	3-08
	94/1	0-38
	94/2	1-04
	95/2	2-07
	Old Sy no. 96 new Sy no. 132	3-11
	Old Sy no. 96 new Sy no. 133	1-00
	Old Sy no. 96 new Sy no. 137	1-00
	Old Sy no. 96 new Sy no. 138	1-19
	97	0-16 ಸರ್ಕಾರಿ ಗ್ರಾವಲ್ ಗುಂಡಿ
	Old Sy no. 97 new Sy no. 135	0-13 ಸರ್ಕಾರಿ ಖರಾಬು ಕುಂಟೆ
	Old Sy no. 97 new Sy no. 136	0-10
	Old Sy no. 97 new Sy no. 140	0-10 ಸರ್ಕಾರಿ ಖರಾಬು
	98	0-06 ಸರ್ಕಾರಿ ಗ್ರಾವಲ್ ಗುಂಡಿ
	99/1	1-00 M

P

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

	99/2	1-06
	99/3	4-25
	100/1	0-16
	100/2	1-12
	100/3	0-30
	100/4	1-28
	100/5	0-05
	100/6	0-03
	100/7	0-07
	100/8	0-02
	100/9	0-10
	101/1	1-18
	101/2	0-21
	102	1-27
	108/ P1, P1	4-29
	109/1	2-10
	109/2	2-35
	Total	
Parjenahalli		
	49	0-28
	50/1	4-06
	50/2	1-26
	51	0-30
	52	1-04
	53	0-19
	54	1-33 ມຸດຈານ
	55	0-37
	56/1	1-36
	56/2	1-16
	57/1	1-24
	57/2	1-03
	58/1	1-17
	58/2	1-02
	59	1-26 ມ ວ າເນ
	60	3-25
	61	5-36
	62	3-02
	63	10-20
	64/1	1-03
	64/2	0-16
	64/3	0-19
	64/4	1-33
	65/1	0-10
	65/2	0-18
	65/3	0-14 /
		(n)

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

	65/4	6-20
	66	0-29
	67	1-29
	68	0-38
	69	1-04
	70	1-07
	71	1-06
	72	1-20
	73	5-13
	74	0-13
	75	2-16
	Tot	
Shingihalli		
	51/1	0-37
	51/2	0-32
	51/3	0-21
	51/4	0-26
	51/5	1-33
	51/6	0-08
	51/7	0-14
	51/8	0-13
	51/9	0-06
· ···	52/1	4-18
	52/2	1-09
	53	4-31
	54	6-21
	55/1	1-19
	55/2	2-29
	56/P2	8-36
	Old Sy No 56, new Sy No 203	2-21
	Old Sy No 56, new Sy No 207	2-20
	Old Sy No 56, new Sy No 209	1-11
	57	4-15
	58	2-24 ಖರಾಬು ಸರ್ಕಾರಿ
	Old Sy No 58, new Sy No 211	0-30
	60/1	0-17
	60/2	0-17
	61/1	0-26
	61/2	0-22
	61/3	0-20
	61/4	0-29
	62/1	0-19
	62/2	0-26
	63/1	0-05
	63/2	0-04

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

63/3	0-04
63/4A	0-02
63/4B	0-03
63/5	0-12
63/6A	0-30
63/6B	0-21
63/7	0-07
 63/8-P1	0-10
63/9-P1	0-08
64/1	0-32
 64/2A	0-05
 64/2B	0-06
 64/2C	0-04
 64/3	0-14
 64/4	0-13
64/5	0-25
65/1	0-24
65/2	0-22
66	3-28
67/1	0-21 1/2
67/2	0-14
67/3	0-21 ^{1/2}
67/4	1-03
68	0-22
69	1-11
70/1	0-19
70/2	0-19
71/1	1-08
71/2A	0-08
71/2B	0-13
71/3	0-23
71/4	0-15
71/5	0-14
71/6	0-15
71/7	0-15
72/1	0-34
72/2	0-30
73/1	0-29
73/2	0-32
74	18-13
75/1	1-27
75/2	1-16
75/3A	0-05
75/3B	0-25
75/4	0-29 /

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

75/5P1	0-08
75/6	0-14
75/7	0-03
75/8	0-09
75/9	0-11
75/10	0-16
75/11	0-03
75/12	0-03
76/1	0-28
76/2	0-28
76/3	0-24
76/4	0-37
77/1	0-20
77/2	0-26
77/3	0-28
77/4	0-09
77/6	0-07
77/7A	0-05
77/7B	0-06
78/1A	0-01
78/1A	0-11
78/10	0-33
78/1D	0-27
78/1E	0-04
78/11	0-20
78/1G	0-20
78/2	0-17
78/3	0-14
79/1	0-22
79/2	0-08
79/3A	0-13
79/38	0-13
79/4	0-14
79/5	1-02
79/6	0-13
79/7	0-11
79/8A	0-12
79/88	0-16
80/1	0-07
80/2	0-30
80/3	0-30
81/1	0-31
81/2	0-29
81/3	0-17
	0-16

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

81/4	0-15
82/1	0-04
82/2	0-06
82/3	0-05
82/4	0-18
83/1	0-05
83/2	0-10
83/3	0-03
83/4	0-23
83/5	0-06
83/6	0-03
84/1	0-06
84/2A	0-07
84/2B	0-06
84/3	0-04
84/4	0-14
84/5	0-22
84/6	0-06
84/7	0-04
84/8	0-05
85	0-15
86	0-17
87	0-15
88/1	0-32
88/2A	0-12
88/2B	0-11
88/2C	0-11
88/3	0-21
88/4	0-20
88/5	0-17
88/6	0-22
88/7	0-01 3/4
88/8	0-01 3/4
88/9	0-03 1/2
134	1-35
135	1-32
136/1	0-26
136/2	0-28
137/1	2-37
137/2	3-20
138	0-20 ಸರ್ಕಾರಿ ತೋಮ
139	3-37
140/1	
140/1	1-35
140/2	1-25
140/3	1-32

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

	141	4-31
	142/1	1-14
	142/2	1-15
	142/3	1-15
	143	0-33
	144	8-31.
_	145	6-10
	146	3-34
	167	4-28
	168/1	0-10
	168/2	1-39
	168/3	2-27
	168/8	0-10
	168/9	0-36 3/4
	168/10	0-36 3/4
	168/11	0-26 3/4
	169/1	3-10
	169/2	2-05
	170/1	1-37
	170/2	1-04
	171/1	1-11
and -	171/2	0-35
	171/5	0-04
	172	2-17
	173/P2	6-09
_	174/1	0-07
	174/2	0-06
	174/3	0-06
and the second s	175/1	0-28
	175/2	1-16
	175/3	1-16
1	175/4	0-29
	176/1	2-01
	176/2	2-24
	177/1	3-36
	177/2	2-19
_	178/1	3-05
	178/2A	1-29
	178/2B	1-28
	178/2C	1-29
	179/1	5-02
	179/2	1-08
	180	3-32
	181/P1	9-22
	182	5-23/

4

SEIAA 29 IND 2012

Project for Development of Vemagal Industrial Area by M/s. Karnataka Industrial Areas Development Board

Total	303-371/4
200	0-31
192	1-39
192	2-02
189	4-23
188	5-17
187	1-19
187	1-34
187	2-11
186	1-04
186	3-24
185	6-09
183/3	1-00
183/2	9-06
183/1	4-17

Summary:

SI Village No.		Extent in Acres Gunta	
1	Kuragal	202-31	
2	Harjenahalli	87-10	
3	Perjenahalli	72-18	
4 Shingihalli		303-371/4	
Tota	1	666-161/4	

Total Land Acquired = 666 Acres 16^{1/4} Guntas or 666.41 Acres

क, रू, /Fax : 080-25586321 ಈಮೇಲ್/E-mail : ho@kspcb.gov.in ជំរោះភ្លឹងថា/Website : http://kspcb.gov.in

25581383, 25589112 25588151, 25588270 25588142, 25586520

ಕಾರ್ಣಗಳ ರಾಜ್ರ ಮಾಲಿಸ್ತ ವಿಯಂತ್ರಣ ಮಂಡಳ

Service State Pollution Control Board

"ಪರಿಸರ ಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ "Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

NO. PCB/53/CNP/13/ DB-1034 / BY REGD. POST WITH ACK. DUE /

HD Reg No. 47398 Dated: 23.03.2013.

DATE: 30 JAN ZUIN

(THIS ORDER CONTAINS DZ PAGES INCLUDING 14 PAGES OF ANNEXURE-I)

To

The Development Officer - II & Executive Engineer, Karnataka Industrial Area Development Board (KIADB), KIADB Zonal Office, Arvind Bhavan, 2nd Floor, NT Road, Bengaluru - 560 001.

Sir,

- Consent for establishment to development of Industrial Area having total land area Sub: of 269.521 Ha (666A - 16.25G) located at Various survey numbers of Kuragal, Harjenahalli Perjenahalli & Shingihalli Village of Vemgal Taluk, Kolar District by M/s. Karnataka Industrial Area Development Board (KIADB).
- Ref:
- 1. CFE applications received at Regional Office, KSPCB, Kolar on 23.03.2013. 2. Inspection of the proposed project site by Officer of the Regional Office, KSPCB, Kolar on 03.04.2013.
- 3. EC No. SEIAA 29 IND 2012 dated 20.09.2014.
- 5. This office vide letter No. 5699 dated 04.01.2017.
- 6. Proceedings of the Consent Committee Meeting held on 28.12.2016. 7. Proceedings of Technical Presentation held on 19.06.2017.
- 8. Project Proponent letter dated 11.09.2017.
- 9. Proceedings of the Consent Committee Meeting held on 29.12.2017.

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 development of Industrial Area having total land area of 269.521 Ha (666A - 16.25G) located at Various survey numbers of Kuragal, Harjenahalli Perjenahalli & Shingihalli Village of Vemgal Taluk, Kolar District, subject to the following conditions.

- Environmental Aspects and Management during the course of ١.
- a) The applicant should cover the project site from all sides by raising sufficiently tall barricades with sheets to ensure that pollutants should, not spill to the

Sadio/A SENIOR ENVIRONMENTAL OFFICER

- b) 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.
- c) The applicant shall control the movement of vehicles carrying construction materials in order to avoid noise pollution in the surrounding.
- d) The project proponent shall strictly adhere to the conditions stipulated in the Environmental clearance issued from the SEIAA:29:IND:2012 dated 20.09.2014.
- e) 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 or as per any plan sanctioning authority.
- f) The applicant shall submit final approved plan from competent authority to the Board before taking up any construction activities.
- g) The applicant shall seek extension through a letter 45 days in advance of the expiry of validity period of CFE/CFExpn order with proper reasons for seeking such extension if required.
- h) The applicant to maintain 5 rows of plantation along the boundaries of the industrial area and to see that only green category industries are allotted towards the adjoining village limits.
- i) The applicant shall not discharge any kind of effluent into the tanks or to any water bodies.
- 1. This consent for establishment shall be valid for a period of Five years from the date of issue of this Order.
- 2. The applicant shall maintain natural nallah and other such feature as in the Revenue Survey map.
- 3. The applicant shall not take expansion/diversification without the prior consent of the Board.
- 4. The applicant shall obtain necessary licence/clearance from their relevant agencies before taking up construction.
- KIADB authorities shall earmark a dedicated area for common facilities like CETP and CSTP, common solid waste treatment and Hazardous waste management.
- 6. The applicant shall maintain utilities including STP for a minimum period of five years.
- 7. The applicant shall use treated sewage for secondary purposes including construction.
- 8. This CFE is issued only from the point of water pollution control only and does not have any relevance over land dispute, Departments/Hon'ble Courts.

SENIOR ENVIRONMENTAL OFFICER

A

9. Common Sewage Treatment Plant (CSTP) 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.

3

- II. WATER CONSUMPTION:
- 1. The water consumption shall not exceed 2650 KLD.
- 2. No ground water is to be drawn without permission from the Central/State Ground Water Authority.

III. WATER POLLUTION CONTROL:

1. The quantity of waste water generation shall not exceed 1700 KLD.

2. The industrial effluent & domestic sewage shall be treated in the proposed CETP & CSTP respectively.

3. The applicant shall submit the complete design details of the CSTP & CETP along with treatment schemes and obtain prior approval from the Board before installation of the same to meet the standards stipulated by the Board regarding process effluents before utilizing for urban reuse viz. landscape irrigation, vehicle washing, toilet flushing, use in fire protection and commercial air conditioners.

4. The applicant shall treat the sewage to meet the following standards stipulated below before utilization for secondary purposes.

SI. No	Parameter	Parameters Limit.
01.	pH	65.00
02.	BOD (mg/l)	6.5 - 9.0
03.	COD (mg/l)	Not more than 10
04.	TSS (mg/l)	Not more than 50
05.	NH4-N (mg/l)	Not more than 20
06.	N-Total (mg/l)	Not more than 5
07.	Fecal Coliform (MPN/100 ml).	Not more than 10
	1. Coar comont (MPN/100 ml).	Less than 100

- 5. Applicant shall add appropriate disinfectant to the treated sewage to ensure some residual chlorine preferably in the range of 1 mg/l. to 3 mg/l.
- 6. The applicant shall treat pretreated waste water from individual units in their 2.0 MLD CETP.
- 7. The secondary and tertiary treated waste water will be supplied to industries for cooling, flushing & gardening.
- 8. If the treatment plant do not achieve the effluent standards stipulated 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.

SENIOR ENVIRONMENTAL OFFICER

- 9. All the treatment units shall be made impervious and there shall not be any discharge of sewage outside the premises.
- 10. The applicant shall provide separate energy meter to liquid waste treatment plant and STP and also shall provide flow meters. A log book of readings shall be maintained.
- 11. The applicant should make provisions for dual piping system to use the treated sewage water for toilet flushing, gardening and other purposes.
- 12. The applicant shall dispose excess treated sewage i.e. left after using for secondary purposes. The applicant shall maintain log book and vehicle details in this regard.

IV. AIR POLLUTION CONTROL:

- 1. The applicant during construction shall ensure that the Ambient Air Quality in its premises shall conform to the National Ambient Air Quality Standards specified in Environment (Protection) Rules.
- 2. The applicant shall provide acoustic measures to the DG Sets as per SI. No. 94 in Schedule-I of Environment (Protection) Rules.
- 3. The applicant shall provide dust suppression systems with water sprinkling system during construction period.

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. 75 dB(A) Leq during day time and 70 dB(A) Leq during night time during and after construction.

VI. SOLID WASTE & HAZARDOUS WASTE DISPOSAL:

- 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.
- 2. The applicant shall apply and obtain authorization for management & handling of waste oil under Hazardous & other Waste (Management & Transboundary Movement) Rules, 2016.
- 3. 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.
- The applicant shall strictly follow the Government Notification No. FEE 17 EPC 2012 Bangalore dated 11.03.2016 with regard to plastics ban.
- 5. The applicant shall strictly follow Construction & Demolition Waste Management Rules, 2016.

Sadiq Ahmed) SENIOR ENVIRONMENTAL OFFICER

6. The applicant shall earmark minimum of 5 acres and maximum of 25 acres of land for the purpose of establishing CETP, Hazardous Waste and Municipal Solid waste collection centers in the industrial area.

5

VII. HEALTH & SAFETY:

- 1. 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 adhere to the Zonal Regulations norms of competent authority.
- 2. The industrial units in the industrial area and the associated facilities shall be strictly in accordance with the norms laid down by the Karnataka State Government and Board.
- 3. The existing water body, canals and rajakaluve and other drainage and water bound structures if any shall be retained unaltered with due buffer zone as applicable and maintained under tree cover
- 4. The natural sloping pattern of the project site other than the area excavated for the purpose of construction of proposed building shall remain unaltered and the natural hydrology of he area be maintained as it is to ensure natural flow of storm water.
- 5. Lakes and other water bodies within and/or at the vicinity of the project area shall be protected and conserved.
- 6. The project Authority shall allow only the Environmental Clearance permitted industries and strictly as proposed in the layout plan.
- 7. The solid waste generated should be properly collected and segregated Wet garbage should be composted and dry/inert solid waste should be disposed off to the approved sites for land filling, after recovering recyclable material.
- 8. The project proponent shall ensure development of a minimum of 33% of the project area which shall include the butter zone and green belt developed by individual authority may undertake compensatory green belt development through avenue plantation in the adjoin roads and in the civic amenity area if there is any shortfall within the project site in the unavoidable circumstances.
- 9. The provision of Energy Conservation Building code, 2006 shall be fully complied with.
- 10. The project authority shall ensure that no water bodies are polluted due to project activities and the nala/water bodies if any within the project areas are well protected with sufficient buffer.

SENIOR ENVIRONMENTAL OFFICER

11. The project authorities shall not use Kharab and 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.

6

- 12. The authorities should include the condition while issuing plots to the prospective individual industries that they should develop greenbelt of 33% of the plot area allotted for them.
- 13. The project proponent shall ensure that the greenery of the area is maintained. Further 33% of the project area shall be dedicated for green belt development. The local Forest Department shall be associated for this purpose and requisite budget
- 14. Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.
- 15. The project authorities shall bifurcate the industrial plots and residential plots with a thick and tall vegetative barrier green belt.
- 16. The project authority shall incorporate a condition in the prospective lease/sale deed/Agreement with individual industries that they also shall abide by the conditions of this E.C.
- 17. The applicant must create structure/storage facility for rain water harvesting and ground water recharge.
- 18. The applicant should make provisions for dual piping system to use the treated sewage water for toilet flushing, gardening and other purposes.
- 19. 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.

3 20. The applicant shall implement the Environmental Management Plan during construction and after construction as given under EMP report.

- 21. The applicant shall not change or alter (a) building plan (b) the quality, quantity or rate of discharge/ emissions and (c) install/replace/alter the water or air pollution control measures without the prior approval of the Board.
- 22. 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.
- 23. 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.

(Sadiq#Ahmed) SENIOR ENVIRONMENTAL OFFICER

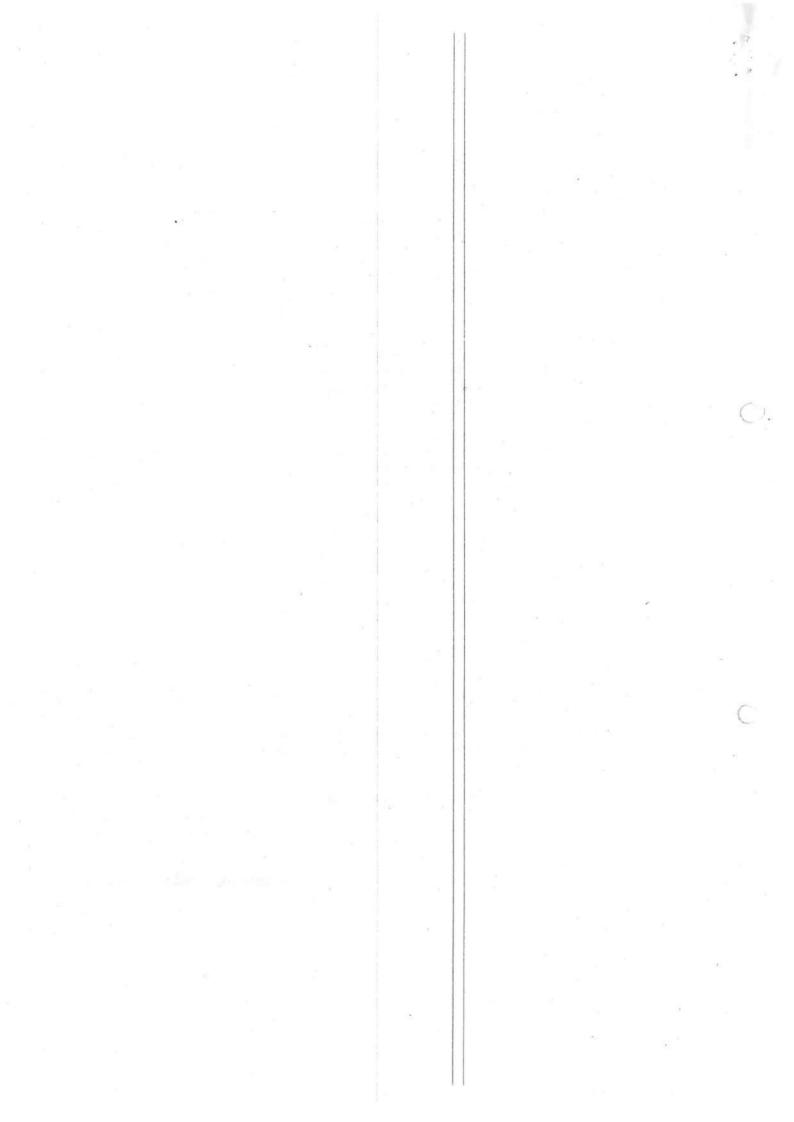
- 24. The applicant shall appoint a qualified Environmental Engineer/ Scientist for the Management of Environmental aspects and also establish Environmental Cell to oversee the operation of STP.
- 25. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions.
- 26. 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.
- 27. The application shall adopt Eco-sanitation system in the project.
- 28. 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.
- 29. 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.
- 30. The project authorities shall adopt green building concept.
- 31. The project authorities shall establish Environmental Cell during operation phase to comprehensively manage environment related issues.
- 32. Suitable local tree species shall be selected for greenery and minimum three rows of plant saplings shall be planted all-along the periphery of the site.
- 33. The CFE is issued without prejudice to the Court case pending in any Hon'ble Court.

Please note that 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 to the completion of construction work of project. Issue of consent will be considered only after completion of Water pollution control measures, solid waste management facilities and installing air

The receipt of this letter may please be acknowledged.

For and on behalf of Karnataka State Pollution Control Board SENIOR ENVIRONMENTAL OFFICER

7



ry Combined national Tote pools in offing

Sd/- Executive Engineer, Project (West) Division

"Pay development charges, help to develop Bengaluru"

ಸಂಬಂಧಿಸಿ ಉಳಿದಂತೆ ಸಂಪರ್ಕಿಸಿ ಸಂಪರ್ಕಿಸಜೆ

MINOR I

MINOR I

No.EE /MID

SHO

Executive

Developn

item rate

Portal Svs

1. Constru

Ankalagi

Rs.99.99

period is

the worl

Division (

up to C

https://e

upto 16.

on 07-04

all the D

a Notar

Enginee

such Tec

DEPART

PHN



EVELOPMENT BOARD

(A Government of Karnataka Undertaking) No. 49, East Wing, 4^h & 5^h Floor, Khanija Bhavan, Race Course Road, Bengaluru - 560 001, Ph.: 22265383 Fax: 080-22267901 website: www.kladb.in e-Mall: cdoce@kladb.in

PUBLIC ANNOUNCEMENT

(Through GoK e-Procurement Portal Only)

KIADB has obtained Environmental Clearance from MoEF&CC/SEIAA for the following Industrial Areas. The Copies of the Environmental Clearances are available on the website of MoEF&CC (http://moef. nic.in)/SEIAA (http://seiaa.karnataka.gov.in).

A. Environmental Clearance from MoEF&CC

1. Sompura Industrial Area, 1&2 Stage, Nelamangala Taluk, Bengaluru-Rural District.

2. Vasanthanarasapura Industrial Area, 2nd & 3rd Phase, Tumakuru District.

3. Gowribidanur, 1st & 2nd Stage Industrial Area, Chikkaballapura District.

4. Kadechuru Industrial Area, Kadechuru Village, Yadgiri Taluk & District.

5. Chamarajanagara Industrial Area, Badanakuppe and Kallambelli villages, Chamarajanagara Taluk & District.

6. Harohalli Industrial Area, 2nd & 3rd Phase, Ramangara District

7. Jakanasandra Industrial Area, Jakasandra village, Malur Taluk, Kolar District.

- B. Environmental Clearance from SEIAA
- 1) Malur Industrial Area, 4th Phase, Malur Taluk, Kolar District.
- 2) Narasapura Industrial Area, 1* Stage, Kolar District.
- 3) IT/BT Park, Gamanagatti, Tarihal Village, Dharwad District.
- 4) Bidadi Industrial Area, 2nd Phase, Ramanagara District.
- 5) Vernagal Industrial Area, Kolar District.

6) Vasanthanarasapura Industrial Area, 1st Stage, Tumakuru Taluk & District.

7) Hi-Tech Defence & Aerospce Components, Devanahalli Taluk, Bengaluru Rural District.

8) Doddaballapura Industrial Area, 3rd Phase, Obdenahalli, Doddaballapura Taluk, Bangalore Rural District.

9) Kittur Industrial Area, Bailahongal Taluk, Belagavi District.

10) Nandur Kesaratagi Industrial Area, 2nd Phase, Kalaburagi Taluk & District. Sd/- Chief Development Officer & Chief Engineer

ision,Ranebennur.

DIP/BGM/F



Scanned by CamScanner

NL. U.T.P. Division, Ranebennur.

(5) ಆರ್ಥಿಕ ಬಿಡ್ ತೆರೆಯುವ

ಗೆ (ಸಾಧ್ಯವಾದಲ್ಲಿ ಮಾತ್ರ). ಬಾಕಿ ಉಳಿದ

ೇ ಬದಲಾವಣೆ ಇರುವುದಿಲ್ಲ. ಹೆಚ್ಚಿನ

i.gov.in ವೆಟ್ ಸೈಟ್ ನಲ್ಲಿ ಹಾಗೂ ಈ

ಸಹಿ/- ಕಾರ್ಯನಿರ್ವಾಹಕ ಇಂಜಿನಿಯರ್.

ರಾಜ್ ಇಂಜಿನಿಯರಿಂಗ್ ವಿಭಾಗ, ಕಾರವಾರ

RAVARI NIGAM LIMITED

Project Division.Ranebennur.

Madhapura Corrigendum-3/

4447 dtd: 03-03-2018

otification No. 3944/017-18

tions cited at Ref (1) to (3)

work of "Survey, Investigation,

Testing and Commissioning of

d Works consisting of Intake

m pump house, Power supply

ansmission lines, Rising Main,

and Construction of Gravity

structure for lifting of water from

ankaranahalli village to fill the

Taluk Havrei Districts, including

for a period of 5 years after

completion of scheme on Turn-

apura Lift Irrigation Scheme in

ct, Karnataka" was called and

insted of Guddada Madhapura

(Madlur) LIS works's drawings

lence the Drawings of Guddada

indum for the above said work

Further details are remains

tender notification and its

made in the published in the

he news papers, wrther

te No. (08373) - 267071, and

Corrigendum -1 Notification

dtd: 19-03-2018

3) This office

tka Enterprise) itive Engineer,

ENDUM-3

-2018



(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).	Report No.	: RE/2021/00469
	Report date	: 13/04/2021
	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 04/04/2021 to 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00469
Karnataka 560 001.	Date of Receipt	: 05/04/2021
	Analysis Start date	: 05/04/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 13/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Ka	arnataka. (Ext-666.41 Acres)	
Sample Location: Near Singihalli Village.	(

SI. No.	Parame	eters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , µg/m ³	M ₁₀ , μg/m ³	60.2	100	IS-5182 (P-23)
2	Particulate Matter P	M _{2.5} , μg/m ³	22.0	60	IS-5182 (P-24
3	Nitrogen Dioxide NC	02, μg/m ³	18.8	80	IS-5182 (P-06
4	Sulphur dioxide as S	Ο ₂ , μg/m ³	10.7	80	IS-5182 (P-02
NFEI	RENCE: The measured	values for the above tested	parameters ar	e within as per the NAAQ Sta	indards
			parameters ar		indards
Det	RENCE: The measured ails of Equipment used ne of the equipment	d for monitoring		re within as per the NAAQ Sta	indards
Det	ails of Equipment used ne of the equipment		Fine Particu	re within as per the NAAQ Sta	indards
Det Nan	ails of Equipment used ne of the equipment del	d for monitoring Respirable Dust Sampler	Fine Particu Envirotech /	re within as per the NAAQ Sta	indards
Det Nan Mor	ails of Equipment used ne of the equipment del	d for monitoring Respirable Dust Sampler Envirotech APM-460	Fine Particu Envirotech / 938/D	re within as per the NAAQ Sta ulate Sampler APM-550 mini	indards

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

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/2021/00470
Board (KIADB).	Report date	: 13/04/2021
	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 04/04/2021 to 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00470
Karnataka 560 001.	Date of Receipt	: 05/04/2021
	Analysis Start date	: 05/04/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 13/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, H	(arnataka. (Ext-666.41 Acres)	
Sample Location: Near Harjenahalli Village.	, ,	

SI. No.	Parameters		Results (As Pe		(As Pe	mits r NAAQS) 24hrs	Protocol	
1	Particulate Matter PI	M ₁₀ , μg/m ³		59.6	100		IS-5182 (P-23)	
2	Particulate Matter Pl	M _{2.5} , μg/m ³		17.9		60	IS-5182 (P-24)	
3	Nitrogen Dioxide NO	2, μg/m ³		15.3		80	IS-5182 (P-06)	
4	Sulphur dioxide as SC	D₂, μg/m³		9.1		80	IS-5182 (P-02)	
NFER	RENCE: The measured	values for the above te	ested pa	rameters are v	vithin as per t	he NAAQ Stand	ards	
Deta	ails of Equipment used	for monitoring				7		
	ne of the equipment	Respirable Dust Sam	npler	Fine Particul	ate Sampler	-		
Moo		Envirotech APM-4				-		
SI. N	lo.	2816/DTB/2020)	941/DT		-		
Calil	brated on date	18-12-2020			and the second se	-		
Calil	bration due date	17-12-2021	1 21-02-2022		-2022	-		
	2-12		EN	ID OF THE REP	ORT		4.0	
Verified by					50	8 D 13/04/21 ed 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).	Report No.	: RE/2021/00471 : 13/04/2021 : Test Request Form : 04/04/2021 to 05/04/2021	
	Report date		
	Ref.		
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling		
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00471	
Karnataka 560 001.	Date of Receipt	: 05/04/2021	
	Analysis Start date	: 05/04/2021	
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 13/04/2021	
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, K	arnataka, (Ext-666 41 Acres)		

Sample Location: Near Perjenahalli Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , µg/m ³	59.1	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , µg/m ³	19.0	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , µg/m ³	18.7	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , µg/m ³	9.6	80	IS-5182 (P-02)

Name of the equipment	Respirable Dust Sampler	Fine Particulate Sample	
Model	Envirotech APM-460	Envirotech APM-550 min	
SI. No.	2819/DTB/2020	943/DTE/202	
Calibrated on date	18-12-2020	22-02-2021	
Calibration due date	17-12-2021	21-02-2022	

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

Verified by

5-813/04/21 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/2021/00472
Board (KIADB). No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 13/04/2021
	Ref.	: Test Request Form
	Date of Sampling	: 04/04/2021 to 05/04/2021
	Job Order No	: RE/2021/00472
	Date of Receipt	: 05/04/2021
	Analysis Start date	: 05/04/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 13/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, K	arnataka, (Ext-666,41 Acres)	
Sample Location: Near Kurugal Village.		
sentiple acculont recar karagar village.		

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , µg/m ³	60.2	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , µg/m ³	22.4	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , µg/m ³	18.9	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , µg/m ³	10.5	80	IS-5182 (P-02)

Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler
Model	Envirotech APM-460	Envirotech APM-550 mini
SI. No.	2815/DTB/2020	944/DTE/2020
Calibrated on date	18-12-2020	18-12-2020
Calibration due date	17-12-2021	17-12-2021

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

Verified by

5-8013/04/21 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/2021/00477
Board (KIADB).	Report date	: 13/04/2021
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Ref.	: Test Request Form
	Date of Sampling	: 05/04/2021 to 06/04/2021
	Job Order No	: RE/2021/00477
	Date of Receipt	: 06/04/2021
	Analysis Start date	: 06/04/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, K	arnataka (Ext-666 41 Acres)	. 10/0 // 2021
Sample Location: Near Vemagal town.	(Ext 000.41 Acres)	

SI. No.	Parame	ters	R	lesults	Limits (As Per NA For 24h	AQS)	Protocol
1	Particulate Matter PN	Λ ₁₀ , μg/m ³		64.8	100		IS-5182 (P-23)
2	Particulate Matter PN			25.3	60		IS-5182 (P-24)
3	Nitrogen Dioxide NO2			20.1	80		IS-5182 (P-06)
4	Sulphur dioxide as SC RENCE: The measured			12.5	80		IS-5182 (P-02)
	ails of Equipment used ne of the equipment	for monitoring Respirable Dust	Sampler	Fine Partic	ulate Sampler		
Mo		Envirotech AP					
SI. N	lo.	2814/DTB/2			APM-550 mini DTE/2020		
Cali	brated on date	18-12-20		and the second se	2-2020		
Cali	bration due date	17-12-20	21		2-2021		
	al al la		E	ND OF THE RI	EPORT		013/04/21



(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/2021/00478
Board (KIADB). No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Report date	: 13/04/2021
	Ref.	: Test Request Form
	Date of Sampling	: 05/04/2021 to 06/04/2021
	Job Order No	: RE/2021/00478
Karnataka 560 001.	Date of Receipt	: 06/04/2021
	Analysis Start date	: 06/04/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 13/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Ka	arnataka. (Ext-666 41 Acres)	
Sample Location: Near Sujjanahalli Village.		



(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/2021/00479	
Board (KIADB).	Report date	: 13/04/2021	
	Ref.	: Test Request Form	
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 05/04/2021 to 06/04/2021	
ace Course Road, Bengaluru,	Job Order No	: RE/2021/00479	
Karnataka 560 001.	Date of Receipt	: 06/04/2021	
	Analysis Start date	: 06/04/2021	
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	. 13/04/2021	
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, K	arnataka (Ext-666 41 Acres)	10/01/2021	
Sample Location: Near Thokalagatta Village.	andeaka. (Ext 000.41 Acres).		

SI. No.	Parame		R	esults	Limits (As Per NA For 24h	AQS)	Protocol
	te Matter P			58.3	58.3 100		IS-5182 (P-23)
	te Matter P			18.2	60		IS-5182 (P-24)
	Dioxide NO			14.2	80		IS-5182 (P-06)
	dioxide as So	D₂, μg/m³ values for the abo		9.3	80		IS-5182 (P-02)
Name of the e	ipment used quipment	d for monitoring Respirable Dust		Fine Partie	culate Sampler		
Model		Envirotech AP		Envirotech APM-550 mini			
SI. No.		2819/DTB/2	2020		DTE/202		
Calibrated on date		18-12-20	18-12-2020		22-02-2021		
Calibration du	e date	17-12-20	21	1 August 1	02-2022		
	~		E	ND OF THE R	EPORT		
Ve	13/112	L.				C	8 D 13/04/21



(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/2021/00480
Board (KIADB).	Report date	: 13/04/2021
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Ref.	: Test Request Form
	Date of Sampling	: 05/04/2021 to 06/04/2021
	Job Order No	: RE/2021/00480
	Date of Receipt	: 06/04/2021
	Analysis Start date	:06/04/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Ka	arnataka (Ext. 666 41 Acros)	. 13/04/2021
Sample Location: Near Hullanakallu Village.	Andraka. (Ext- 000.41 Acres)	

SI. No.	Parame		Results	Limits (As Per NAAC For 24hrs	(S) Protocol
1	Particulate Matter P	M10, μg/m ³	60.8	100	IS-5182 (P-23)
2	Particulate Matter P	M _{2.5} , μg/m ³	22.2	60	IS-5182 (P-23)
3	Nitrogen Dioxide NO		19.0	80	IS-5182 (P-06)
4	Sulphur dioxide as SO		10.1	80	IS-5182 (P.02)
		values for the above teste	e per unicici o un	e within as per the N	AAQ Standards
	ails of Equipment used the of the equipment	Respirable Dust Sampler	Fine Partic	ulate Sampler	
Mod	lel	Envirotech APM-460		APM-550 mini	
SI. N		2815/DTB/2020		TE/2020	
	orated on date	18-12-2020	18-1	2-2020	
Calib	oration due date	17-12-2021	17-1	2-2021	
	2417		END OF THE R	EPORT	
	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/2021/00473
Board (KIADB).	Report date	: 13/04/2021
	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 04/04/2021 to 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00473
Karnataka 560 001.	Date of Receipt	: 05/04/2021
	Analysis Start date	: 12/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District	Analysis Completed date	

Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-666.41 Acres) Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00473	Near Singihalli Village	6:01 AM to 10:00 PM	44.6	64.1	53.5
		10:01 PM to 6:00 AM	37.5	50.1	43.3

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
0	END OF THE REPORT
Verified by	5-8013/04/21
	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/2021/00474 Board (KIADB). Report date : 13/04/2021 Ref. No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, : Test Request Form Date of Sampling : 04/04/2021 to 05/04/2021 Race Course Road, Bengaluru, Job Order No : RE/2021/00474 Karnataka 560 001. Date of Receipt : 05/04/2021 Analysis Start date : 12/04/2021

 Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-666.41 Acres)

 Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	Leq dB(A)
RE/2021/00474	Near Harjenahalli	6:01 AM to 10:00 PM	43.7	64.5	53.1
,,,,,	Village	10:01 PM to 6:00 AM	36.7	50.4	43.0

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.
- 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
\bigcirc	
13/4521	Sop Bioloula
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/2021/00475
Board (KIADB).	Report date	: 13/04/2021
	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 04/04/2021 to 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00475
Karnataka 560 001.	Date of Receipt	: 05/04/2021
	Analysis Start date	: 12/04/2021
	Analysis Completed date	

Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-666.41 Acres) Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00475	Near Perjenahalli Village	6:01 AM to 10:00 PM	44.3	63.0	52.8
RE/2021/00475	inear i erjenanam vinage	10:01 PM to 6:00 AM	37.2	49.2	42.8

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
\bigcirc	END OF THE REPORT
A los	
18/4/2	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/2021/00476
Board (KIADB).	Report date	: 13/04/2021
	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 04/04/2021 to 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00476
Karnataka 560 001.	Date of Receipt	: 05/04/2021
	Analysis Start date	: 12/04/2021
	Analysis Completed date	

Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-666.41 Acres) Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00476	Near Kurugal Village	6:01 AM to 10:00 PM	47.3	60.5	53.5
	in the table that the	10:01 PM to 6:00 AM	38.2	51.8	44.5

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,
	Report Status: - The measured values for the above locations are within the standard
	END OF THE REPORT
Q_	
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/2021/00481
Board (KIADB).	Report date	: 13/04/2021
	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 05/04/2021 to 06/04/2021
Race Course Road, Bengaluru,	Job Order No	:RE/2021/00481
Karnataka 560 001.	Date of Receipt	: 06/04/2021
Sample Particulars: Noice Menitorian for 24 h	Analysis Start date	: 12/04/2021
	Analysis Completed date	

Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	Leq dB(A)
RE/2021/00481 Near Vemagal town	6:01 AM to 10:00 PM	47.3	74.6	59.4	
	and a second bar town	10:01 PM to 6:00 AM	39.7	58.3	48.1

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.		
0	END OF THE REPORT		
et .			
13/2121	SZ RN 101-110		
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/2021/00482
Report date	: 13/04/2021
Ref.	: Test Request Form
Date of Sampling	: 05/04/2021 to 06/04/2021
Job Order No	: RE/2021/00482
Date of Receipt	: 06/04/2021
Analysis Start date	: 12/04/2021
Analysis Completed date	: 13/04/2021

Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-666.41 Acres) Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00482 Near Sujjanahalli Village	6:01 AM to 10:00 PM	46.1	60.9	53.0	
		10:01 PM to 6:00 AM	38.7	48.6	43.4

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
Q	
Verified by	So B B 13/04/21 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/2021/00483
Board (KIADB). No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 13/04/2021
	Ref.	: Test Request Form
	Date of Sampling	: 05/04/2021 to 06/04/2021
	Job Order No	: RE/2021/00483
	Date of Receipt	: 06/04/2021
	Analysis Start date	: 12/04/2021

 Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-666.41 Acres).

 Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00483 Near Thokalagatta	6:01 AM to 10:00 PM	47.9	61.2	54.1	
	Village	10:01 PM to 6:00 AM	37.1	53.7	44.6

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 standard
0	END OF THE REPORT
13/11/21	Authorized Signatory
Verified by	3-00 Kloy 12



(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/2021/00484
Board (KIADB).	Report date	: 13/04/2021
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Ref.	: Test Request Form
	Date of Sampling	: 05/04/2021 to 06/04/2021
	Job Order No	: RE/2021/00484
	Date of Receipt	: 06/04/2021
	Analysis Start date	: 12/04/2021

 Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-666.41 Acres).

 Sample Particulars: Noise Monitoring for 24 hours.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00484 Near Hullanakallu Village	6:01 AM to 10:00 PM	44.2	61.2	52.0	
	in the second se	10:01 PM to 6:00 AM	34.3	53.7	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 standa		
	END OF THE REPORT		
13/4/21	Sopraloula		
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/2021/00485
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00485
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Borowall Wetan Article Area, Kolar District, Karnataka	Sampling Protocol	: E/WP/65

si

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.			15 10500: 2012	
1	Color (hazen units)	<2.0	5	15	
2	Odour	Agreeable	Agreeable	15	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	7.81		Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
4	Turbidity, NTU		6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
5	Chloride as Cl, mg/L	0.2	1	5	IS 3025 (Part - 10): 1984 Reaff.2017
6	Total hardness as CaCO ₃ , mg/L	184.9	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	506.5	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
8	Magnasia Ca, mg/L	47.9	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
	Magnesium as Mg, mg/L	93.9	30	100	IS 3025 (Part 40), 1991 Reaff.2019
9	Total dissolved Solids, mg/L	606.0	500	2000	IS 3025 (Part – 46): 1994 Reaff.2019
10	Sulphate as SO4, mg/L	41.2	200	400	IS 3025 (Part - 16): 1984 Reaff.2017
11	Nitrate as NO ₃ , mg/L	0.6	45.0		IS 3025 (Part – 24): 1986 Reaff.2019
12	Fluoride as F, mg/L	0.2		No relaxation	APHA 23 rd Edition
13	Iron as Fe, mg/L	BDL	1.0	1.5	APHA 23 rd Edition
14	Lead as Pb, mg/L	a second and a second as a	0.3	No relaxation	APHA 23 rd Edition
.5	Copper as Cu, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
6	Zinc as Zn, mg/L	BDL	0.05	1.5	APHA 23 rd Edition
	2.110 03 211, 111g/ L	BDL	5	15	IS 3025 (Part – 49): 1994 Reaff 2019

whit 13/04/21 Verified by

5-0316104/21 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/2021/004		
(KIADB).	Report date	: 16/04/2021	
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form	
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021	
Karnataka 560 001.	Job Order No	: RE/2021/00485	
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Date of Sampling	: 05/04/2021	
	Analysis start date	:06/04/2021	
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021	
	Sampling Protocol	: E/WP/65	
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Borewell Water – Near Singihalli Village.	. (Ext-666.41 A).		

SI. No.	Tests	Results	10 4 9 7 9 7 7 7 7 7	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05		
18	Dissolved oxygen, mg/L	3.1	0.05	No relaxation	APHA 23 rd Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, P	b: 0.01 7p: 0.0		-	APHA 23 rd Edition
Rem	arks: The given water cample		03, 304. 3.0, NO3: 5.0), F: 0.1.	
	arks: The given water sample	e complies to i	5. 10500-2012 speci	fication for above tested p	arameters.
				E REPORT	
	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



Report date Reference Sample receipt date lob Order No	: RE/2021/00486 : 16/04/2021 : Test Request Form : 05/04/2021
Sample receipt date	: Test Request Form : 05/04/2021
	: 05/04/2021
lob Order No	
	: RE/2021/00486
Date of Sampling	: 05/04/2021
Analysis start date	: 06/04/2021
Analysis completion date	: 16/04/2021
ampling Protocol	: E/WP/65
An An	alysis start date alysis completion date

SI. No.	Tests	Results	Protocol
		Results	FIGCOCOL
	cription: Colorless liquid.		
1	Color (hazen units)	<2.0	IS 2025 (Dent 4) 1000 -
2	Odour	Agreeable	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	7.97	IS 3025 (Part - 5): 1983 Reaff.2018
4	Turbidity, NTU		IS 3025 (Part – 11): 1983 Reaff.2017
5	Chloride as Cl, mg/L	4.8	IS 3025 (Part – 10): 1984 Reaff.2017
6	Total hardness as CaCO ₃ , mg/L	149.9	IS 3025 (Part – 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	193.4	IS 3025 (Part – 21): 2009 Reaff.2019
8	Magnesium as Mg, mg/L	42.4	IS 3025 (Part – 40): 1991 Reaff.2019
9	Total dissolved Solids, mg/L	21.2	IS 3025 (Part – 46): 1994 Reaff.2019
10	Sulphate as SO4, mg/L	442.0	IS 3025 (Part – 16): 1984 Reaff.2017
11		41.6	IS 3025 (Part – 24): 1986 Reaff.2019
12	Nitrate as NO ₃ , mg/L	3.2	APHA 23 rd Edition
	Fluoride as F, mg/L	0.3	APHA 23 rd Edition
13	Iron as Fe, mg/L	BDL	APHA 23 rd Edition
14	Lead as Pb, mg/L	BDL	
15	Copper as Cu, mg/L	BDL	IS 3025 (Part – 47): 1994 Reaff 2019
16	Zinc as Zn, mg/L	BDL	APHA 23 rd Edition
			IS 3025 (Part – 49): 1994 Reaff 2019

104/21 Verified by

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/2021/00486	
(NADB).	Report date	: 16/04/2021	
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form	
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021	
Karnataka 560 001.	Job Order No : RE/2021/00486		
	Date of Sampling	: 05/04/2021	
	Analysis start date	: 06/04/2021	
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021	
Name of the Industrial Area: Vemagal Industrial Area to the	Sampling Protocol :	E/WP/65	
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Lake Water - Near Singihalli Village.	. (Ext-666.41 A).		

No.	Tests	Results	Protocol
17	Chromium as Cr, mg/L		
18	Dissolved oxygen, mg/L	BDL	APHA 23 rd Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, Pb: 0.01, Zn: 0.	3.0	APHA 23 rd Edition
	Front 16/02/21		C 8B 16/04/21
	Frult 16/02/21 Verified by		S-85 16/04/21 Authorized by



(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 date Reference	: RE/2021/00487 : 16/04/2021
Poforonce	
Reference	: Test Request Form
Sample receipt date	: 05/04/2021
Job Order No	: RE/2021/00487
Date of Sampling	: 05/04/2021
	: 06/04/2021
	: 16/04/2021
Sampling Protocol	: E/WP/65
	Job Order No Date of Sampling Analysis start date

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
	ription: Colorless liquid.			10 10000. 2012	
1	Color (hazen units)	<2.0	5	45	
2	Odour	Agreeable	Agreeable	15	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	7.66		Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
4	Turbidity, NTU		6.5 - 8.5	No relaxation	IS 3025 (Part - 11): 1983 Reaff.2017
5	Chloride as Cl, mg/L	0.2	1	5	IS 3025 (Part - 10): 1984 Reaff.2017
6	Total hardness as CaCO ₃ , mg/L	194.9	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	354.5	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
8	Magnosium as Marcu (60.8	75	200	IS 3025 (Part - 40): 1991 Reaff.2019
9	Magnesium as Mg, mg/L	49.2	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
10	Total dissolved Solids, mg/L	552.0	500	2000	IS 3025 (Part 46), 1994 Reaff.2019
	Sulphate as SO ₄ , mg/L	41.2	200	400	IS 3025 (Part - 16): 1984 Reaff.2017
11	Nitrate as NO ₃ , mg/L	1.5	45.0	No relaxation	IS 3025 (Part – 24): 1986 Reaff.2019
12	Fluoride as F, mg/L	0.3	1.0		APHA 23 rd Edition
13	Iron as Fe, mg/L	BDL	0.3	1.5	APHA 23 rd Edition
14	Lead as Pb, mg/L	BDL		No relaxation	APHA 23 rd Edition
15	Copper as Cu, mg/L	BDL	0.01	No relaxation	IS 3025 (Part - 47): 1994 Reaff 2019
16	Zinc as Zn, mg/L	12012000	0.05	1.5	APHA 23 rd Edition
		BDL	5	15	IS 3025 (Part - 49): 1994 Reaff 2019

6/04/21 Verified by

5-01516/04/21 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 (KIADB).						No.	: RE/2021/00487	
[1/1	IADBJ.		Report		: 16/04/2021			
No	.49, 4th & 5th Floor, Eas	t Wing, Kha	iniia Bhavan		Referen		: Test Request Form	
Rac	ce Course Road, Bengalu	irii			e receipt date	: 05/04/2021		
Kar	rnataka 560 001.	ru,	Job Ord		: RE/2021/00487			
	Contraction of the Contraction o			Sampling	: 05/04/2021			
						s start date	: 06/04/2021	
Sam	nple Qty: 2 Ltrs					s completion date	: 16/04/2021	
Nam	ne of the Industrial Area: Ver	magal Industri	ial Aroa, Kalar Distric	a successive second		ng Protocol	: E/WP/65	
iam	ple Particulars: One sample of	of Borewell W	al Area, Kolar District	t, Karnataka.	(Ext-666.4)	1 A).		
		JI DOIEWEII W	ater - Near Harjenar	nalli Village.				
SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maxim Permissibl IS 10500:	ble Limit Pr		otocol	
17	Chromium as Cr, mg/L	BDL	0.05					
18	Dissolved oxygen, mg/L	3.2		No relaxa	ation		3 rd Edition	
lote	: BDL for Cr: 0.05, Fe: 0.05, Pl	b. 0.01 7p. 0.0	-	-			3 rd Edition	
em	arks: The given water sample	complies to	J5, 504: 5.0, NO3:5.0,	, F: 0.1.				
	arks: The given water sample	2 complies to i	S: 10500-2012 specif	lication for al	bove tester	d parameters.		
			END OF THE	REF UN I				
	Verified by	ł				Sel	80,6104/21 ized 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



Sample receipt date	: RE/2021/00488 : 16/04/2021 : Test Request Form : 05/04/2021
Sample receipt date	: Test Request Form
Sample receipt date	
	. 03/04/2021
Job Order No	: RE/2021/00488
Date of Sampling	: 05/04/2021
Analysis start date	: 06/04/2021
Analysis completion date	: 16/04/2021
Sampling Protocol	: E/WP/65
D A A	ate of Sampling nalysis start date nalysis completion date

SI. No.	Tests	Results	Protocol
Des	cription: Colorless liquid.		
1	Color (hazen units)		
2	Odour	<2.0	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
4	Turbidity, NTU	8.02	IS 3025 (Part – 11): 1983 Reaff.2017
5	Chloride as Cl, mg/L	6.2	IS 3025 (Part – 10): 1984 Reaff.2017
6	Total hardness as CaCO ₃ , mg/L	154.9	IS 3025 (Part – 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	147.3	IS 3025 (Part – 21): 2009 Reaff.2019
8	Magnesium as Mg, mg/L	35.02	IS 3025 (Part – 40): 1991 Reaff.2019
9	Total dissolved Solids, mg/L	14.5	IS 3025 (Part – 46): 1994 Reaff.2019
10	Sulphate as SO4, mg/L	458.0	IS 3025 (Part – 16): 1984 Reaff.2017
11	Nitrate as NO ₃ , mg/L	16.0	IS 3025 (Part – 24): 1986 Reaff.2019
12	Fluoride as F, mg/L	3.5	APHA 23 rd Edition
13	Iron as Fe, mg/L	0.3	APHA 23 rd Edition
13	Lead as Pb, mg/L	BDL	APHA 23 rd Edition
15		BDL	IS 3025 (Part – 47): 1994 Reaff 2019
16	Copper as Cu, mg/L	BDL	APHA 23 rd Edition
10	Zinc as Zn, mg/L	BDL	IS 3025 (Part – 49): 1994 Reaff 2019

Linte 16/04/21 Verified by

5-3016/04/21 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/2021/00488
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00488
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Laka Water - North Area, Kolar District, Karnataka	Sampling Protocol	: E/WP/65
Sample Particulars: One sample of Lake Water - Near Harjenahalli Village.	. (Ext-666.41 A).	

SI. No.	Tests	Results	Protocol
17	Chromium as Cr, mg/L	BDL	
18	Dissolved oxygen, mg/L		APHA 23 rd Edition
lote	: BDL for Cr: 0.05, Fe: 0.05, Pb: 0.01, Zn:	3.0	APHA 23 rd Edition
	RIL		
	fronter		
	Verified by		Authorized by



(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/2021/00489
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00489
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak Sample Particulars: One sample of Personal West	Sampling Protocol	: E/WP/65

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.			13 10300: 2012	
1	Color (hazen units)	<2.0	5	45	
2	Odour	Agreeable		15	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	8.27	Agreeable	Agreeable	IS 3025 (Part - 5): 1983 Reaff.2018
4	Turbidity, NTU		6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
5	Chloride as Cl, mg/L	0.2	1	5	IS 3025 (Part - 10): 1984 Reaff.2017
6	Total hardness as CaCO ₃ , mg/L	209.9	250	1000	IS 3025 (Part - 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	368.3	200	600	IS 3025 (Part - 21): 2009 Reaff.2019
8	Magnesium as Mg, mg/L	95.8	75	200	IS 3025 (Part - 40): 1991 Reaff.2019
9		31.3	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
10	Total dissolved Solids, mg/L	855.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
11	Sulphate as SO ₄ , mg/L	40.3	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
12	Nitrate as NO ₃ , mg/L	7.1	45.0	No relaxation	APHA 23 rd Edition
	Fluoride as F, mg/L	0.2	1.0	1.5	APHA 23 rd Edition
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	
4	Lead as Pb, mg/L	BDL	0.01	No relaxation	APHA 23 rd Edition
15	Copper as Cu, mg/L	BDL	0.05	1.5	IS 3025 (Part - 47): 1994 Reaff 2019
16	Zinc as Zn, mg/L	BDL	5		APHA 23 rd Edition
			2	15	IS 3025 (Part - 49): 1994 Reaff 2019

69/21 erified by

5381 16/04/21 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/2021/00489
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00489
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Borewell Water – Near Perjenahalli Village	. (Ext-666.41 A).	

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	
18	Dissolved oxygen, mg/L	2.36			APHA 23 rd Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, Pl	b: 0.01 Zp: 0.0	05 SOULE O NO LE O	-	APHA 23 rd Edition
Rem	arks: The given water sample	complies to	IS: 10500 2012	, F: U.1.	
	o de la complete	complies to l	13. 10300-2012 speci	fication for above tested p	parameters.
			END OF TH	E REPORT	an neu y
	\bigcap i i				
	11. ality				
	16604/21				
	10009101				C-RBUDUDI
	Verified by				So BB 16/04/21 Authorized by
					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/2021/00490
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00490
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
Name of the Industrial Area: Vemagal Industrial Area, K. L. T.	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Borewell Water – Near Kurugal Village.	a. (Ext-666.41 A).	

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
	ription: Colorless liquid.			10 10000. 2012	
1	Color (hazen units)	<2.0	5	15	
2	Odour	Agreeable	Agreeable	15	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	7.52		Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
4	Turbidity, NTU	0.2	6.5 - 8.5	No relaxation	IS 3025 (Part - 11): 1983 Reaff.201
5	Chloride as Cl, mg/L		1	5	IS 3025 (Part - 10): 1984 Reaff.201
6	Total hardness as CaCO ₃ , mg/L	139.95	250	1000	IS 3025 (Part - 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	377.5	200	600	IS 3025 (Part - 21): 2009 Reaff.2019
8	Magnesium as Mg, mg/L	66.4	75	200	IS 3025 (Part - 40): 1991 Reaff.2019
9	Total dissolved Solids, mg/L	51.4	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
10	Sulphate as SO ₄ , mg/L	552.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
11		15.6	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
	Nitrate as NO ₃ , mg/L	9.2	45.0	No relaxation	APHA 23 rd Edition
12	Fluoride as F, mg/L	0.2	1.0	1.5	APHA 23 rd Edition
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	APHA 23 rd Edition
15	Copper as Cu, mg/L	BDL	0.05	1.5	IS 3025 (Part - 47): 1994 Reaff 2019
6	Zinc as Zn, mg/L	BDL	5		APHA 23 rd Edition
		P	5	15	IS 3025 (Part – 49): 1994 Reaff 2019

6104/21

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/2021/00490
(NADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00490
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs.	Analysis completion date	: 16/04/2021
Name of the Industrial Area: Vemagal Industrial Area Kill		: E/WP/65
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. Sample Particulars: One sample of Borewell Water – Near Kurugal Village.	(Ext-666.41 A).	1

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 relevet	
18	Dissolved oxygen, mg/L	3.1		No relaxation	APHA 23 rd Edition
Note	BDL for Cr: 0.05, Fe: 0.05, P	b: 0.01 7p: 0.0		-	APHA 23 rd Edition
Rema	irks: The given water sample	Complies to I	5, 304: 5.0, NO3: 5.0), F: 0.1.	
	rks: The given water sample	complies to I	5: 10500-2012 speci	fication for above tested p E REPORT	arameters.
	Verified by	1			Authorized by
			Daga 2 - f		

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/2021/00491
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00491
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
Name of the Industrial Area: Vemagal Industrial Area II I and	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Borewell Water – Near Vemagal Village.	a. (Ext-666.41 A).	

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	
2	Odour	Agreeable	Agreeable	15	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	6.77	6.5 - 8.5	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
4	Turbidity, NTU	0.2		No relaxation	IS 3025 (Part - 11): 1983 Reaff.2017
5	Chloride as Cl, mg/L		1	5	IS 3025 (Part - 10): 1984 Reaff.2017
6	Total hardness as CaCO ₃ , mg/L	139.95	250	1000	IS 3025 (Part - 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	345.3	200	600	IS 3025 (Part - 21): 2009 Reaff.2019
8	Magnesium as Mg, mg/L	82.9	75	200	IS 3025 (Part - 40): 1991 Reaff.2019
9	Total dissolved Solids, mg/L	33.5	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
10	Sulphate as SO ₄ , mg/L	484.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
11		8.1	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
12	Nitrate as NO ₃ , mg/L	5.9	45.0	No relaxation	APHA 23 rd Edition
13	Fluoride as F, mg/L	0.3	1.0	1.5	APHA 23 rd Edition
	Iron as Fe, mg/L	BDL	0.3	No relaxation	
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	APHA 23 rd Edition
15	Copper as Cu, mg/L	BDL	0.05	1.5	IS 3025 (Part – 47): 1994 Reaff 2019
16	Zinc as Zn, mg/L	BDL	5	1.5	APHA 23 rd Edition
			-	13	IS 3025 (Part - 49): 1994 Reaff 2019

16604/21

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/2021/00491
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00491
1011010101001.	Date of Sampling	: 05/04/2021
	Analysis start date	:06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Borewell Water – Near Vemagal Village.	. (Ext-666.41 A).	

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	
18	Dissolved oxygen, mg/L	3.6	-	The relaxation	APHA 23rd Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, P	b: 0.01 7p: 0.0	15 SOULE O NO LE O	-	APHA 23 rd Edition
Rem	arks: The given water sample	Complies to I	5, 304, 3.0, NO3:5.0	, F: U.1.	
	arks: The given water sample	e complies to i	5: 10500-2012 speci	fication for above tested pa E REPORT	arameters.

Page 2 of 2



-

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 Board	Report No.	: RE/2021/00492
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00492
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak Sample Particulars: One sample of Borewell Water – Near Thokalagatta Villag	a. (Ext-666.41 A). ge.	

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
	ription: Colorless liquid.			10 10000. 2012	
1	Color (hazen units)	<2.0	5	15	10.0000
2	Odour	Agreeable	Agreeable	15	IS 3025 (Part- 4): 1983 Reaff.2017
3	pH Value	8.16	6.5 - 8.5	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
4	Turbidity, NTU	0.2	0.5 - 8.5	No relaxation	IS 3025 (Part - 11): 1983 Reaff.2017
5	Chloride as Cl, mg/L		1	5	IS 3025 (Part - 10): 1984 Reaff.2017
6	Total hardness as CaCO ₃ , mg/L	609.8	250	1000	IS 3025 (Part - 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	874.8	200	600	IS 3025 (Part - 21): 2009 Reaff.2019
8	Magnesium as Mg, mg/L	197.2	75	200	IS 3025 (Part - 40): 1991 Reaff.2019
9		92.8	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
10	Total dissolved Solids, mg/L	1186.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
11	Sulphate as SO ₄ , mg/L	32.9	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
	Nitrate as NO ₃ , mg/L	3.2	45.0	No relaxation	APHA 23 rd Edition
12	Fluoride as F, mg/L	0.2	1.0	1.5	APHA 23 rd Edition
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	APHA 23 rd Edition
15	Copper as Cu, mg/L	BDL	0.05	1.5	IS 3025 (Part – 47): 1994 Reaff 2019
16	Zinc as Zn, mg/L	BDL	5		APHA 23 rd Edition
			5	15	IS 3025 (Part - 49): 1994 Reaff 2019

Finle 16/64/21 erified by

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/2021/00492
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
Karnataka 560 001.	Job Order No	: RE/2021/00492
	Date of Sampling	: 05/04/2021
	Analysis start date	:06/04/2021
Sample Qty: 2 Ltrs	Analysis completion date	: 16/04/2021
Name of the Industrial Area: Vemagal Industrial Area	Sampling Protocol	: E/WP/65
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka Sample Particulars: One sample of Borewell Water – Near Thokalagatta Villag	. (Ext-666.41 A). e.	

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	
18	Dissolved oxygen, mg/L	4.9	-		APHA 23 rd Edition
Note	: BDL for Cr: 0.05, Fe: 0.05, P	b: 0.01. 7n: 0 (15 SO4: 5 0 NO- 15 0	-	APHA 23 rd Edition
Rem	arks: The given water sample	e complies to l	S: 10500 2012 anot	0, F: U.1.	
		e complica to l	5. 10500-2012 speci	E REPORT	arameters.
	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



Report date Reference Sample receipt date	: 16/04/2021 : Test Request Form
Sample receipt date	
	: 05/04/2021
Job Order No	: RE/2021/00493
Date of Sampling	: 05/04/2021
Analysis start date	: 06/04/2021
Analysis completion date	: 16/04/2021
Sampling Protocol	: E/WP/77
xt-666.41 A).	
AA	ob Order No Pate of Sampling Inalysis start date Inalysis completion date

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		
1	pH (20% Suspension)	7.63	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	163.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	490.7	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
4	Moisture,%	27.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.60	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	773.5	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
/	wagnesium wg, mg/Kg	80.4	Practical Manual for Hands on training GKVK Beng

Verified by 16/04/21

S-8B 16/04/21 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/2021/00493
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Bace Course Board, Banaralum	Sample receipt date	: 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00493
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Course of the second se	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	a (Ext-666 41 A)	
Sample Particulars: One Soil Sample- Near Singihalli Village.	(Ext 000.41 A).	

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	1.50	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	5.21	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	307.7	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	20.76	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	13.36	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	11.20	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	6.39	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	3.83	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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

16/04/21

50815 16/04/21 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



(KIADB).Report date: 16/04/2021No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.Reference: Test Request Sample receipt dateJob Order No: RE/2021/004Date of Sampling: 05/04/2021Analysis start date: 06/04/2021Analysis completion date: 16/04/2021Sample Qty: 1kgSampling Protocol	M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00494
NO.49, 4th & Sth Floor, East Wing, Khanija Bhavan, Sample receipt date : 05/04/2021 Race Course Road, Bengaluru, Job Order No : RE/2021/004 Karnataka 560 001. Date of Sampling : 05/04/2021 Analysis start date : 06/04/2021 Analysis completion date : 16/04/2021 Sample Qty: 1kg Sampling Protocol : 5/04/2021	(KIADB).	Report date	: 16/04/2021
Race Course Road, Bengaluru, Sample receipt date : 05/04/2021 Karnataka 560 001. Job Order No : RE/2021/004 Date of Sampling : 05/04/2021 Analysis start date : 06/04/2021 Analysis completion date : 16/04/2021 Sample Qty: 1kg Sampling Protocol	No.49, 4th & 5th Floor East Wing Khapila Bhaves	Reference	: Test Request Form
Karnataka 560 001. Date of Sampling : 05/04/2021 Analysis start date : 06/04/2021 Analysis completion date : 16/04/2021 Sample Qty: 1kg Sampling Protocol	Bace Course Bood, Beneslum	Sample receipt date	
Sample Qty: 1kg Sample Qty: 1kg Sample Qty: 1kg Sample Qty: 1kg		Job Order No	: RE/2021/00494
Sample Qty: 1kg Sampling Protocol - 5 (MP/77)	Karnataka 560 001.	Date of Sampling	: 05/04/2021
Sampling Protocol		Analysis start date	: 06/04/2021
Sampling Protocol	Sample Ot 41	Analysis completion date	: 16/04/2021
	Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka	Sampling Protocol	: E/WP/77
	Sample Particulars: One Soil Sample- Near Harjenahalli Village.	,	

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		
1	pH (20% Suspension)	7.35	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	173.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	392.4	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture,%	1.01	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	425.7	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	40.8	Practical Manual for Hands on training GKVK Bengaluru

02/21

533316104/21 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/2021/00494
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 05/04/2021
	Job Order No	: RE/2021/00494
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	:06/04/2021
Samula Ot. 41	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	a (Ext-666 41 A)	/ / //
Sample Particulars: One Soil Sample- Near Harjenahalli Village.	d. (Ext-000.41 A).	

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	3.52	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.008	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	5.95	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	298.0	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	3.6	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	10.4	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	22.2	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	5.4	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	4.5	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

16/04/21 Verified by

530D 16/04/21 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



Report No.	: RE/2021/00495
Report date	: 16/04/2021
Reference	: Test Request Form
Sample receipt date	: 05/04/2021
Job Order No	: RE/2021/00495
Date of Sampling	: 05/04/2021
Analysis start date	: 06/04/2021
Analysis completion date	: 16/04/2021
Sampling Protocol	: E/WP/77
(Ext-666.41.4)	
	Reference Sample receipt date Job Order No Date of Sampling

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		
1	pH (20% Suspension)	8.21	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	106.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	376.2	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
4	Moisture,%	2.93	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.68	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	1157.5	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	40.8	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

104/21 Verified by

508B16/04/21 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/2021/00495
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Board, Beneralium, Khanija Bhavan,	Sample receipt date	: 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00495
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	:06/04/2021
Sample Otiu 11-	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	a (Ext-666 41 A)	, ,
Sample Particulars: One Soil Sample- Near Perjenahalli Village.	d. (EXT-666.41 A).	

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	3.98	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.007	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	4.44	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	302.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	6.20	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	19.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	15.4	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	5.33	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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

64 21 erified by

5-81316/04/21 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



Kace Course Road, Bengaluru, Job Ord Karnataka 560 001. Date of	ence : Test le receipt date : 05/0 rder No : RE/2	04/2021 t Request Form 04/2021 2021/00496
Race Course Road, Bengaluru, Karnataka 560 001.	le receipt date : 05/0 rder No : RE/2	04/2021 2021/00496
Race Course Road, Bengaluru,Job OrdKarnataka 560 001.Date of	le receipt date : 05/0 rder No : RE/2	04/2021 2021/00496
Karnataka 560 001. Date of		
Date of	of Sampling · 05/0	
Analysi		04/2021
Anarysi	sis start date : 06/0	04/2021
Samala Oto 11	sis completion date : 16/0	04/2021
Sample Qty: 1kg Samplin	ling Protocol	
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka. (Ext-66 Sample Particulars: One Soil Sample- Near Kurugal village.	66 (11 A)	111

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		
1	pH (20% Suspension)	6.72	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	64.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	350.8	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture,%	4.27	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %		Practical Manual for Hands on training GKVK Bengaluru
6		1.26	Practical Manual for Hands on training GKVK Bengaluru
0	Calcium as Ca, mg/Kg	459.9	Practical Manual for Hands on training GKVK Bengaluru
/	Magnesium Mg, mg/Kg	40.8	Practical Manual for Hands on training GKVK Bengaluru

Soor Hloyh 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/2021/00496
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Pase Course Beed, Beed	Sample receipt date	: 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00496
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Course of the second se	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	a (Ext-666.41.4)	12/11///
Sample Particulars: One Soil Sample- Near Kurugal village.	Lett 000.41 AJ.	

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	6.17	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.009	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	4.86	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	250.3	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	14.3	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	20.7	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	8.97	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	9.16	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	6.78	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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

10/16/04/2/

Sold 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



Report No.	: RE/2021/00497
Report date	: 16/04/2021
Reference	: Test Request Form
Sample receipt date	: 05/04/2021
Job Order No	: RE/2021/00497
Date of Sampling	: 05/04/2021
Analysis start date	: 06/04/2021
Analysis completion date	: 16/04/2021
Sampling Protocol	: E/WP/77
Ext EEE AT AL	/ ///
	Report date Reference Sample receipt date Job Order No Date of Sampling

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		
1	pH (20% Suspension)	8.19	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	95.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	215.6	
4	Moisture,%	12.8	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %		Practical Manual for Hands on training GKVK Bengaluru
1. 17 M		0.54	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	666.4	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	116.4	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

Verified

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/2021/00497
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
	Sample receipt date	: 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00497
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Second Diverties	Analysis completion date	: 16/04/2021
Sample Qty: 1kg Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	Sampling Protocol	: E/WP/77

Sample Particulars: One Soil Sample- Near Sujjanahalli village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	15.56	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.005	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	4.74	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	142.9	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	8.72	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	12.59	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	16.58	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	8.26	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	7.51	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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

Verified by 16104/21

Sol 16/04/21 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/2021/00498
(KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Report date	: 16/04/2021
	Reference	: Test Request Form
	Sample receipt date	: 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00498
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Samula Otra Al-	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka	(Ext-666.41.4)	
Sample Particulars: One Soil Sample- Near Vemagal Village.	(LAC 000.41 A).	

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.		
1	pH (20% Suspension)	8.36	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	140.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	444.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
4	Moisture,%	11.9	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.77	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	1.000.00	Practical Manual for Hands on training GKVK Bengaluru
-		838.9	Practical Manual for Hands on training GKVK Bengaluru
/	Magnesium Mg, mg/Kg	62.4	Practical Manual for Hands on training GKVK Bengaluru

Verified by

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/2021/00498
(KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru,	Report date	: 16/04/2021
	Reference	: Test Request Form
	Sample receipt date	: 05/04/2021
	Job Order No	: RE/2021/00498
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Same of the	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	a (Ext-666.41.4)	
Sample Particulars: One Soil Sample- Near Vemagal Village.	. (ERC 000.41 A).	

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training GKVK Bengaluru
9	Sulphur as S, mg/Kg	2.11	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.007	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	3.52	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	32.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	5.3	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	19.9	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	11.7	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	5.99	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	11.5	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	<0.1	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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

Henty Verified by 16/09/21

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/2021/00499
(KIADB).	Report date	: 16/04/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00499
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
formula de la	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka	a (Ext-666.41.4)	
Sample Particulars: One Soil Sample- Near Thokalagatta village.	. (LAC 000.41 A).	

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.		
1	pH (20% Suspension)	7.02	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	38.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	398.2	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
4	Moisture,%	7.14	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.44	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	831.8	Practical Manual for Hands on training GKVK Bengaluru
/	wagnesium wg, mg/Kg	67.2	Practical Manual for Hands on training GKVK Bengaluru

100/21 erified by

Sold Diblar 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/2021/00499
(KIADB).	Report date	: 16/04/2021
No.49. 4th & 5th Floor East Wing Khanila Phanes	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 05/04/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00499
Karnataka 560 001.	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 1kg	Analysis completion date	: 16/04/2021
	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	a (Ext-666 41 A)	
Sample Particulars: One Soil Sample- Near Thokalagatta village.	. (LAT 000.41 A).	

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for the day of the second
9	Sulphur as S, mg/Kg	7.90	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	2012.000	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	0.008	Practical Manual for Hands on training GKVK Bengaluru
All the second	Phosphorous as P, mg/kg	4.36	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	45.60	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	5.68	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	14.3	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	20.95	Practical Manual for Hands on training GKVK Bengaluru
17		5.91	Practical Manual for Hands on training GKVK Bengaluru
	Nickel as Ni, mg/Kg	13.1	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 by

Sold 16/04/21 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/2021/00500
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Reference	: Test Request Form
	Sample receipt date	: 05/04/2021
	Job Order No	: RE/2021/00500
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
	Analysis completion date	: 16/04/2021
Sample Qty: 1kg	Sampling Protocol	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnatak	a (Ext-666 41 A)	, , , , ,
Sample Particulars: One Soil Sample- Near Hullanakallu village.	a. (LX1-000.41 A).	

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.		
1	pH (20% Suspension)	6.72	Practical Manual for Hands on training GKVK Bengaluru
2	Conductivity, µmhos/cm	48.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	249.3	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru
4	Moisture,%	3.57	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	0.96	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	737.1	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
	wiagnesium wig, mg/kg	25.2	Practical Manual for Hands on training GKVK Bengaluru

Verified by

5-0316/04/21 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/2021/00500
(KIADB).	Report date	: 16/04/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Reference	: Test Request Form
	Sample receipt date	: 05/04/2021
	Job Order No	: RE/2021/00500
	Date of Sampling	: 05/04/2021
	Analysis start date	: 06/04/2021
Sample Qty: 1kg	Analysis completion date	: 16/04/2021
	Sampling Destand	: E/WP/77
Name of the Industrial Area: Vemagal Industrial Area, Kolar District, Karnataka	a. (Ext-666.41 A)	
Sample Particulars: One Soil Sample- Near Hullanakallu village.	(interesting)	

SI. No.	Test	Result	Protocol
8	Colour	Brown	Dractical Manual Court
9	Sulphur as S, mg/Kg	3.60	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %		Practical Manual for Hands on training GKVK Bengaluru
11		0.007	Practical Manual for Hands on training GKVK Bengaluru
	Phosphorous as P, mg/Kg	5.45	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	118.99	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	11.81	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	28.89	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	19.64	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	The Pression	Practical Manual for Hands on training GKVK Bengaluru
17		4.54	Practical Manual for Hands on training GKVK Bengaluru
	Nickel as Ni, mg/Kg	14.57	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 by

Solt 16/04/11 Authorized by

Page 2 of 2