KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD



(A Government of Karnataka Undertaking)

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No. KIADB/JDTP/FCN:20456/ 5693 /2021-22

Date: 13/08/2021

To,

State Level Environment Impact Assessment Authority (SEIAA)

Room No. 706, 7th Floor, 4th Gate, M. S. Building, Bengaluru -560001, Karnataka.

Respect Sir/ Madam,

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 Mummigatti Industrial Area, KIADB at Mummigatti village, Dharwad Taluk & District, Karnataka to an extent of 509.19 Acres.

Ref.: 1. ToR issued by SEIAA on 13th June, 2013.

- 2. Environmental Public Hearing held on 24th June, 2015.
- 3. Environmental Clearance reference no.: No. SEIAA: 12: IND: 2013 dated 14th November, 2019.
- 4. General Condition imposed in the Environmental Clearance for submission of Half yearly Compliance @ Condition No. 6.

With reference to above subject, it is to be informed that SEIAA has issued Environmental Clearance for Establishment of Mummigatti Industrial Area, KIADB at Mummigatti village, Dharwad Taluk & District, Karnataka to an extent of 509.19 Acres, after finalizing the ToR issued by SEIAA on 13th June 2013 and after conducting the public hearing on 24th June, 2015.

In the said Environmental Clearance at the General Condition No. 6, it is stipulated that KIADB has to submit half yearly compliance report to all the conditions stipulated in the EC issued on 14th November, 2019.

Hence, the detailed point wise compliance report to all the conditions stipulated in the Environmental Clearance issued to Mummigatti 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 Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka.

For

KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD (KIADB)

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

Submission to

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

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

Prepared by

ROBUST MATERIALS TECHNOLOGY PRIVATE LIMITED

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

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

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1.0. PROJECT DETAILS:

- 1) Name of the Project: Development of Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka.
- 2) Environmental Clearance reference no.: No. SEIAA: 12: IND: 2013 dated 14-11-2019.
- 3) Total Plot Area: 206.06 Hectares (509.19 Acres).
- 4) ToR issued: ToR issued by SEIAA on 13th June, 2013.
- 5) Public Hearing: Public Hearing was conducted on 24th June, 2015.
- 6) Category of Industries: Orange and Green category.
- 7) Total Water requirement for the Industrial area: 2,634 KLD will be met by Malaprabha River/Borewells.
- 8) Total Wastewater generation: 1,227 KLD.
- 9) Total Power Requirement: 3,700 KW will be sourced from KPTCL.
- **10) Project Cost:** Rs. 273.97 Crores.
- 11) Schedule & Category: 7 (C) & B category.
- 12) Address of the Correspondence:

Chief Development Officer & Chief Engineer,

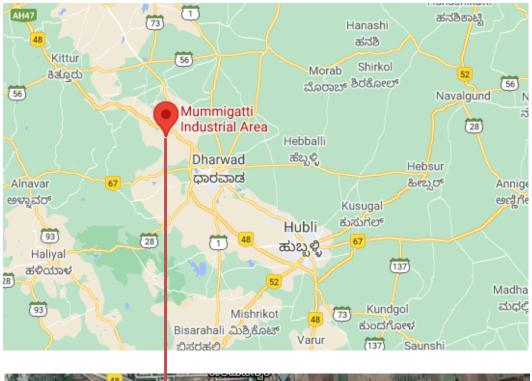
Karnataka Industrial Areas Development Board (KIADB),

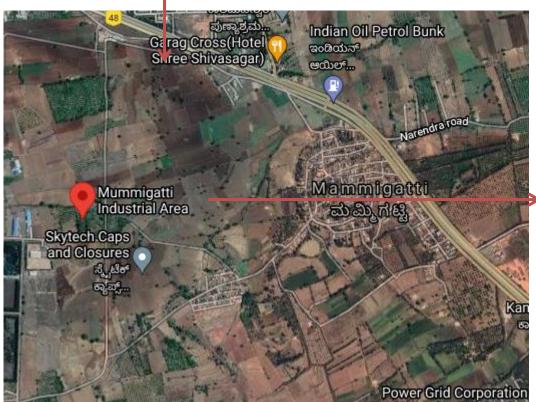
#49, 4th & 5th floors,

Khanija Bhavan, Race Course road,

Bengaluru- 560 001.

2.0. LOCATION MAP:





Mummigatt Industrial Area, Dharwad

Fig.1: Map showing Mummigatti Industrial Area, Dharwad.

3.0. Half Yearly Environmental Compliance Report for all the Conditions Stipulated in the Environmental Clearance issued with respect to Establishment of Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48Acres).

Sl. No.	CONDITIONS STIPULATED IN THE EC	COMPLIANCE STATUS
A	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 work 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, has been obtained on 25 th March 2021. 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 were provided to the workers in 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 advised to adapt 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 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 and complied. The construction debris will be reused / recycled for backfilling and for construction of roads and when necessary the debris is disposed in safe and secure manner as per the Construction and Demolition rules 2016.
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 were taken to keep the emission within the stipulated standards.
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 should be used as building material during the construction phase. The individual Industrial units will be directed 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 obtained by KIADB for digging the new Borewell from Central Ground Water Authority and no ground water will be drawn without permission from the Central/ State Ground Water Authority. Also during the operation phase, industries will also be informed about the same.
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 adopted wherever possible. During the operation phase, individual industries will be provided directions before allotting the plots, so as to comply with the Energy conservation measures as per ECBC, 2006 and its amendments.
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 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 re obtained from the approved quarries and construction materials shall also be procured from the authorized agencies/traders.
29	The Proponent shall obtain approval from competent authorities for structural safety of the building due to earthquake, adequacy of fire fighting equipment's etc. as per the National Building Code (NBC) including protection measures for lightening etc.	Noted and the same will be informed to the industries before allotment of the plots.
30	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.
31	Safety standards as per National Building Code (NBC), 2005 should be followed and ensured.	Noted and followed.

32	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.
33	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.
34	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.
35	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.
36	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 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.
37	The project authorities shall ensure the time specification prescribed by the honourable High Court of Karnataka in WP. No. 1958/2011 (LB-RES-PIL) on 04.12.2012 for different activities involved in construction work.	Noted.
38	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.	Noted. No alterations will be made in case of existing natural drainage patterns, water bodies, rajakaluve etc. and the buffer zone are provided in the required areas.

39	The project authorities shall leave required buffer from the boundary of lake and on either side of the channel / nala and other water bodies if any and this shall be free from any permanent structures. The buffer so maintained shall be planted with indigenous tree species 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 other than the area excavated for the purpose of construction of proposed building 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 of 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 are existing before the project.
42	The project Authorities will undertake all relevant measures, as indicated during the public hearing for improvising the Socio-economic conditions of the surrounding area.	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.
43	The Project Authority shall allow only general Engineering industries, automobile industries, and other small and medium scale industries of orange and green category as per the KSPCB/ CPCB guidelines. However individual industries attracting the provisions of EIA Notification shall be established only after obtaining prior E.C. from the competent authorities.	Noted. The Plots will only be allotted to 'B' Category industries as per the norms laid down by KSPCB. If any plots are allotted for Red category industries Individual industries will be informed that they are required to obtain EC and will be informed to do so as per the provisions of EIA notification 2006.
44	The project proponent shall impose a condition to the prospective allotees of industrial plots to undertake treatment and reuse of effluents.	Noted. Each industrial units are informed to treat and reuse the wastewater generated in the industry as per the rules and regulations laid down by competent authority. Also they are advised to adapt advanced wastewater treatment systems for effective treatment, so that the treated water meets the norms laid down by CPCB.

The project proponent shall undertake activities under Corporate Environmental Responsibility (CER) with a total cost of not less than Rs. 412 Lakhs supply, towards providing drinking water Development of infrastructure & sanitation facilities, Health camp & health awareness programmes, education & skill development, Agriculture livelihood enhancement activities, electrification including solar power, plantation development in avenue & community areas etc. within five years around the project site in accordance with the O.M.F. No.22-65/ 2017-IA.III dated 1st May 2018 and report to be submitted to the Authority.

Noted. Steps with respect to CSR/CER responsibilities are being taken. Allotted funds are being used for the development of infrastructure. Awareness programmes, training programmes, distributions of saplings for planting in forest areas are being done as part of CSR/ CER responsibilities.

II Operation Phase

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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.

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 development of a minimum of 33% of the project area which shall include the buffer zone and green belt developed by individual industries.	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 STP/ETP.	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 obtain Authorization for Collection, Storage and disposal of Hazardous waste under the Hazardous waste (Management, Handling and Tans boundary Movement) Rules, 2008 for management hazardous wastes and prior permission from KSPCB shall be obtained for collection/treatment/ Storage/disposal of solid/ hazardous waste to TSDF. The concerned authority shall undertake measures for fire fighting facilities in case of emergency.	Noted. Necessary authorization will be obtained 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.
16	The project authorities must strictly comply with 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.	Noted. Necessary approvals from the competent authority will be obtained for the safe disposal of hazardous waste as per the applicable rules and regulations.
17	Project Authorities shall ensure transportation, segregation and composting is done in accordance with the Municipal Solid Wastes (Management and Handling) Rules 2000.	Noted
18	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.
19	The individual industries shall take all necessary clearances including Environment clearance under EIA Notification 2006 wherever necessary 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.
20	The project authorities shall bifurcate the industrial plots and residential plots, if any with a thick and tall vegetative barrier green belt.	Noted.
21	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 issuance of Environmental 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 are obtained from the concerned authorities before the operation of the project and the same shall be informed to the industrial units.
2	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.
3	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.
4	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.
5	The implementation of the project vis-a-vis environmental action plans shall be monitored by MoEF, Regional office at Bangalore/ KSPCB/CPCB and the Department of Environment & Ecology, Bangalore.	Noted and will be complied.
6	A six monthly compliance status report shall be submitted to monitoring agencies. "The HYCRs with its contents of a covering letter, compliance reports and environmental monitoring data has to be in PDF format merged into a single document. The email should clearly mention the name of project, EC no & date, period of submission and to be sent to the Regional Office of MoEF&CC by email only at email Id rosz.bng-moefcc@gov.in. Hard copy of HYCRs shall not be acceptable.	Noted and will be complied.
7	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 or http://environmentalclearance.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.	Noted and complied.

8	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.
9	The SEIAA, Karnataka may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.	Noted.
10	The SEIAA, Karnataka reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted.
11	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.	Noted.
12	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.
13	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.
14	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.

15	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.
16	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.
17	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.
18	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.
19	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.
20	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	61.1	66.9	63.7
2	Particulate Matter PM _{2.5} , μg/m ³	60	21.5	26.6	23.8
3	Nitrogen Dioxide NO _{2,} μg/m ³	80	18.4	24	21.3
4	Sulphur dioxide as SO ₂ , μg/m ³	80	11.2	15.3	13.5

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

4.2. Ambient Noise Level Monitoring:

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

Sl. No.	Locations	Noise level in dB(A) Leq		CPCB Standard	
		Day	Night	Lday (Ld)	LNight (Ln)
1	Near Mummigatti Industrial Area- Project Site.	64.1	51.6	55	45
2	Near Mummigatti Village	54.3	43.7	55	45
3	Near Hiremalligawad Village	52.9	42.6	55	45
4	Near Kyarkoppa Village	53.3	42.9	75	70
5	5 Near Neeralakatti Village 52.6		43.4	75	70
6	Near Ramapur Village	54.0	43.2	55	45
7	Near Kelgeri Village	53.8	44.4	55	45
8	Near Narendra	54.7	44.6	55	45

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

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

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

4.3. Water Quality Monitoring:

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

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

SI. 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	6.8	7.3	7.0
4	Turbidity, NTU	0.4	3.8	1.1
5	Chloride as Cl, mg/L	98.5	344.9	189.7
6	Total hardness as CaCO _{3,} mg/L	133.3	488.8	220.5
7	Calcium as Ca, mg/L	35.5	106.7	50.0
8	Magnesium as Mg, mg/L	10.8	53.9	23.2
9	Total dissolved Solids, mg/L	372	1130	603.3
10	Sulphate as SO ₄ , mg/L	21.2	110.5	45.6
11	Nitrate as NO ₃ , mg/L	3.5	16.5	8.1
12	Fluoride as F, mg/L	0.4	1.2	0.8
13	Iron as Fe, mg/L	BDL	BDL	BDL
14	Lead as Pb, mg/L	BDL	BDL	BDL
15	Copper as Cu, mg/L	BDL	BDL	BDL
16	Zinc as Zn, mg/L	BDL	BDL	BDL
17	Chromium as Cr, mg/L	BDL	BDL	BDL
18	Dissolved oxygen, mg/L	1.6	3.4	2.34

4.4. Soil Quality Monitoring:

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

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

SI. No.	Soil Parameters	Minimum Value	Maximum Value	Average Value
1	pH (20% Suspension)	7.46	8.1	7.9
2	Conductivity, µmhos/cm	36	95.6	57.2
3	Chloride as Cl, mg/Kg	401.6	432.5	419.4
4	Moisture, %	4.1	13.6	9.1
5	Organic Matter, %	2.8	6.8	4.8
6	Calcium as Ca, mg/Kg	1.38	1602	817.3
7	Magnesium Mg, mg/Kg	336	1080	648.8
8	Colour	Brown	Brown	Brown
9	Sulphur as S, mg/Kg	7.5	23.8	18.2
10	Nitrogen as N, %	0.0168	0.05	0.029
11	Phosphorous as P, mg/Kg	6.8	136	31.0
12	Potassium as K, mg/Kg	210	422	319.4
13	Copper as Cu, mg/Kg	4.4	19.9	10.5
14	Chromium as Cr, mg/Kg	4.7	9.1	6.6
15	Zinc as Zn, mg/Kg	27.4	55.4	37.0
16	Lead as Pb, mg/Kg	6.2	14.8	10.4
17	Nickel as Ni, mg/Kg	< 1.0	< 1.0	< 1.0
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 12 IND 2013

Date: 14-11-2019

To,

The Development Officer & Executive Engineer Karnataka Industrial Area Development Board (KIADB) 4th & 5th Floor, Khanija Bhavan, East Wing, No. 49, Race Course Road, Bangalore – 560 001.

Sir.

Sub: Proposed Development of Mummigatti Industrial Area at Mummigatti Village, Dharwad Taluk & District by Karnataka Industrial Area Development Board (KIADB) - Issue of Environmental Clearance- reg.

* * * *

This has reference to your application dated 15th April 2013 and revised application dated 09th October 2019 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, Pre-Feasibility Report, EIA study report for proposed Development of Mummigatti Industrial Area and the additional clarifications furnished in response to the observations of the SEIAA and SEAC, Karnataka.

2. It is, inter-alia, noted that Karnataka Industrial Area Development Board (KIADB) had proposed for Development of Mummigatti Industrial Area on a total plot area of 385.45 Ha (950 Acres), and modified the project during the period of consideration of application by this authority and reduced the total extent to 206.06 Ha (509.19 Acres). Out of 509.19 Acres area, 239.32 Acres area is for Industrial Land, 50.20 Acres area is earmarked for KSSIDC, 9.77 Acres area is for Commercial purpose, 5.00 Acres area is for Amenities, 16.47 Acres area is for Utility, 25.49 Acres area is for Parking, 20.73 Acres area is for Parks, 83.99 Acres area is for Buffer Zone, 58.22 Acres area is for Roads. Total water requirement for the industrial area is 2,634 KLD will be met from Malaprabha River/ Bore wells. Total waste water generated is 1,227 KLD. It is proposed to construct Two Common Effluent Treatment plants (CETPs) each with a capacity of 0.6 MLD and One Common Sewage Treatment plants (CSTP) with a capacity of 0.5 MLD. Total power requirement is 3000 KW will be sourced from KPTCL. The project shall have DG sets of 250 KVA and 500 KVA as alternative source of power supply. The project cost is Rs. 273.97 Crores.

19/11/2019

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Proposed Development of Mummigatti Industrial Area by KIADB

- 3. The project proposal has been considered by SEAC during the meeting held on 17th & 18th May 2013 for issue of ToRs. Accordingly the ToR was issued on 13th June 2013. The EIA study has been conducted and report submitted by Ramky Enviro Engineers Pvt. Ltd., Ramky House, Raj Bhavan Road, Somajiguda, Hyderabad 500 082, who are accredited from NABET. Public consultation was held by KSPCB on 24th June 2015. The proponent has submitted the EIA report on 5th November 2015.
- 4. Based on the information submitted by you, presentation made by you and your consultant Ramky Enviro Engineers Pvt. Ltd. The State Level Expert Appraisal Committee (SEAC) examined the proposal in the meeting held on 28th December 2018 and has recommended for issue of Environmental Clearance.
- 5. The SEIAA Karnataka during the meeting held on 10th January 2019 duly considering the relevant documents submitted by the project proponent, additional clarifications furnished in response to its observations and the appraisal and recommendation of the SEAC has decided to accord Environmental Clearance in accordance with the provisions of Environment Impact Assessment Notification-2006 and its subsequent amendments, subject to strict compliance of the following terms and conditions:

PART-A- SPECIFIC CONDITIONS:-

I. Construction Phase:-

- 1. "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 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 area both during construction and operation phase.
- 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.

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Proposed Development of Mummigatti Industrial Area by KIADB

- 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.
- 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 neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- 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.

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Proposed Development of Mummigatti Industrial Area by KIADB

- 22. No ground water is to be drawn without permission from the Central/State Ground Water Authority.
- 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 fulfil requirement.
- 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.
- 29. The proponent shall obtain approval from the competent authorities for structural safety of the building due to earthquake, adequacy of firefighting equipment etc. as per the National Building Code (NBC) including protection measures for lightening etc.
- 30. The project authority shall ensure that no water bodies are polluted due to project activities.
- 31. Safety standards as per National Building Code (NBC), 2005 should be followed and ensured.
- 32. The project Authorities shall ensure that the National Building Code, 2005 is complied with and adhered to.
- 33. 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.
- 34. 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.
- 35. 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.
- 36. The project authorities shall strictly adhere to the commitments made 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.
- 37. The project Authorities shall ensure the time specification prescribed by the Honourable High Court of Karnataka in WP. No. 1958/2011 (LB RES PIL) on 04.12.2012 for different activities involved in construction work.
- 38. 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.

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Proposed Development of Mummigatti Industrial Area by KIADB

- 39. The project authorities shall leave required buffer from the boundary of lake and on either side of the channel / nala and other water bodies if any and this shall be free from any permanent structures. The buffer so maintained shall be planted with indigenous tree species and maintained as green belt.
- 40. 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 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 Authority will undertake all relevant measures, as indicated during the Public Hearing for improving the Socio-economic conditions of the surrounding area.
- 43. The project Authority shall allow only general Engineering industries, automobile industries, and other small and medium scale industries of orange and green category as per CPCB/KSPCB guidelines. However individual industries attracting the provisions of EIA Notification shall be established only after obtaining prior EC from the competent Authorities.
- 44. The project proponent shall impose a condition to the prospective allottees of industrial plots to undertake treatment and reuse of effluents.
- 45. The project authorities shall undertake activities under Corporate Environment Responsibility (CER) with a total cost of not less than Rs. 412 Lakhs towards providing drinking water supply, Development of infrastructure & sanitation facilities, Health camp & health awareness programmes, education & skill development, Aggriculture livelihood enhancement activities, electrification including solar power, plantation development in avenue & community areas etc. within five years around the project site in accordance with the O.M. F. No.22-65/2017-IA.III dated 01st May 2018 and report be submitted to the Authority.

II. Operation Phase:-

- 1. The Project Authority shall implement all the recommendations made in the Environmental Impact Assessment / EMP report and risk assessment report.
- 2. The project proponent shall establish CSTP and CETP as proposed with proper E.C required in accordance with E.A Notification 2016 amended from time to time
- 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 Karnataka State Pollution Control Board.

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Proposed Development of Mummigatti Industrial Area by KIADB

- 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 development of a minimum of 33% of the project area which shall include the buffer zone and green belt developed by individual industries.
- 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 bore well 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 finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the SEIAA, Karnataka in three months time.
- 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 STP/ETP.
- 14. The buildings 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 obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 for management of hazardous wastes and prior permission from KSPCB shall be obtained for collection/treatment/ storage/disposal of solid / hazardous waste to the TSDF. The concerned authority shall undertake measures for firefighting facilities in case of emergency.
- 16. 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.
- 17. Project Authorities shall ensure transportation, segregation and composting is done in accordance with the Municipal Solid Wastes (Management and Handling) Rules 2000.

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Proposed Development of Mummigatti Industrial Area by KIADB

- 18. 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.
- 19. The individual industries shall take all necessary clearances including Environment clearance under EIA Notification 2006 whenever necessary in accordance with the law. The project Authority shall incorporate such condition in the lease/ sale deed/ Agreement.
- 20. The project authorities shall bifurcate the industrial plots and residential plots, if any with a thick and tall vegetative barrier green belt.
- 21. 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.

PART-B. GENERAL CONDITIONS:-

- 1. The issuance 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.
- 2. The project authorities shall strictly adhere to the stipulations made by the Karnataka State Pollution Control Board (KSPCB).
- 3. 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.
- 4. The project proponent shall also comply with all the environmental protection measures and safeguards as per the information provided.
- 5. 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.
- 6. A six monthly compliance status report shall be submitted to monitoring agencies. "The HYCRs with its contents of a covering letter, compliance reports, and environmental monitoring data has to be in PDF format merged into a single document. The email should clearly mention the name of project, EC No & date, period of submission and to be sent to the Regional Office of MOEF&CC by email only at email ID rosz.bng-mefcc@gov.in Hard copy of HYCRs shall not be acceptable".
- 7. 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 or http://environmentclearance.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.
- The project authorities shall inform the MoEF Regional Office at Bangalore / KSPCB/ CPCB and the Department of Ecology and Environment, Bangalore.

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Proposed Development of Mummigatti Industrial Area by KIADB

- the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- 9. The SEIAA, Karnataka may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 10. The SEIAA, Karnataka reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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 CCF, Regional Office of MoEF, Bangalore/Department of Ecology and Environment, Bangalore/Regional Officer, KSPCB Bangalore.
- 16. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- 17. 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.
- 18. 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.
- 19. 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.

SEIAA 12 IND 2013

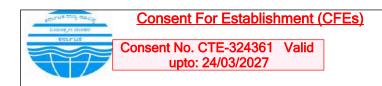
Proposed Development of Mummigatti Industrial Area by KIADB

20. 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.

(Vijaykumar Gogi)
Member Secretary,
SEIAA, Karnataka.

Copy to:

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



Karnataka State Pollution Control Board Parisara Bhavana,No.49, Church Street,Bengaluru-560001 Tele: 080-25589112/3, 25581383 Fax:080-25586321

email id: ho@kspcb.gov.in

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

Industry Scale: LARGE

Consent Order CTE-324361 PCB ID: 85168 Date. 25/03/2021

No.

To,

The Applicant

Industry Colour: RED

Proposed Development Of Mummigatti Industrial Area At Mummigatti Village Dharwa

The Development Officer, KAIDB ZOnal Office, Lakammanahalli Indl Area PB Road, D

Sir,

Sub: Consent to Establish under the Water (Prevention & Control of Pollution) Act, 1974 & the Air (Prevention & Control of Pollution) Act, 1981-reg.,

Ref: 1. CFE application submitted by the industry/organization on 02/03/2020 at Regional Office

2. Inspection of the project site by Regional Officer Dharwad on 09/06/2020

3. Proceedings of the CCM dated 05/12/2020 ,held on 02/12/2020

With reference to the above, Karnataka State Pollution Control Board hereby accords **Consent for Establishment** for new Activity under the Water (Prevention & Control of Pollution) Act, 1974 & the Air (Prevention & Control of Pollution) Act, 1981 at the location indicated below subject to the following terms & conditions.

Location:

Name of the Applicant: Proposed Development Of Mummigatti Industrial Area At Mummigatti Village

Dharwa

Address: various survey nos. of Mummigatti village, Dharwad Taluk & D, Various survey nos.

of Mummigatti, Hiremailligewada Kelageri

Industrial Area: LAKKAMANAHALLI INDL ESTATE, Mummigatti,

Taluk: Dharwad, District: Dharwad

Conditions:

1. This consent for establishment is valid up to 24/03/2027 from the date of issue.

2. The applicant shall not undertake expansion/diversification without the prior consent of the Board.

3. The applicant shall obtain necessary license/clearance from other relevant statutory agencies as required under the law

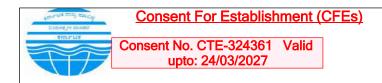
4. This consent is granted considering the following activities:

Sr	Product Name	Applied Qty/Month	Unit
1	Not Applicable	0.000	CBM

I. WATER CONSUMPTION:

1. The source of water shall be from Malaprabha River and total water consumption shall be as below.

Particulars	Water consumption(KLD)
Domestic Purpose	270.0



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email id: ho@kspcb.gov.in

Industry Scale: LARGE

II. WATER POLLUTION CONTROL:

Industry Colour: RED

(This document contains

1. The discharge from the premises of the applicant shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act or Rules made there under.

4 pages including annexure & excluding additional conditions)

- 2. The applicant shall treat the domestic wastewater from the factory in septic tank with soak pit. No overflow from the soak pit is allowed. The septic tank and soak pit shall be designed as per IS 2470 Part I and Part- II
- 3. The applicant shall treat the domestic wastewater in the Sewage Treatment Plant (STP) as per the proposal submitted. It shall meet the standards specified in Annexure-I & shall be used on land for gardening/greenbelt within the factory premises.
- 4. The quantity of domestic waste water and trade effluent generated from the proposed industry shall not exceed the permitted quantity as indicated below

Discharge of effluents under the Water Act:

Sl. No.	_	Permitted Quantity of discharge in KLD	Mode/Place of disposal
1	Domestic Purpose	243.000	Domestic purpose

5. The applicant shall treat the trade effluent in proposed ETP which consists of the following;

STP & ETP details

SlNo	ETP/STP NO	ETP Code	Category Name	Capacity (Meter Cubic)	Units	Remarks
1	STP1	STP	Sewage Treatment Plants	500.00	1	

- 6. The applicant shall ensure that the ETP will treat the effluent to the stipulated standards as indicated in Annexure-I
- 7. The applicant shall not discharge any effluent outside the industry premises.
- 8. The applicant shall provide separate flow meter for inflow & outflow of effluents through ETP and separate energy meter and shall maintain a logbook for hourly record of meter reading for the verification of inspecting officers
- 9. The applicant shall discharge the effluents only to the place mentioned in the Consent order.

III. AIR POLLUTION CONTROL:

- 1. The Source of emission, Stack height & Air Pollution Control (APC) measures shall be as specified in ANNEXURE-II.
- 2. The applicant shall provide port holes for sampling of emission, access platforms for carrying out stack sampling, electrical points and all other necessary arrangements including ladder as indicated in Annexure-II.
- 3. The applicant shall upgrade/modify/replace the control equipment with prior permission of the Board.

IV. NOISE POLLUTION CONTROL:

1. The applicant shall ensure that the ambient noise levels within its premises shall not exceed the limits i.e. 75 dB(A) Leq during day time and 70 dB(A) Leq during night time as specified in the Environment (Protection) Rules.

V. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:

- 1. The applicant shall collect, treat and dispose off all solid waste generated from the process other than wastes covered under the Hazardous and other Wastes (Management & Transboundry Movement) Rules 2016, in such manner so as not to cause environmental pollution.
- 2. The details of solid waste generated from the proposed plant and mode of disposal shall be as below.

Sı	Solid Waste Name/Type	Qty-Unit	Mode of Disposal
1	Muncipal Solid waste	30.0000 - M.T	OTH

VI. HAZARDOUS AND OTHER WASTES (MANAGEMENT & TRANSBOUNDRY MOVEMENT) RULES 2016:

1. The applicat shall apply and obtain authorization under Hazardous and Other Wastes (Management & Transboundry Movement) Rules 2016, and comply with the provisions of the said Rules.

Karnataka State Pollution Control Board Parisara Bhavana,No.49, Church Street,Bengaluru-560001 Tele: 080-25589112/3, 25581383 Fax:080-25586321

email id: ho@kspcb.gov.in

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

Industry Scale: LARGE

VII. GENERAL:

Industry Colour: RED

- 1. The applicant shall transport and store the raw materials in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.
- 2. The applicant shall not commission the proposed plant for trial or regular production unless necessary Water & air pollution control equipments are installed as specified in the Consent Order.
- 3. The applicant shall ensure that the treatment plant and control equipments are completed and commissioned simultaneously along with construction of the factory and erection of machineries.
- 4. The applicant shall not change or alter (a) raw materials or manufacturing process, (b) change the products or product mix (c) the quality, quantity or rate of discharge/emissions and (d) install/replace/alter the water or air pollution control equipments without the prior approval of the Board.
- 5. The applicant shall immediately report to the Board of any accident or unforeseen act or event resulting in release of discharge of effluents or emissions or solid wastes etc. in excess of the standards stipulated. And the shall immediately take appropriate corrective and preventive actions under intimation to the Board.
- 6. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the conditions.
- 7. This CFE does not give any right to the Party/Project Authority/Industry to forego any other legal requirement, that is necessary for setting/operation of the plant.
- 8. The applicant shall furnish pointwise compliance to the conditions given under this consent for establishment along with the application for Consent to operate.
- 9. The applicant is liable to reinstate or restore, damaged or destroyed elements of environment at his cost, failing which, applicant/occupier as the case may be shall be liable to pay the entire cost of remediation or restoration in advance an amount equal to the cost estimated by Competent Agency or Committee.
- 10. The applicant shall comply with all the Conditions and guidelines issued from time to time.
- 11. The applicant must create structure/facility for rain water harvesting and ground water recharge.
- 12. The applicant shall develop extensive green belt within the periphery of the plant.
- 13. This consent is issued without prejudice to Court Cases pending in any Hon'ble Court.

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

The receipt of this letter may please be acknowledged.

Consent Fee paid : Rs. 100000

Note:

The Conditions II(2),(6), III(2), IV(1), V(1)

mentioned in the schedule are not applicable.

Additional Conditions:

II(2),(6), III(2), IV(1), V(1), VI(1) & VII(4) these conditions are not applicable.

The project authorities shall strictly comply with the conditions stipulated in Annexure I contains 12 pages.

The CFE is issued as per the recommendations of the Enforcement Committee Meeting held on 02.12.2020 & duly approved by Member Secretary & Hon'ble Chairman.

Page-3 e_outwardno40058--25/03/2021

Karnataka State Pollution Control Board Parisara Bhavana, No. 49, Church Street, Bengaluru-560001 Tele: 080-25589112/3, 25581383

Fax:080-25586321 email id: ho@kspcb.gov.in

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

Industry Scale: LARGE

COPY TO:

Industry Colour: RED

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

Chi m.N o.	Chimne y attached to	KVA	Minimum chimney height to be provided above ground level (in Mts)	Constituents to be controlled in the emission	Tolerance limits mg/NM3	Fuel	Control	Date of which air pollution control equipments shall be provided to achieve the stipulated tolerance limits and chimney heights
				ಕನಾ	೯ಟ	5		conforming to stipulated heights.
1	Cone Crusher	Not Applicabl e	0	PM(mg/NM3),SO2 (PPM),NOx(PPM)	NA			Before commissioning.

Note:

LOCATION OF SAMPLING PORTHOLES, PLATFORMS, ELECTRICAL OUTLET.

1. Location of Portholes and approach platform:

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

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

FOR AND ON BEHALF OF KARNATAKA POLLUTION CONTROLBOARD

> Signature Not Verified Digitally signed by Date: 2021.03.26 18:15:16 +05:30



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TEST REPORT



M/s. Karnataka Industrial Areas Development Board (KIADB). No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Report No.	: RE/2021/00714
	Report date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 24/06/2021 to 25/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00714
Karnataka 560 001.	Date of Receipt	: 26/06/2021
	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti	i village, Dharwad Taluk & Dist	rict, Karnataka. (Ext-509.48A).
Sample Location: Near Mummigatti Industrial Area- Project Site.		

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	66.9	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , µg/m ³	25.7	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , μg/m ³	21.1	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	15.3	80	IS-5182 (P-02)

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

Details of Equipment used for monitoring					
Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler			
Model	Thermo TEI-108 NL	Thermo TEI-121			
Sl. No.	222-TEA-21	211-TEA-21			
Calibrated on date	25-01-2021	25-01-2021			
Calibration due date	22.01.2022	23.01.2022			

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

Verified by

Authorized Signatory



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TEST REPORT



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00715
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 24/06/2021 to 25/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00715
Karnataka 560 001.	Date of Receipt	: 26/06/2021
	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti	ti village Dhanwad Taluk & Dis	trict Karnataka (Ext EOO 191)

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A).

Sample Location: Near Mummigatti Village.

SI. No.	Parameters	Results	(As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	64.2	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , µg/m ³	23.3	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , μg/m ³	20.8	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	12.5	80	IS-5182 (P-02)

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

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

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

508329/06/21 **Authorized Signatory**



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(Approved by Drug Control Department-GoK; Certified by OHSAS-ISO 45001:2018)

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Email: info@robustmaterials.com Website: www.robustmaterials.com

TEST REPORT



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00716
La Carlo Car	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 24/06/2021 to 25/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00716
Karnataka 560 001.	Date of Receipt	: 26/06/2021
	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Location: Near Hiremalligawad Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	62.0	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , μg/m ³	21.5	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , μg/m ³	18.4	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	14.2	80	IS-5182 (P-02)

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

Details of Equipment used for monitoring					
Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler			
Model	Ecotech AAS 217-BL	Envirotech AAS 127-mini			
SI. No.	16-L-415	18-J-889			
Calibrated on date	25-08-2020	21-01-2021			
Calibration due date	24-08-2021	20-01-2022			

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

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TEST REPORT



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00717
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 24/06/2021 to 25/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00717
Karnataka 560 001.	Date of Receipt	: 26/06/2021
	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed da	ite : 29/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Location: Near Kyarkoppa Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	63.5	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , μg/m ³	22.6	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , µg/m ³	23.3	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	13.8	80	IS-5182 (P-02)

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

Name of the equipment	Respirable Dust Sampler	Fine Particulate Sampler	
Model	EcotechAAS 217 NL	EcotechAAS 217	
SI. No.	20-1-932	20-1-1165	
Calibrated on date	16-12-2020	16-12-2020	
Calibration due date	15-12-2021	15-12-2021	

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

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Sold 29 06/21 Authorized Signatory



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TEST REPORT



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00718
	Report date	: 29/06/2021
(KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 24/06/2021 to 25/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00718
Karnataka 560 001.	Date of Receipt	: 26/06/2021
moderate the secondary of the secondary	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village	. Dharwad Taluk & District.	Karnataka. (Ext-509.48A).

Sample Location: Near Neeralakatti Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	62.4	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , μg/m ³	25.3	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , μg/m ³	19.5	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	13.8	80	IS-5182 (P-02)

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

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

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S 01/29/06/21

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Email: info@robustmaterials.com Website: www.robustmaterials.com

TEST REPORT



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00719
Anna Spiritania mana	Report date	: 29/06/2021
(KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 24/06/2021 to 25/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00719
Karnataka 560 001.	Date of Receipt	: 26/06/2021
	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
	PART HILLS OF V AND SWIN CO.	

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A).

Sample Location: Near Ramapur Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	61.1	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , µg/m ³	23.7	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , μg/m ³	20.4	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	11.2	80	IS-5182 (P-02)

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

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

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

Verified by

Signatory Authorized Signatory



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

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

TEST REPORT



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00720
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 24/06/2021 to 25/06/2021
Râce Course Road, Bengaluru,	Job Order No	: RE/2021/00720
Karnataka 560 001.	Date of Receipt	: 26/06/2021
	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A).

Sample Location: Near Kelgeri Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	63.5	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , μg/m ³	21.8	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , μg/m ³	23.1	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	14.2	80	IS-5182 (P-02)

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

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

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

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TEST REPORT



M/s. Karnataka Industrial Areas Development	Report No.	: RE/2021/00721
	Report date	: 29/06/2021
Board (KIADB).	Ref.	: Test Request Form
No. 49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Date of Sampling	: 24/06/2021 to 25/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00721
Karnataka 560 001.	Date of Receipt	: 26/06/2021
	Analysis Start date	: 26/06/2021
Sample Particulars: Ambient Air Monitoring for 24 hrs.	Analysis Completed date	: 29/06/2021
Name of the Industrial Area Mummigatti Industrial Area Mummigatt	i villago Dhanuad Taluk & Dis	trict Karpataka /Evt 500 48A

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Location: Near Narendra Village.

SI. No.	Parameters	Results	Limits (As Per NAAQS) For 24hrs	Protocol
1	Particulate Matter PM ₁₀ , μg/m ³	65.8	100	IS-5182 (P-23)
2	Particulate Matter PM _{2.5} , μg/m ³	26.6	60	IS-5182 (P-24)
3	Nitrogen Dioxide NO ₂ , μg/m ³	24.0	80	IS-5182 (P-06)
4	Sulphur dioxide as SO ₂ , μg/m ³	12.9	80	IS-5182 (P-02)

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

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

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

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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/2021/00722
Report date	: 29/06/2021
Ref.	: Test Request Form
Date of Sampling	: 24/06/2021 to 25/06/2021
Job Order No	: RE/2021/00722
Date of Receipt	: 26/06/2021
Analysis Start date	: 28/06/2021
Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A).

Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
/ /	Near Mummigatti	6:01 AM to 10:00 PM	51.8	79.4	64.1
RE/2021/00722	Industrial Area- Project Site	10:01 PM to 6:00 AM	43.0	62.0	51.6

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.

As per CPCB Standards,

- *-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

Report Status: - The measured values for the above locations are within the standards.

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

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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.

Ī	Report No.	: RE/2021/00723
	Report date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 24/06/2021 to 25/06/2021
	Job Order No	: RE/2021/00723
	Date of Receipt	: 26/06/2021
	Analysis Start date	: 28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
//	Near Mummigatti	6:01 AM to 10:00 PM	46.2	63.8	54.3
RE/2020/00723	Village	10:01 PM to 6:00 AM	38.3	49.8	43.7

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

- Day Time is reckoned between 6 A.M and 10 P.M.
- · Night Time is reckoned between 10 P.M and 6 A.M.
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- 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

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M/s. Karnataka	Industrial Are	as Development
Board (KIADB).		

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

Report No.	: RE/2021/00724
Report date	: 29/06/2021
Ref.	: Test Request Form
Date of Sampling	: 24/06/2021 to 25/06/2021
Job Order No	: RE/2021/00724
Date of Receipt	: 26/06/2021
Analysis Start date	: 28/06/2021
Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
05/0004/00704	Near Hiremalligawad	6:01 AM to 10:00 PM	45.7	61.3	52.9
RE/2021/00724	Village	10:01 PM to 6:00 AM	37.9	47.9	42.6

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,
INFERENCE	Report Status: - The measured values for the above locations are within the standards.
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M/s. Karnataka Industrial Areas Development Board (KIADB).

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

Control of the Contro
: RE/2021/00725
: 29/06/2021
: Test Request Form
: 24/06/2021 to 25/06/2021
: RE/2021/00725
: 26/06/2021
: 28/06/2021
te: 28/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
/2024 /20725		6:01 AM to 10:00 PM	46.0	61.8	53.3
RE/2021/00725	Near Kyarkoppa Village	10:01 PM to 6:00 AM	38.2	48.3	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

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



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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/2021/00726
Report date	: 29/06/2021
Ref.	: Test Request Form
Date of Sampling	: 24/06/2021 to 25/06/2021
Job Order No	: RE/2021/00726
Date of Receipt	: 26/06/2021
Analysis Start date	: 28/06/2021
Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
RE/2021/00726 Near Neeralakatti Village	6:01 AM to 10:00 PM	46.3	62.7	52.6	
	Village	10:01 PM to 6:00 AM	38.4	49.0	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,
INFERENCE	Report Status: - The measured values for the above locations are within the standards.
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	END OF THE REPORT



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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/2021/00727
	Report date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 24/06/2021 to 25/06/2021
	Job Order No	: RE/2021/00727
	Date of Receipt	: 26/06/2021
	Analysis Start date	: 28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Particulars: Noise Monitoring for 24hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
DE /2024 /00727		6:01 AM to 10:00 PM	46.9	63.1	54.0
RE/2021/00727	Near Ramapur Village	10:01 PM to 6:00 AM	37.8	49.4	43.2

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

- Day Time is reckoned between 6 A.M and 10 P.M.
- Night Time is reckoned between 10 P.M and 6 A.M.
- Leg: 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.

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 "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear.

INTERPRINCE	As per CPCB Standards,
INFERENCE	Report Status: - The measured values for the above locations are within the standards.
	END OF THE REPORT
(0)	END OF THE REPORT

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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/2021/00728
	Report date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 24/06/2021 to 25/06/2021
	Job Order No	: RE/2021/00728
	Date of Receipt	: 26/06/2021
	Analysis Start date	: 28/06/2021
	Analysis Completed date	: 28/06/2021

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Particulars: Noise Monitoring for 24 hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
5/2024/00720		6:01 AM to 10:00 PM	45.2	64.1	53.8
RE/2021/00728	Near Kelgeri Village	10:01 PM to 6:00 AM	38.1	51.8	44.4

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.
- Leg: It is energy mean of the noise level over a specified period.
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- 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.

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

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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/2021/00729
	Report date	: 29/06/2021
	Ref.	: Test Request Form
	Date of Sampling	: 24/06/2021 to 25/06/2021
	Job Order No	: RE/2021/00729
	Date of Receipt	: 26/06/2021
	Analysis Start date	: 28/06/2021
	Analysis Completed date	: 28/06/2021
-		and the second of the second o

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48A). Sample Particulars: Noise Monitoring for 24 hrs.

J.O.No.	Location	Time Frequency	L min dB(A)	L max dB(A)	L eq dB(A)
DE /2021 /00720		6:01 AM to 10:00 PM	46.3	64.6	54.7
RE/2021/00729	Near Narendra Village	10:01 PM to 6:00 AM	38.3	52.0	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.
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- A "decibel" is a unit in which noise is measured.

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 "A", in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to Frequency response characteristics of the human ear.

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

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

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TEST REPORT



M/s. Karnataka Indu	strial Areas Development Board
(KIADB).	and a creation ment board

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

Report No.	: RE/2021/00738
Report date	: 29/06/2021
Reference	: Test Request Form
Sample receipt date	: 26/06/2021
Job Order No	: RE/2021/00738
Date of Sampling	: 24/06/2021
Analysis start date	: 26/06/2021
Analysis completion date	: 29/06/2021
Sampling Protocol	: E/WP/77

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)

Sample Particulars: One Soil Sample- Near Mummigatti Industrial Area- Project Site.

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.		
1	pH (20% Suspension)	8.1	Practical Manual Fault
2	Conductivity, µmhos/cm	95.6	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	420.5	Practical Manual for Hands on training GKVK Bengaluru
5		7.8	Practical Manual for Hands on training GKVK Bengaluru
77.77	Organic Matter, %	5.3	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	1602.0	Practical Manual for Hands on training GRVK Bengaluru
7	Magnesium Mg, mg/Kg	1080.0	Practical Manual for Hands on training GKVK Bengaluru
	0,116/16	1000.0	Practical Manual for Hands on training GKVK Bengaluru

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Email: info@robustmaterials.com Website: www.robustmaterials.com

Report No.

Report date

Reference

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.

 Sample receipt date
 : 26/06/2021

 Job Order No
 : RE/2021/00738

 Date of Sampling
 : 24/06/2021

 Analysis start date
 : 26/06/2021

 Analysis completion date
 : 29/06/2021

 Sampling Protocol
 : E/WP/77

: RE/2021/00738

: Test Request Form

: 29/06/2021

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)
Sample Particulars: One Soil Sample- Near Mummigatti Industrial Area- Project Site.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Proctice Manual Control
9	Sulphur as S, mg/Kg	20.5	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	Optionary.	Practical Manual for Hands on training GKVK Bengaluru
11		0.05	Practical Manual for Hands on training GKVK Bengaluru
terration and	Phosphorous as P, mg/Kg	15.6	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	325.0	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	6.6	Practical Manual for Hands on training GRVK Bengaluru
14	Chromium as Cr, mg/Kg	7.2	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	44.0	Practical Manual for Hands on training GKVK Bengaluru
		12.37	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	< 1.0	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	< 0.1	Practical Manual for Hands on training GKVK Bengaluru

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Report No.

Report date

TEST REPORT



: RE/2021/00739

: 29/06/2021

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

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

Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00739 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date : 29/06/2021 Sampling Protocol : E/WP/77

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample- Near Mummigatti Village.

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		9
1	pH (20% Suspension)	8.02	Practical Manual for Hands and the Comment
2	Conductivity, µmhos/cm	50.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	411.5	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %		Practical Manual for Hands on training GKVK Bengaluru
5		6.5	Practical Manual for Hands on training GKVK Bengaluru
	Organic Matter, %	6.8	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	856.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	586.0	Practical Manual for Hands on training GKVK Bengaluru

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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/2021/00739 Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00739 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date : 29/06/2021 Sampling Protocol

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)
Sample Particulars: One Soil Sample— Near Mummigatti Village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual fault
9	Sulphur as S, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	19.8	Practical Manual for Hands on training GKVK Bengaluru
11		0.023	Practical Manual for Hands on training GKVK Bengaluru
	Phosphorous as P, mg/Kg	21.5	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	220.0	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	13.4	Practical Manual for Hallds off training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	9.1	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
-		49.6	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	13.1	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	< 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 Practical Manual for Hands on training GKVK Bengaluru

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Report No.

Report date

Job Order No

Sample receipt date

Reference

TEST REPORT



: RE/2021/00740

: Test Request Form

: 29/06/2021

: 26/06/2021

: RE/2021/00740

M/s. Karnataka	Industrial Areas	Development Board
(KIADB).		- Trainpline in Board

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

Date of Sampling : 24/06/2021

Analysis start date : 26/06/2021

Analysis completion date : 29/06/2021

Sample Qty: 1kg

Sampling Protocol : E/WP/77

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample- Near Hiremalligawad Village.

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.	-	
1	pH (20% Suspension)	7.8	Practical Manual for Hands on training Class a
2	Conductivity, µmhos/cm	46.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	425.6	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %		Practical Manual for Hands on training GKVK Bengaluru
5		7.5	Practical Manual for Hands on training GKVK Bengaluru
	Organic Matter, %	4.5	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	802.0	Practical Manual for Hands on training GRVR Bengaluru
7	Magnesium Mg, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
0	megnesiam mg, mg/ ng	575.0	Practical Manual for Hands on training GKVK Bengaluru

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Report No.

Report date

TEST REPORT

M/s. Karnataka Industrial Areas Development Board

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

: 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00740 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date : 29/06/2021 Sampling Protocol

: RE/2021/00740

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample - Near Hiremalligawad Village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Proctical Manual 5
9	Sulphur as S, mg/Kg	Stations	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	7.5	Practical Manual for Hands on training GKVK Bengaluru
11		0.02	Practical Manual for Hands on training GKVK Bengaluru
	Phosphorous as P, mg/Kg	6.8	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	410.0	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	4.4	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	4.7	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
16		55.4	Practical Manual for Hands on training GKVK Bengaluru
	Lead as Pb, mg/Kg	6.7	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	< 1.0	Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	< 0.1	Practical Manual for Hands on training GKVK Bengaluru

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M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00741
(KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 29/06/2021
	Reference	: Test Request Form
	Sample receipt date	: 26/06/2021
	Job Order No	: RE/2021/00741
Mariataka 500 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021
Sample Qty: 1kg	Analysis completion date	: 29/06/2021
Name of the Industrial Area: Mummigatti Industrial Area, Adversion in	Sampling Protocol	: E/WP/77

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample— Near Kyarkoppa Village.

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.		
1	pH (20% Suspension)	7.7	Practical Manual for Hand
2	Conductivity, µmhos/cm	68.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	411.0	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	70.70	Practical Manual for Hands on training GKVK Bengaluru
5		8.0	Practical Manual for Hands on training GKVK Bengaluru
_	Organic Matter, %	3.7	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	1220.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	842.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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TEST REPORT

M/s. Karnataka Industrial Areas Development Board Report No. : RE/2021/00741 (KIADB). Report date : 29/06/2021 No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Reference : Test Request Form Sample receipt date Race Course Road, Bengaluru, : 26/06/2021 Job Order No : RE/2021/00741 Karnataka 560 001. Date of Sampling : 24/06/2021 Analysis start date

: 26/06/2021 Analysis completion date : 29/06/2021 Sample Qty: 1kg Sampling Protocol : E/WP/77

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample- Near Kyarkoppa Village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual Faul II
9	Sulphur as S, mg/Kg	22.5	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	Parky (All Services Services	Practical Manual for Hands on training GKVK Bengaluru
11		0.0168	Practical Manual for Hands on training GKVK Bengaluru
	Phosphorous as P, mg/Kg	20.1	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	286.0	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	19.9	Practical Manual for Hands on training GRVK Bengaluru
14	Chromium as Cr, mg/Kg	7.4	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	2752011	Practical Manual for Hands on training GKVK Bengaluru
16		27.9	Practical Manual for Hands on training GKVK Bengaluru
	Lead as Pb, mg/Kg	6.2	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	< 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

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Report No.

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M/s. Karnataka Industria	Areas Development Board
(KIADB).	a seriopinicite Board

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

Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00742 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date : 29/06/2021 Sampling Protocol

: RE/2021/00742

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample- Near Neeralakatti Village.

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.	1	
1	pH (20% Suspension)	7.46	Practical Manual for Hands
2	Conductivity, µmhos/cm	36.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	426.8	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %		Practical Manual for Hands on training GKVK Bengaluru
5		4.1	Practical Manual for Hands on training GKVK Bengaluru
	Organic Matter, %	4.8	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	635.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	419.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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Report No.

Report date

Job Order No

Sample receipt date

Reference

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.

Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date : 29/06/2021 Sampling Protocol

: RE/2021/00742

: Test Request Form

: 29/06/2021

: 26/06/2021

: RE/2021/00742

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)

Sample Particulars: One Soil Sample- Near Neeralakatti Village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Practical Manual for Hands on training CONTRA
9	Sulphur as S, mg/Kg	17.6	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	0.020	Practical Manual for Hands on training GKVK Bengaluru
11	Phosphorous as P, mg/Kg	14.5	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	210.0	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	19.9	Practical Manual for Hands on training GKVK Bengaluru
14	Chromium as Cr, mg/Kg	6.1	Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	30.5	Practical Manual for Hands on training GKVK Bengaluru
16	Lead as Pb, mg/Kg	12.2	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
18	Cadmium as Cd, mg/Kg	< 1.0	Practical Manual for Hands on training GKVK Bengaluru
10	cadmidin as cu, mg/kg	< 0.1	Practical Manual for Hands on training GKVK Bengaluru

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Report No.

Reference

Report date

Job Order No

Sample receipt date

TEST REPORT



: RE/2021/00743

: Test Request Form

: 29/06/2021

: 26/06/2021

: RE/2021/00743

M/s. Karnataka Industrial	Areas Development Board
(KIADB).	and a state princing board

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

Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date : 29/06/2021 Sampling Protocol : E/WP/77

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample- Near Ramapur Village.

SI. No.	Test	Result	Protocol
Desci	ription: Brown Colored Soil.		
1 .	pH (20% Suspension)	7.82	Practical Manual facility
2	Conductivity, µmhos/cm	52.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	432.5	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %		Practical Manual for Hands on training GKVK Bengaluru
5		11.6	Practical Manual for Hands on training GKVK Bengaluru
_	Organic Matter, %	2.8	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	1.38	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	736.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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TEST REPORT

M/s. Karnataka Industrial Areas Development Board Report No. : RE/2021/00743 (KIADB). Report date : 29/06/2021 No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Reference : Test Request Form Sample receipt date Race Course Road, Bengaluru, : 26/06/2021 Job Order No Karnataka 560 001. : RE/2021/00743 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date : 29/06/2021 Sample Qty: 1kg Sampling Protocol

: E/WP/77 Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A) Sample Particulars: One Soil Sample- Near Ramapur Village.

SI. No.	Test	Result	Protocol	
8	Colour	Brown	Practical Manual FIII	
9	Sulphur as S, mg/Kg	23.8	Practical Manual for Hands on training GKVK Bengaluru	
10	Nitrogen as N, %		Practical Manual for Hands on training GKVK Bengaluru	
11	Phosphorous as P, mg/Kg	0.028	Practical Manual for Hands on training GKVK Bengaluru	
12		136.0	Practical Manual for Hands on training GKVK Bengaluru	
	Potassium as K, mg/Kg	326.0	Practical Manual for Hands on training GKVK Bengaluru	
13	Copper as Cu, mg/Kg	5.6	Practical Manual for Hands on training GKVK Bengaluru	
14	Chromium as Cr, mg/Kg	6.9	Practical Manual for Hands on training GKVK Bengaluru	
15	Zinc as Zn, mg/Kg	29.9	Practical Manual for Hards of training GKVK Bengaluru	
16	Lead as Pb, mg/Kg	7.9	Practical Manual for Hands on training GKVK Bengaluru	
17	Nickel as Ni, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru	
18	Cadmium as Cd, mg/Kg	< 1.0	Practical Manual for Hands on training GKVK Bengaluru	
10	caulillulii as Cu, mg/Kg	< 0.1	Practical Manual for Hands on training GKVK Bengaluru	

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TEST REPORT



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00744
(KIADB).	Report date	: 29/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Race Course Road, Bengaluru,	Sample receipt date	: 26/06/2021
Karnataka 560 001.	Job Order No	: RE/2021/00744
Normataka 500 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021

Sample Qty: 1kg

Sampling Protocol : E/WP/77 Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)

Analysis completion date : 29/06/2021

Sample Particulars: One Soil Sample- Near Kelgeri Village.

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		
1	pH (20% Suspension)	7.93	Practical Manual for Hands on training Course
2	Conductivity, µmhos/cm	52.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as Cl, mg/Kg	401.6	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	9-10-10-0	Practical Manual for Hands on training GKVK Bengaluru
5		13.6	Practical Manual for Hands on training GKVK Bengaluru
	Organic Matter, %	6.1	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	896.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	616.0	Practical Manual for Hands on training GKVK Bengaluru Practical Manual for Hands on training GKVK Bengaluru

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Page 1 of 2



Sample Qty: 1kg

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Report No.

Report date

Job Order No

Date of Sampling

Analysis start date

Analysis completion date : 29/06/2021

Sample receipt date

Reference

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.

Karnataka 560 001.

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)

Sample Particulars: One Soil Sample— Near Kelgeri Village.

SI. No.	Test	Result	Protocol
8	Colour	Brown	Dracking I NA I S
9	Sulphur as S, mg/Kg	- APPARENCE AND THE STATE OF TH	Practical Manual for Hands on training GKVK Bengaluru
10	Nitrogen as N, %	15.8	Practical Manual for Hands on training GKVK Bengaluru
11		0.037	Practical Manual for Hands on training GKVK Bengaluru
	Phosphorous as P, mg/Kg	14.8	Practical Manual for Hands on training GKVK Bengaluru
12	Potassium as K, mg/Kg	356.0	Practical Manual for Hands on training GKVK Bengaluru
13	Copper as Cu, mg/Kg	4.8	Practical Manual for Harlds on training GRVK Bengaluru
14	Chromium as Cr, mg/Kg		Practical Manual for Hands on training GKVK Bengaluru
15	Zinc as Zn, mg/Kg	5.2	Practical Manual for Hands on training GKVK Bengaluru
16		31.0	Practical Manual for Hands on training GKVK Bengaluru
	Lead as Pb, mg/Kg	14.8	Practical Manual for Hands on training GKVK Bengaluru
17	Nickel as Ni, mg/Kg	< 1.0	Practical Manual for Hands on training GRAK Bengaluru
18	Cadmium as Cd, mg/Kg	< 0.1	Practical Manual for Hands on training GKVK Bengaluru
	, 18/18	· 0.1	Practical Manual for Hands on training GKVK Bengaluru

---END OF THE REPORT----

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: RE/2021/00744

: Test Request Form

: 29/06/2021

: 26/06/2021

: 24/06/2021

: 26/06/2021

: RE/2021/00744

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Report No.

TEST REPORT



: RE/2021/00745

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

No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.
 Report date
 : 29/06/2021

 Reference
 : Test Request Form

 Sample receipt date
 : 26/06/2021

 Job Order No
 : RE/2021/00745

 Date of Sampling
 : 24/06/2021

 Analysis start date
 : 26/06/2021

 Analysis completion date
 : 29/06/2021

 Sampling Protocol
 : E/WP/77

Sample Qty: 1kg

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)

Sample Particulars: One Soil Sample— Near Narendra Village.

SI. No.	Test	Result	Protocol
Desc	ription: Brown Colored Soil.		
1	pH (20% Suspension)	8.1	Practical Manual for Hands and his in popular
2	Conductivity, µmhos/cm	58.0	Practical Manual for Hands on training GKVK Bengaluru
3	Chloride as CI, mg/Kg	426.0	Practical Manual for Hands on training GKVK Bengaluru
4	Moisture, %	12010	Practical Manual for Hands on training GKVK Bengaluru
5	Organic Matter, %	13.4	Practical Manual for Hands on training GKVK Bengaluru
		4.1	Practical Manual for Hands on training GKVK Bengaluru
6	Calcium as Ca, mg/Kg	526.0	Practical Manual for Hands on training GKVK Bengaluru
7	Magnesium Mg, mg/Kg	336.0	Practical Manual for Hands on training GKVK Bengaluru

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Report No.

Reference

Report date

Job Order No

Sample receipt date

Date of Sampling

Analysis start date

Analysis completion date : 29/06/2021

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.

Sample Qty: 1kg

Samuel St. 11

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509.48 A)

Sample Particulars: One Soil Sample- Near Narendra Village.

SI. Test Result Protocol No. 8 Colour Brown Practical Manual for Hands on training GKVK Bengaluru 9 Sulphur as S, mg/Kg Practical Manual for Hands on training GKVK Bengaluru 17.8 10 Nitrogen as N, % 0.036 Practical Manual for Hands on training GKVK Bengaluru 11 Phosphorous as P, mg/Kg 18.6 Practical Manual for Hands on training GKVK Bengaluru 12 Potassium as K, mg/Kg Practical Manual for Hands on training GKVK Bengaluru 422.0 13 Copper as Cu, mg/Kg 9.3 Practical Manual for Hands on training GKVK Bengaluru Chromium as Cr, mg/Kg 14 6.1 Practical Manual for Hands on training GKVK Bengaluru 15 Zinc as Zn, mg/Kg 27.4 Practical Manual for Hands on training GKVK Bengaluru 16 Lead as Pb, mg/Kg 9.7 Practical Manual for Hands on training GKVK Bengaluru 17 Nickel as Ni, mg/Kg < 1.0 Practical Manual for Hands on training GKVK Bengaluru 18 Cadmium as Cd, mg/Kg < 0.1 Practical Manual for Hands on training GKVK Bengaluru

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: 26/06/2021

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No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.
 Report date
 : 29/06/2021

 Reference
 : Test Request Form

 Sample receipt date
 : 26/06/2021

 Job Order No
 : RE/2021/00730

 Date of Sampling
 : 24/06/2021

 Analysis start date
 : 26/06/2021

 Analysis completion date
 : 29/06/2021

 Sampling Protocol
 : E/WP/65

: RE/2021/00730

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water— Near Mummigatti Industrial Area- Project Site.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.2	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	3.8	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	344.9	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	488.8	200	600	IS 3025 (Part – 32): 2009 Reaff.2019
7	Calcium as Ca, mg/L	106.7	75	200	IS 3025 (Part – 21). 2009 Reaff.2019
8	Magnesium as Mg, mg/L	53.9	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	1130.0	500	2000	
10	Sulphate as SO ₄ , mg/L	110.5	200	400	IS 3025 (Part – 16): 1984 Reaff.2017
11	Nitrate as NO ₃ , mg/L	16.5	45.0	No relaxation	IS 3025 (Part – 24): 1986 Reaff.2019
12	Fluoride as F, mg/L	1.0	1.0	1.5	APHA 23rd Edition
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	APHA 23rd Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	APHA 23 rd Edition
15	Copper as Cu, mg/L	BDL	0.05	700 March 1997	IS 3025 (Part – 47): 1994 Reaff. 2019
16	Zinc as Zn, mg/L	BDL	5	1.5	APHA 23 rd Edition IS 3025 (Part – 49): 1994 Reaff. 2019

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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/2021/00730 Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00730 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date: 29/06/2021 Sampling Protocol : E/WP/65

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A)

Sample Particulars: One sample of Borewell Water- Near Mummigatti Industrial Area- Project Site.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol	
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	ABUA 22(d E-1:4:	
18	Dissolved oxygen, mg/L	2.5	West Control of the C	TVOTCIONALIOIT	APHA 23 rd Edition	
1000 70	Dissolved oxygen, mg/L 2.5		7/1	-	APHA 23rd Edition	

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO4: 5.0, NO3:5.0, F:0.1.

Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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M/s. Karnataka Industrial	Areas Development Board
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Report No. : RE/2021/00731 Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00731 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date: 29/06/2021 Sampling Protocol : E/WP/65

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A)

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

SI. No.	Tests Results Desirable Limit Permissible I IS 10500: 2012 IS 10500: 20		Maximum Permissible Limit IS 10500: 2012	Protocol	
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	6.9	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.7	1	5	IS 3025 (Part – 11): 1984 Reaff.2017
5	Chloride as Cl, mg/L	256.2	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	213.3	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	53.3	75	200	IS 3025 (Part – 21): 2009 Reaff.2019
8	Magnesium as Mg, mg/L	19.4	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	739.0	500	2000	
10	Sulphate as SO ₄ , mg/L	42.6	200	400	IS 3025 (Part – 16): 1984 Reaff.2017
11	Nitrate as NO ₃ , mg/L	6.5	45.0	No relaxation	IS 3025 (Part – 24): 1986 Reaff.2019
12	Fluoride as F, mg/L	0.5	1.0	1.5	APHA 23rd Edition
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	APHA 23rd Edition
14	Lead as Pb, mg/L	BDL	0.01		APHA 23 rd Edition
15	Copper as Cu, mg/L	BDL		No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
16	Zinc as Zn, mg/L	BDL	0.05	1.5	APHA 23 rd Edition
	Zirio do Ziri, ilig/ L	BUL	5	15	IS 3025 (Part - 49): 1994 Reaff 2019

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M/s. Karnataka Industrial Areas Development Board

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

Report No. : RE/2021/00731 Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00731 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date: 29/06/2021 Sampling Protocol : E/WP/65

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A)

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

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 rd Edition
18	Dissolved oxygen, mg/L	3.0		140 TEIGRACION	
	BBL 6 C C C C C C C C C C C C C C C C C C	3.0	-	-	APHA 23 rd Edition

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO₄: 5.0, NO₃:5.0, F:0.1.

Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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Report No.

TEST REPORT



: RE/2021/00732

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

No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001. Report date : 29/06/2021

Reference : Test Request Form

Sample receipt date : 26/06/2021

Job Order No : RE/2021/00732

Date of Sampling : 24/06/2021

Analysis start date : 26/06/2021

Analysis completion date : 29/06/2021

Sampling Protocol : E/WP/65

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water— Near Hiremalligawad Village.

SI. No.	. Tests Results Desirable Limit Permis		Maximum Permissible Limit IS 10500: 2012	Protocol	
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.0	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.4	1	5	IS 3025 (Part – 11): 1984 Reaff.2017
5	Chloride as Cl, mg/L	123.1	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	168.8	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	44.4	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	14.0	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	410.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO ₄ , mg/L	35.6	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO₃, mg/L	11.0	45.0	No relaxation	APHA 23 rd Edition
12	Fluoride as F, mg/L	0.7	1.0	1.5	APHA 23 rd Edition
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	APHA 23 Edition
14	Lead as Pb, mg/L	BDL	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
15	Copper as Cu, mg/L	BDL	0.05	1.5	APHA 23 rd Edition
16	Zinc as Zn, mg/L	BDL	5	15	IS 3025 (Part – 49): 1994 Reaff 2019

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TEST REPORT

M/s. Karnataka Industrial Areas Development Board

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

Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00732 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date: 29/06/2021 Sampling Protocol : E/WP/65

: RE/2021/00732

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A)

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

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 rd Edition
18	Dissolved oxygen, mg/L	2.0		TTOTCIONACION	
	Dissolved Oxygen, mg/L	2.0	-	7	APHA 23 rd Edition

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO₄: 5.0, NO₃:5.0, F:0.1.

Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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Page 2 of 2



Sample Qty: 2 Ltrs

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TEST REPORT



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00733
KIADB). o.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Report date	: 29/06/2021
	Reference	: Test Request Form
	Sample receipt date	: 26/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00733
Karnataka 560 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021
	Analysis completion dat	te : 29/06/2021

Sampling Protocol Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water- Near Kyarkoppa Village.

SI. No.	Tocts		Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	6.80	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.8	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	128.1	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	155.5	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	37.3	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	15.1	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	425.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO ₄ , mg/L	36.8	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO₃, mg/L	3.5	45.0	No relaxation	APHA 23 rd Edition
12	Fluoride as F, mg/L	1.2	1.0	1.5	
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	APHA 23rd Edition
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	15	APHA 23 rd Edition IS 3025 (Part – 49): 1994 Reaff 2019

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M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00733
M/s. Karnataka Industrial Areas Development Board (KIADB). No.49, 4th & 5th Floor, East Wing, Khanija Bhavan, Race Course Road, Bengaluru, Karnataka 560 001.	Report date	: 29/06/2021
	Reference	: Test Request Form
	Sample receipt date	: 26/06/2021
	Job Order No	: RE/2021/00733
Karnataka 560 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021
Court Or All	Analysis completion da	te: 29/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	· E/M/D/65

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water— Near Kyarkoppa Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	ADUA 22rd Edikian
18	Dissolved oxygen, mg/L	4.5		TVOTCIAXACION	APHA 23 rd Edition
THE RESERVE OF	Dissolved oxygen, mg/L	1.6	-	-	APHA 23 rd Edition

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO₄: 5.0, NO₃:5.0, F:0.1.

Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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Sample Qty: 2 Ltrs

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TEST REPORT



M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00734
(KIADB).	Report date	: 29/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
	Sample receipt date	: 26/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00734
Karnataka 560 001.	Date of Sampling	: 24/06/2021
2	Analysis start date	: 26/06/2021

Analysis completion date : 29/06/2021
Sampling Protocol : E/WP/65

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water— Near Neeralakatti Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	6.86	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.4	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	172.4	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	231.0	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	40.9	75	200	IS 3025 (Part – 21): 2009 Reaff. 2019
8	Magnesium as Mg, mg/L	31.2	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	605.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO ₄ , mg/L	52.3	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO₃, mg/L	8.2	45.0	No relaxation	APHA 23 rd Edition
12	Fluoride as F, mg/L	0.8	1.0	1.5	
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	APHA 23rd Edition
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	15	APHA 23 rd Edition IS 3025 (Part – 49): 1994 Reaff 2019

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TEST REPORT

M/s. Karnataka Industrial Areas Development Board

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

Report No. : RE/2021/00734 Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00734 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date: 29/06/2021 Sampling Protocol : E/WP/65

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water- Near Neeralakatti Village.

Maximum Maximum SI. Desirable Limit Tests Permissible Limit Results Protocol No. IS 10500: 2012 IS 10500: 2012 17 Chromium as Cr, mg/L BDL 0.05 No relaxation APHA 23rd Edition 18

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO₄: 5.0, NO₃:5.0, F:0.1.

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Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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Dissolved oxygen, mg/L

APHA 23rd Edition

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TEST REPORT



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

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

Report No.	: RE/2021/00735
Report date	: 29/06/2021
Reference	: Test Request Form
Sample receipt date	: 26/06/2021
Job Order No	: RE/2021/00735
Date of Sampling	: 24/06/2021
Analysis start date	: 26/06/2021
Analysis completion da	te: 29/06/2021
Sampling Protocol	: E/WP/65

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water - Near Ramapur Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	6.95	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.5	1	5	IS 3025 (Part – 11): 1984 Reaff.2017
5	Chloride as Cl, mg/L	98.5	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	213.3	200	600	IS 3025 (Part – 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	42.6	75	200	
8	Magnesium as Mg, mg/L	25.9	30	100	IS 3025 (Part - 40): 1991 Reaff.2019
9	Total dissolved Solids, mg/L	372.0	500	2000	IS 3025 (Part – 46): 1994 Reaff.2019
10	Sulphate as SO ₄ , mg/L	21.2	200	400	IS 3025 (Part – 16): 1984 Reaff.2017
11	Nitrate as NO ₃ , mg/L	6.4	45.0	No relaxation	IS 3025 (Part – 24): 1986 Reaff.2019
12	Fluoride as F, mg/L	1.2	1.0	No. of the last of	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	111210000	0.01	No relaxation	IS 3025 (Part – 47): 1994 Reaff 2019
16	Zinc as Zn, mg/L	BDL	0.05	1.5	APHA 23 rd Edition
10	Zinc as Zii, iiig/L	BDL	5	15	IS 3025 (Part - 49): 1994 Reaff 2019

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TEST REPORT

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00735
(KIADB).	Report date	: 29/06/2021
	Reference	: Test Request Form
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Sample receipt date	: 26/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00735
Karnataka 560 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021
	Analysis completion da	ate: 29/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A)

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

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
17	Chromium as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 rd Edition
18	Dissolved oxygen, mg/L	2.4		110 TEIGNACION	AFIIA 25 EUILIOII
	Dissolved Oxygen, mg/L	3.4		-	APHA 23rd Edition

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO₄: 5.0, NO₃:5.0, F:0.1.

Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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

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M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00736
(KIADB).	Report date	: 29/06/2021
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	Sample receipt date	: 26/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00736
Karnataka 560 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021
Samula Ohii 2 Itii	Analysis completion da	te: 29/06/2021

Sample Qty: 2 Ltrs Sampling Protocol : E/WP/65

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water - Near Kelgeri Village.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.3	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	0.8	1	5	IS 3025 (Part – 11): 1984 Reaff.2017
5	Chloride as Cl, mg/L	202.0	250	1000	IS 3025 (Part – 32): 1988 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	133.3	200	600	IS 3025 (Part – 21): 2009 Reaff.2019
7	Calcium as Ca, mg/L	35.5	75	200	IS 3025 (Part – 40): 1991 Reaff.2019
8	Magnesium as Mg, mg/L	10.8	30	100	IS 3025 (Part – 46): 1994 Reaff.2019
9	Total dissolved Solids, mg/L	565.0	500	2000	IS 3025 (Part – 16): 1984 Reaff.2017
10	Sulphate as SO ₄ , mg/L	25.2	200	400	IS 3025 (Part – 24): 1986 Reaff.2019
11	Nitrate as NO ₃ , mg/L	8.2	45.0	No relaxation	APHA 23 rd Edition
12	Fluoride as F, mg/L	0.4	1.0	1.5	APHA 23 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	15	APHA 23 rd Edition IS 3025 (Part – 49): 1994 Reaff 2019

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M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00736
(KIADB).	Report date	: 29/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Page Course Bood, Bornell	Sample receipt date	: 26/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00736
Karnataka 560 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021
Samuel Or a v	Analysis completion da	ite: 29/06/2021
Sample Qty: 2 Ltrs	Sampling Protocol	: E/WP/65

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Borewell Water – Near Kelgeri Village.

l. o.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
7 Chromium	as Cr, mg/L	BDL	0.05	No relaxation	APHA 23 rd Edition
8 Dissolved	oxygen, mg/L	2.6		TTO TELEMENTON	APHA 23rd Edition

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO₄: 5.0, NO₃:5.0, F:0.1.

Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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

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TEST REPORT



M/s. Karnataka Industrial Areas Development Board

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

Report No. : RE/2021/00737 Report date : 29/06/2021 Reference : Test Request Form Sample receipt date : 26/06/2021 Job Order No : RE/2021/00737 Date of Sampling : 24/06/2021 Analysis start date : 26/06/2021 Analysis completion date: 29/06/2021 Sampling Protocol : E/WP/65

Sample Qty: 2 Ltrs

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A)

Sample Particulars: One sample of Borewell Water- Near Narendra.

SI. No.	Tests	Results	Maximum Desirable Limit IS 10500: 2012	Maximum Permissible Limit IS 10500: 2012	Protocol
Desc	ription: Colorless liquid.				
1	Color (hazen units)	<2.0	5	15	IS 3025 (Part- 4): 1983 Reaff.2017
2	Odour	Agreeable	Agreeable	Agreeable	IS 3025 (Part – 5): 1983 Reaff.2018
3	pH Value	7.11	6.5 - 8.5	No relaxation	IS 3025 (Part – 11): 1983 Reaff.2017
4	Turbidity, NTU	1.2	1	5	IS 3025 (Part – 10): 1984 Reaff.2017
5	Chloride as Cl, mg/L	192.1	250	1000	IS 3025 (Part – 10): 1984 Reaff.2019
6	Total hardness as CaCO ₃ , mg/L	159.9	200	600	IS 3025 (Part – 32): 1988 Reaff.2019
7	Calcium as Ca, mg/L	39.1	75	200	
8	Magnesium as Mg, mg/L	15.1	30	100	IS 3025 (Part - 40): 1991 Reaff.2019
9	Total dissolved Solids, mg/L	580.0	500	2000	IS 3025 (Part - 46): 1994 Reaff.2019
10	Sulphate as SO ₄ , mg/L	40.2	200	400	IS 3025 (Part – 16): 1984 Reaff.2017
11	Nitrate as NO ₃ , mg/L	4.6	45.0	No relaxation	IS 3025 (Part – 24): 1986 Reaff.2019 APHA 23 rd Edition
12	Fluoride as F, mg/L	0.6	1.0	1.5	
13	Iron as Fe, mg/L	BDL	0.3	No relaxation	APHA 23rd Edition
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 IS 3025 (Part – 49): 1994 Reaff 2019

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TEST REPORT

M/s. Karnataka Industrial Areas Development Board	Report No.	: RE/2021/00737
(KIADB).	Report date	: 29/06/2021
No.49, 4th & 5th Floor, East Wing, Khanija Bhavan,	Reference	: Test Request Form
Page Course Bood, Barrell	Sample receipt date	: 26/06/2021
Race Course Road, Bengaluru,	Job Order No	: RE/2021/00737
Karnataka 560 001.	Date of Sampling	: 24/06/2021
	Analysis start date	: 26/06/2021

Sample Qty: 2 Ltrs

Analysis completion date: 29/06/2021
Sampling Protocol: E/WP/65

Name of the Industrial Area: Mummigatti Industrial Area, Mummigatti village, Dharwad Taluk & District, Karnataka. (Ext-509-48A) Sample Particulars: One sample of Pond Water- Near Narendra.

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	ADUA 22rd Edia
18	Dissolved oxygen, mg/L	1.0	0.05	NOTEIAXALIOIT	APHA 23 rd Edition
	Dissolved oxygen, mg/L	1.8	-	(*)	APHA 23rd Edition

Note: BDL for Cr: 0.05, Fe: 0.05, Pb:0.01, Zn:0.05, SO₄: 5.0, NO₃:5.0, F:0.1.

Remarks: The given water sample complies to IS: 10500-2012 specification for above tested parameters.

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

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Proceedings of Environmental Public Hearing in respect of Development of Mummigatti Industrial Area, Dharwad held on 24-06-2015 at 11.00 AM at the C-DAC meeting Hall, Plot No.1, Belur Industrial Area, Dharwad.

Members Present:

Dr. Satheesha B.C.
 Additional Deputy Commissioner & Additional District Magistrate,
 Dharwad.

Presiding Officer.

Shri.C.M. Satheesh
 Senior Environmental Officer
 Karnataka State Pollution Control Board,
 Dharwad.

Representative of KSPCB

3. Shri, Vijaykumar T Kadakabhavi, Environmental Officer, Karnataka State Pollution Control Board, Dharwad. Representative of KSPCB.

Preamble

The Karnataka Industrial Area Development Authorities have proposed to develop an Industrial Area by name Mummigatti Industrial Area in total extent of 394.63 Hectares (975.13 Acres) in various survey numbers of Mummigatti village, Dharwad Taluk & District. As the development of Industrial Area is covers under EIA notification dated 14-09-2006 (as amended on 1/12/2009), the Environmental Public Hearing is mandatory and hence the Environmental Public Hearing was conducted at the C-DAC meeting hall, Plot No.1, Belur Industrial Area, Dharwad which is nearer to Mummigatti village on 24.06.2015.

Environmental Public Hearing

The Environmental Officer welcomed the Additional Deputy Commissioner & Additional District Magistrate and also the presiding officer of the Environmental Public Hearing meeting, The Senior Environmental Officer, Dharwad Zone and the Development Officer of the Karnataka Industrial Area Development Board, consultants and other distinguished guests, all the farmers & the public attended the meeting.

Shri Vijaykumar T Kadakabhavi, Environmental Officer, Karnataka State Pollution Control Board, Dharwad briefly explained about the purpose of conducting Environmental Public Hearing and also the measures proposed to control the environmental pollution from the proposed Industrial Area Development Project. He briefly explained to the gathering regarding Environmental Public Hearing which is covered under EIA Notification dated 14-09-2006 (as amended on 1/12/2009), wherein public hearing is mandatory to get the opinion of the surrounding public before the recommendations for Environmental Clearance from SEIAA, Govt of Karnataka, Bengaluru. Accordingly press note was issued in the leading news papers both in Kannada (Vijay Karnataka) and English (Deccan Herald) on 24.05.2015 keeping 30 days in advance and also the REIA and executive summary of project in both Kannada and English were kept with the five Offices as per the EIA Notification. He then requested the Additional Deputy Commissioner & Additional District Magistrate and also the Presiding Officer of the Environmental Public Hearing meeting to start the proceedings.

The Additional Deputy Commissioner & Additional District Magistrate requested the public to come out with their opinion, doubts if any about probable pollution caused by the development of the said project. He then informed the public to get clarified their doubts with the consultants & KIADB Authorities. In the meeting, he requested the KIADB Authorities of Dharwad and their consultants to brief about the proposed industrial development project to the public. The Additional Deputy Commissioner & Additional District Magistrate also informed the gathering that they should express their views freely without any fear. Their views in this hearing shall be compiled and sent to KSPCB and SEIAA, Ecology & Environment, Govt of Karnataka for further needful action. He also informed the gathering, the entire proceeding is being video graphed and hence the participants may express their views without any fear. The Additional Deputy Commissioner then informed the authorities to present details of the proposed project and proposed pollution control measures to the gathering.

M/s Ramkey Enviro Engineers Limited, Hyderabad who is the Environmental consultants to KIADB, explained about the proposed development project. The said project proponents briefed the environmental protection measures proposed by the project proponent. He also explained the future proposals to safeguard the environment.

The Environmental Impacts and its control measures proposed to provide during development of project & other related matters are expressed in Environmental report submitted by the KIADB authority.

General discussion on Public hearing:

1) Sri Madiwalappa Yallappa Gundappa, Mummigatti village: He expressed that Mummigatti Industrial Area name given to this project area will it changes in coming days or not.

For this the Sri Pawar, Development Officer, KIADB, Dharwad has expressed that the same name Mummigatti Industrial Area will be retained later also.

2) Sri Ramappa Rachappa Batangi, Mummigatti village; He expressed that there are so many ITI & Diploma passed unemployed youths in their village and also for land losers the job for all about 1000 members should be provided in the coming up project.

For this the Sri Pawar, Development Officer, KIADB, Dharwad informed that applications for the same may be submitted & the same will be considered after obtaining approval from the higher authorities i.e. Chief Executive Officer, KIADB, Bengaluru.

3) Sri Vittal Gundannanavar, Mummigatti village & Sri Manjunath Gali, Mummigatti village:- Both persons expressed to provide a job in coming up industries in this area and make them permanent and also expressed that they are facing air pollution problem from existing industries in Belur Industrial Area.

For this the Additional Deputy Commissioner, Dharwad expressed that already there is a provision as per Sarojini Mahishi report, they have to appoint local people for their units in the industrial area.

Also Shri Vijay Kumar T Kadakbhavi, Environmental Officer, Dharwad expressed that action has been taken against the defaulters in the existing industrial area (Belur Industrial Area).

4) Sri Shanthappa Marithimmaiah, Mummigatti village:- He expressed that for small farmers i.e. about ½ acre to 1 acre land losers and are not literate, for them to provide at least small plots at subsidy rates to make them self employment by putting canteen, shops, mini workshops etc.

For this the Sri Pawar, Development Officer, KIADB, Dharwad expressed that the suggestions given during hearing will be brought to the notice of the Head Office at Bengaluru and to be considered as per Law.

5) Sri Somalingappa Chikkannavar, Mummigatti village: He sought to get assurance that at least one person from the land losers will get employment.

For this the Joint Director, Industries & Commerce & Development Officer, KIADB have expressed that already there is a provision as per new Industrial Policy i.e. about 10 % of developed plots should be given to the local people.

6) Sri Y.D.Karpar, Mummigatti village; He expressed that there is no land for construction of school under Central Govt Scheme & requested for allotment of land for school building construction and also expressed that there are lot of ITI & Diploma holder unemployed youth in their village & requested to provide job opportunity to them.

For this the Additional Deputy Commissioner, Dharwad expressed that if any Govt land is there then it will be allotted to the Central Govt School or if not identify the suitable land and it will be acquired for the same.

At the end Sri Pawar, Development Officer, KIADB, Dharwad assured the gathering that, whatever the suggestion/opinion given in the hearing will be brought to the notice of the higher authority and assured to implement all these suggestions.

The hearing was concluded with vote of thanks from Sri Vijayakumar T Kadakbhavi, Environmental Officer, KSPCB, Regional Office-Dharwad.

(Dr.Satheesha B.C.)

Presiding Officer and

The Additional Deputy Commissioner

Dharwad District.

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