## KARNATAKA INDUSTRIAL AREAS DEVELOPMENT BOARD



(A Government of Karnataka Undertaking)

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KIADB/JDTP/FCN:20456/70 \ /2021-22

Date: 13-01-2022

To,

The Ministry of Environment, Forest & Climate Change (MoEF&CC)

Regional Office (Southern Zone), Kendriya Sadan, 4th floor, F-Wing, 17th main road, II block, Koramangala, Bengaluru- 560 034.

Respected 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 Gowribidanur, 1st & 2nd Phase Industrial Area, KIADB at Chikkaballapur District to an extent of 724.12 Acres.

**Ref.:** 1.ToRissued by MoEF& CC on 06th June 2014.

- 2. Environmental Public Hearing held on 09th January 2014.
- 3. Environmental Clearance reference no.: 21-65/2012-I.A.III dated 20th July 2015.
- 4. General Condition imposed in the Environmental Clearance for submission of Half yearly Compliance @ Condition No. 3.
- 5. This Office first Half-yearly compliance report No.5693 dated:13-08-2021.

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With reference to above subject, it is to be informed that MoEF & CC has issued Environmental Clearance for Establishment of Gowribidanur, 1st & 2nd Phase Industrial Area, KIADB, at Chikkaballapur District to an extent of 724.12 Acres, after finalizing the ToR issued by MoEF&CC on 06th June 2014andafter conducting the public hearing on09<sup>th</sup> January 2014.

In the said Environmental Clearance at the General Condition No. 3, it is stipulated that KIADB has to submit half yearly compliance report to all the conditions stipulated in the EC issued on 20.07.2015. Earlier on 13-08-2021, KIADB has submitted 1<sup>st</sup> Half-yearly compliance report as per the condition of EC.

Hence, the detailed 2<sup>nd</sup> Half-yearly point wise compliance report to all the conditions stipulated in the Environmental Clearance issued to Gowribidanur, 1st & 2nd Phase Industrial Areais being submitted to MoEF&CC for information in the form of soft copy.

Kindly acknowledge the same.

Yours faithfully,

Chief Engineer-1 KIADB, Bengaluru. Half Yearly Environmental Compliance Report for all the Conditions Stipulated in the Environmental Clearance issued with respect to Development of Gowribidanur Industrial Area, Phase I & II at Gowribidanur in Chikkaballapur District, Karnataka- 2<sup>nd</sup> Term.

#### 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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# Half yearly Environmental Compliance report for Gowribidanur 1st & 2nd Stage, Chikkaballapur - 2021

#### 1.0. PROJECT DETAILS

- 1) Name of the Project: Development of Gowribidanur Industrial Area, Phase I & II at Gowribidanur in Chikkaballapur District.
- 2) Environmental Clearance reference no.: 21-65/2012-I.A.III dated 20th July 2015.
- **3) Total Plot Area:** 742.12 Acres (293.17 Ha).
- 4) Category of Industries: Orange and Green category.
- 5) Total Water requirement for the Industrial area:19.83 MLD (Freshwater: 8.82 MLD, Treated water: 11.01 MLD) will be met by BWSSB.
- 6) Total Wastewater generation: 10 MLD
- 7) Total Power Requirement: 55.5 KW will be sourced from KPTCL.
- 8) Project Cost: 220 crores.
- 9) Schedule & Category: 7 (C) & A category.

#### 10) Address of the Correspondence:

Chief Development Officer& Chief Engineer,

Karnataka Industrial Areas Development Board (KIADB),

Khanija Bhavan, Race Course road,

Bengaluru-560 001.

#### 2.0. LOCATION MAP

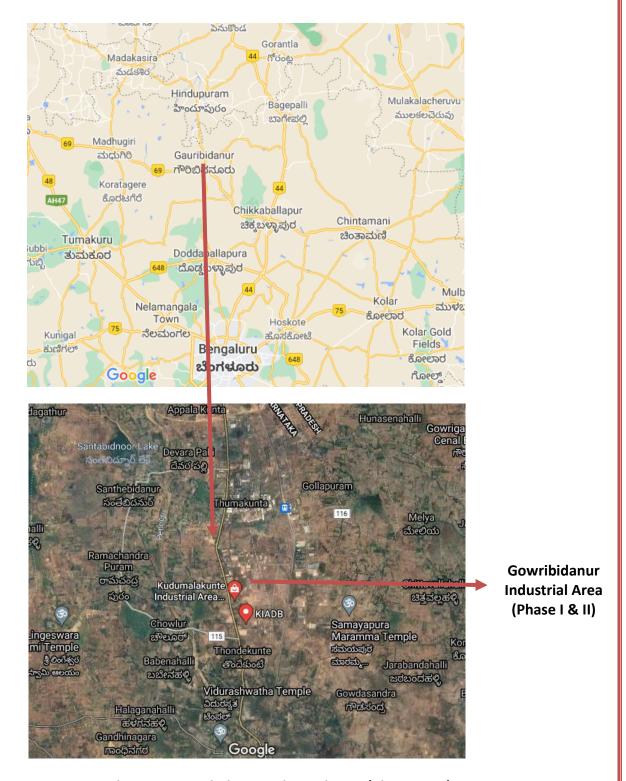


Fig.1: Map showing Gowribidanur Industrial Area (Phase I & II).

3.0. Half Yearly Environmental Compliance Report for all the Conditions Stipulated in the Environmental Clearance issued with respect to Establishment of Gowribidanur, 1st & 2nd Phase Industrial Area, Chikkaballapur District. (Ext-724.12 Acres)

SI. No.	CONDITIONS STIPULATED IN THE EC	COMPLIANCE STATUS
Α	SPECIFIC CONDITIONS:	
ı	Construction Phase:	
1	"Consent for Establishment" shall be obtained from Karnataka State Pollution Control Board under Air(Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	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 02 <sup>nd</sup> August 2017. Copy has been submitted to MoEF & CC, Regional Office, Bangalore.
2	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF & CC along with six monthly monitoring reports.	Noted. Individual industries will be informed to maintain the log book for recording water consumption and wastewater generation by respective industries, once the industries start operation in the proposed area.
3	Special Purpose Vehicles shall be established for implementation, monitoring and compliance of the environmental safeguards.	Noted.
4	All the recommendation of the EMP shall be complied with in letter and spirit. All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to RO, MoEF & CC along with half yearly compliance report.	Noted and all the recommendations made in the Environmental Management Plan will be adhered to and applicable mitigation measures are adapted wherever required and mitigation plans so adapted shall be included in the half yearly Compliance report and shall be submitted to the Regional Office of MoEF & CC, Bangalore.
5	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.	Complied. All necessary infrastructure facilities and basic sanitary facilities will be provided to the workers in the site during the construction phase of the industrial area.

6	Soil and ground water samples should be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Noted. All necessary steps will be taken to ensure that there is no contamination of soil and ground water during construction activities. Once the industries are made operational Red Category industries will be directed to carryout regular monitoring of Environmental attributes to observe the changes if any.
7	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate water courses and the dumpsites 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 and disposed carefully, to prevent the contamination of the ground water.
8	Any hazardous waste generated during development/ construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Karnataka State Pollution Control Board.	Agreed. Necessary approvals from the competent authority will obtained during the construction phase for the safe disposal of hazardous waste generated as per the rules and regulations applicable.
9	The diesel generator sets to be used during the construction phase should be of low sulphur diesel type and should conform to Environment (Protection) rules prescribed for air and noise emission standards.	Noted and Complied. The fuel used in the DG sets used during construction phase will have low sulphur content and hence the air and noise emissions were within the prescribed norms, so that there was no disturbance created due to use of DG sets. DG sets with acoustic enclosures will be used to comply with the norms.
10	The diesel required for operating DG sets shall be stored underground tanks and if required clearance from Chief Controller of Explosives shall be taken.	Complied- Necessary actions were 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 site will be advised to take necessary steps and they will be advised to obtain clearances from competent authority for the safe storage of diesel.

11	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.	Complied- hired Vehicles hired will be operated in good condition and emission documents will be maintained by the vehicle owner which conforms to the prescribed standards and the workers were 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.
12	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 the construction phase. Adequate measures to reduce ambient air and noise pollution during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.	Complied- Competent persons from KIADB & Construction workers available at the Project site were 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 norms.
13	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003.	Noted and complied. 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.
14	Ready mixed concrete must be used in site development and building construction.	Noted
15	Storm water control and its reuse as per CGWB and BIS standard for various applications.	Noted.
16	Water demand during development or construction should be reduced by use of premixed concrete, curing agents and other best practices referred.	Noted.

17	Permission to draw ground water, if any, shall be obtained from the competent Authority prior to construction/operation of the project.	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
18	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.
19	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.	Noted and complied. During the operation phase individual industries will be informed to install latest technology To reduce the water consumption & wastewater generation, for efficient and limited use of water wherever possible. Industries will also be directed to conserve the water resource by adapting the same
20	Use of glass facia may be reduced by up to 40% to reduce electricity consumption and load on air conditioning. If necessary use high quality low E value glass.	Noted and adapted wherever applicable. Industries will also be advised to do the same.
21	Roof should meet prescriptive requirement as per Energy Conservation building code, by using appropriate thermal insulation material to fulfil requirement.	Duly noted and will be adapted wherever possible as per ECBC, 2007 and its amendments.
22	Opaque wall should meet perspective requirement as per Energy Conservation Building code, which is proposed to be mandatory for all air conditioned spaces while it is aspirational to non-air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.	Duly noted and will be adapted wherever possible.
23	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire-fighting equipment's, etc. as per National Building Code including protection measures from lightening etc.	Noted and the same will be informed to the industries before allotment of the plots.

24	Regular supervision of the above and other measures for monitoring should be in place all through the development/ construction phase, so as to avoid disturbance to the surroundings.	Complied. Regular supervision was done to ensure that there was no disturbance to the surroundings during the construction phase.
25	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	Noted. No such actions will be taken without the prior approval.
26	The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.	Noted. The suggestions/observations and concerns made during the public hearing will be duly considered and all relevant measures are being taken to improve the socio-economic conditions of the project and surrounding area.
27	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.	Noted and all the recommendations made in the Environmental Management Plan and applicable mitigation measures are adapted wherever applicable.
28	Corporate Social Responsibility:	
	a) The Company shall have a well laid down Environment Policy approved by the board of Directors.	Noted. Individual Industrial units in the project area will be informed the same. All norms, standards and policies laid down by the competent authority will be strictly followed by the industrial units.
	b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/ deviation/ violation of the environmental or forest norms/ conditions.	Noted. Industrial units in the project area will be informed the same. Standard Operating Procedures will be laid down to keep the track, if there is any kind of deviations, noncompliances.
	c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.	Noted. Industrial units in the project area have been informed the same. Hierarchical system will be followed to all the concerned authorities when required.

d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

Noted. Individual Industrial units at the time of operation in the project area will be informed to have well laid down system of reporting of non-compliances/ violations of environmental norms.

#### **II** Operation Phase

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The installation of the Sewage Treatment Plant (STP) / Effluent Treatment Plant (ETP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled/ reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of treated sewage shall conform to the norms & standards of the Karnataka State Pollution Control Board. 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.

Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical healthcare, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. The safe disposal of wastewater and solid wastes generated during the development/ construction phase should be ensured.

Complied. Mostly local workers 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.

3	The First Aid room shall be provided in the project both during construction and operation of the project.	Noted.
4	All the topsoil excavated during development/ construction activities should be stored for use in horticulture/ landscape development within the project site.	Agreed, the topsoil excavated will be used for landscaping, levelling and plantation purposes in the project site.
5	Disposal of muck during development/construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Noted. The construction debris will be reused / recycled for backfilling and for construction of roads and when necessary the debris is disposed in safe and secure manner as per the Construction and Demolition rules 2016.
6	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.
7	Diesel power generating sets proposed as 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 maybe decided with in consultation with Karnataka State Pollution Control Board.	Noted. The fuel used in individual DG sets used during construction phase will be 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.
8	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.

9	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	Complied. 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 adjoining roads of the project site. Also individual industrial units are also advised to maintain green belt for at least 33% of the allotted plot area as applicable.
10	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.
11	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 5mtrs. above the highest ground water table.	Noted. The project area and the industries proposed to operate within the area will be directed to provide 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.
12	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 before digging any bore well 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.
13	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading and unloading should be fully internalized and no public space should be utilized.	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.

14	A report on energy conservation measures confirming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials and technology, R &U factors etc. and submit to the SEIAA, Karnataka in three month's time. Energy conservation of 20% be attained vis-a-vis the conventional consumption in perpetuity, through regular monitoring by competent authority.	Noted.
15	Energy conservation measures like installation of LED's, 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.	Noted and being complied. 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. Industrial units in the project area will also be advised to do the same.
16	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Noted. All construction and hazardous waste generated during the construction phase will be stored in safe and secure manner and disposed carefully, to prevent contamination of water environment. Individual Industrial units will also be advised to follow the same.
17	The Project should be operational with 24*7 monitoring devices as applicable.	Noted.
В	GENERAL CONDITIONS:	
1	The Environmental safeguards contained in the EIA report should be implemented in letter and spirit.	Agreed. All necessary measures and steps will be taken for the protection of environment and conservation of natural resources.
2	Provision should be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.	Noted Mostly labours/local workers from the surrounding villages/area will be hired during the construction phase, so that it is not required to provide temporary housing. Required infrastructure facility will be provided to all the labourers during construction phase.

3	The Project Proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF & CC, the respective Zonal Office of CPCB and the SPCB.	
4	A copy of the environment clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's Office for 30 days.	Noted and followed.
5	The project proponent shall set up a separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	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.
6	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purpose.	Noted.
7	Officials from the Regional Office of MoEF & CC, Bangalore who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF & CC should be forwarded to the CCF, Regional Office of MoEF & CC, Bangalore.	Noted and understood. Full cooperation, facilities & the required documents is be
8	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Noted and understood. Any changes in the project approved, will be made as a fresh appraisal in front of the Competent Authority.

9	The Ministry reserves the right to additional safeguard measures subsequently, if found necessary, and to take action including revoking of the Environmental Clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted.
10	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.
11	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.
12	This Environmental Clearance is subject to obtaining prior clearance from forestry and wildlife angle including clearance from the Standing Committee of the National Board for Wild Life (NBWL), if applicable.	Noted.
13	The Project Proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest & Climate Change at http://www.envfor.nic.in. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore.	Noted and complied.

# Half yearly Environmental Compliance report for Gowribidanur 1st & 2nd Stage, Chikkaballapur - 2021

14	This Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.46O of 2004 as may be applicable to this project.	Noted.
15	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 15 of the National Green Tribunal Act. 2010.	Noted.
16	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter sail also be put on the website of the company by the proponent.	Noted and followed.
17	The proponent shall upload the status of compliance conditions, including results of monitored data on their update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF & CC, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Noted and will be complied.
18	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment Protection rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF & CC by e-mail.	Noted and will be complied.

#### 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.

The compiled monitoring data is submitted below. 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 PM10, µg/m3	100	55.6	64.4	59.8
2	Particulate Matter PM2.5, µg/m3	60	17.1	23.6	21.1
3	Nitrogen Dioxide NO2, µg/m3	80	16.5	23.3	19.1
4	Sulphur dioxide as SO <sub>2</sub> , µg/m <sub>3</sub>	80	7.6	12.5	10.3

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

#### 4.2. Ambient Noise Level Monitoring

The Ambient Noise Monitoring is carried at 8 Locations. The compiled monitoring data is submitted below. The monitoring results reveal the following ambient noise concentration at different locations:

SI.	Locations	Noise Level in db (A) Leq		CPCB Standard	
No		Day	Night	Lday (Ld)	LNight (Ln)
1	Near Viduraashwatha Village	53	40.8	55	45
2	Near Project srilaksmi- refineries Industries	67.1	53.9	75	70
3	Near Kudumulukunte Gate	53	43.1	55	45
4	Near Choluru gate	53.1	44.6	55	45
5	Near Doddakoragodu Village	54.9	42.8	55	45
6	Near Gowdanapalya Village	53.8	44.1	55	45
7	Near Andhra Check post- Project Site.	64.1	52.2	75	70
8	Near Kudumulukunte Village	54.6	44.1	55	45

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

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

#### 4.3. Water Quality Monitoring

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

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

Sl. No.	Parameters	Minimum Value	Maximum Value	Average Value
1	Color (hazen units)	<2.0	<2.0	<2.0
2	Odour	Agreeable	Agreeable	Agreeable
3	pH Value	7.3	8.8	7.78
4	Turbidity, NTU	0.3	9.9	3.45
5	Chloride as Cl, mg/L	53.4	213.69	127.44
6	Total hardness as CaCO <sub>3</sub> , mg/L	308.27	408.36	378.77
7	Calcium as Ca, mg/L	24.02	180.1	80.07
8	Magnesium as Mg, mg/L	31	93.35	59.33
9	Total dissolved Solids, mg/L	107	939	492.38
10	Sulphate as SO <sub>4</sub> , mg/L	9.2	64.3	31.70
11	Nitrate as NO <sub>3</sub> , mg/L	6.9	16.4	10.45
12	Fluoride as F, mg/L	0.2	0.5	0.33
13	Iron as Fe, mg/L	BDL	BDL	BDL
14	Lead as Pb, mg/L	BDL	BDL	BDL
15	Copper as Cu, mg/L	BDL	BDL	BDL
16	Zinc as Zn, mg/L	BDL	BDL	BDL
17	Chromium as Cr, mg/L	BDL	BDL	BDL
18	Dissolved oxygen, mg/L	2.7	5	3.63

#### 4.4. Soil Quality Monitoring

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

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

SI. No.	Soil Parameters	Minimum Value	Maximum Value	Average Value
1	pH (20% Suspension)	7.01	8.23	7.6
2	Conductivity, µmhos/cm	123	363.2	219.4
3	Chloride as Cl, mg/Kg	164.7	453.52	295.0
4	Moisture, %	3.23	9.2	6.3
5	Organic Matter, %	1.23	8.13	4.3
6	Calcium as Ca, mg/Kg	289.7	1236.1	654.1
7	Magnesium Mg, mg/Kg	76.7	206.4	122.1
8	Colour	Brown	Brown	Brown
9	Sulphur as S, mg/Kg	6.2	54.2	21.3
10	Nitrogen as N, %	0.009	0.016	0.0
11	Phosphorous as P, mg/Kg	2.3	15.2	7.7
12	Potassium as K, mg/Kg	13.24	173.9	89.6
13	Copper as Cu, mg/Kg	2.12	19.98	11.2
14	Chromium as Cr, mg/Kg	4.05	41.42	16.9
15	Zinc as Zn, mg/Kg	8.2	41.49	22.3
16	Lead as Pb, mg/Kg	2.49	8.71	4.8
17	Nickel as Ni, mg/Kg	1.54	41.47	15.2
18	Cadmium as Cd, mg/Kg	<0.1	<0.1	<0.1