



Karnataka State Pollution Control Board
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Consent For Establishment (CFE)

As per the provisions of
The Water (Prevention & Control of Pollution) Act, 1974
&
The Air (Prevention & Control of Pollution) Act, 1981

To

**Mana Projects Private Limited, Doddakannahalli Village, Varthur Hobli,
Bengaluru East Taluk**

for the Facility located at,

**Mana Projects Private Limited, Sy. Nos. 21/2A, 21/2B, 21/3, 21/4, 161 & 162
,Doddakannahalli Village, Varthur Hobli, Bengaluru East Taluk**

Bangalore Urban

Consent Order No	PCBID	INW ID	Industry Colour/Scale	Date of Issue
CTE-334569	134520	172488	RED/LARGE	24/11/2022

**This Consent is granted for the Products/ Activity/Service name indicated
in the annexure along with the terms & conditions attached to this order**

Validity : **23/11/2027**

Consent Order No. CTE-334569

PCB ID:

134520

Date: 24/11/2022

To,

The Applicant

Mana Projects Private Limited

No. 20/7, "Swamy Legato", 3rd Floor,
Kadubeesanahalli, Marathahalli ORR,
Bengalu

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 15/10/2022 at Regional Office

2. Inspection of the project site by Regional Officer Bangalore on 18/10/2022
Bommanaha
lli

3. Proceedings of the ECM dated 02/11/2022 ,held on 28/10/2022

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: Mana Projects Private Limited

Address: Sy. Nos. 21/2A, 21/2B, 21/3, 21/4, 161 & 162, Doddakannahalli Village,
Varthur Hobli, Bengaluru East Taluk

Industrial Area: Not In I.A, Bengaluru,

Taluk: BBMP- W- 174, District: Bangalore Urban

Conditions:

1. This consent for establishment is valid up to 23/11/2027 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	Unit
1	residential apartment with 400 units resulting in built up area of 1,07,833.32 sqm	1.0000	Number

I. WATER CONSUMPTION:

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

Particulars	Water consumption(KLD)
Domestic Purpose	313.0

II. WATER POLLUTION CONTROL:

- 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.
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.	Description	Permitted Quantity of discharge in KLD	Mode/Place of disposal
1	Domestic Purpose	282.000	Sewage effluent shall be discharge into STP of capacity 285 KLD, treated to standards stipulated at all times and used for secondary urban purposes within the premises with Zero Liquid discharge outside.

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

STP & ETP details

SINo	ETP/STP NO	ETP Code	Category Name	Capacity (Meter Cubic)	Units	Remarks
1	STP1	BS-	Bar Screen	0.20	1	BSC Size = 1.0 m x 1.0 m x 1.0 m
2	STP1	DEC	P-Decanter	142.50	1	Decant Tank: 7.30 m x 5.57 m x 3.5 m
3	STP1	EQU	P-Equalization Tank	142.50	1	Equalization tank size : 5.93 m x 8.0 m x 3.0 m
4	STP1	OGT	P-Oil-Grease Trap	0.20	1	O&G Chamber Size : 1.0 m x 1.0 m x 1.5 m
5	STP1	PRI	Primary	50.00	1	Anoxic Tank: 3.6 m X 4.0 m X 3.5 m
6	STP1	AER	S-AERATION TANK	285.00	1	Sequential Batch Reactor: 10.17 m x 8.0 m x 3.5 m

(This document contains 9 pages including annexure & excluding additional conditions)

7	STP1	SHT	S-SLUDGE HOLDING TANK	57.00	1	SHT: 7.30 m x 2.23 m x 3.5 m
8	STP1	CFL	T-CARBON FILTER	1.70	1	Activated carbon filter with 1.2 m dia & 1.5 m height
9	STP1	SFL	T-SAND FILTER	1.70	1	Pressure sand filter with 1.2 m dia & 1.5 m height
10	STP1	TER	Tertiary	285.00	2	Final treated water tank: 10.17 m x 8.0 m x 3.5 m – 2 Nos.

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:

The applicant shall ensure that the ambient noise levels within its premises during construction and during operational period shall not exceed w.r.t Area/Zone as per Noise Pollution (Regulation and Control) Rules, 2000 as mentioned below:-

- a) In Industrial Area 75 dB(A) Leq during day time and 70 dB(A) Leq during night time.
- b) In Commercial Area 65 dB(A) Leq during day time and 55 dB(A) Leq during night time.
- c) In Residential Area 55 dB(A) Leq during day time and 45 dB(A) Leq during night time.
- d) In Silence Zone 50 dB(A) Leq during day time and 40 dB(A) Leq during night time.

Note: - * Day time shall mean 6 am to 10 pm and Night time shall mean 10 pm to 6 am.

- * 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.
- * Leq: It is an energy mean of the noise level over a specified period.

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 & Transboundary 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.

Sr	Solid Waste Name/Type	Qty-Unit	Mode of Disposal
1	STP sludge	0.4200 - M.T	OTH
2	Organic Solid Waste	11.1300 - M.T	OTH
3	Inorganic Solid Waste	16.7100 - M.T	OTH

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

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

VII. GENERAL:

1. The applicant shall transport and store the raw materials in a manner so as not to cause any damage to environment, life 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 industry 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 terms and 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, the 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. 125000

Note:

The Conditions Nil mentioned in the schedule are not applicable.

COPY TO:

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

ANNEXURE- II

Chimney No.	Chimney attached to	Capacity/ KVA Rating	Minimum chimney height to be provided above ground level (in Mts)	Constituents to be controlled in the emission	Tolerance limits mg/NM3	Fuel	Air pollution Control equipment to be installed, in addition to chimney height as per col.(4)	Date of which air pollution control equipments shall be provided to achieve the stipulated tolerance limits and chimney heights conforming to stipulated heights.
1	D.G. Sets	500 KVA - 1 No.		4 PM,SO2,NOx,C O, NMHC	75,0,710,150,100	DIE	AEC,PRT	At all times
2	D.G. Sets	250 KVA - 1 No.		3 PM,SO2,NOx,C O, NMHC	75,0,710,150,100	DIE	AEC,PRT	At all times

Note:

AEC,PRT : Accoustic Enclosures

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 pages.

The CFE is issued as per the recommendations of the Enforcement Committee Meeting held on 27th October 2022 duly approved by Member Secretary & Hon'ble Chairman.



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 at least 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.

$$\text{Equivalent Diameter} = \frac{2 (\text{Length} \times \text{Width})}{(\text{Length} + \text{Width})}$$

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

FOR AND ON BEHALF OF
KARNATAKA STATE POLLUTION CONTROL BOARD

Signature valid

Digitally signed by
Date: 2022.11.24 18:11:29
+05:30

Additional Conditions

In addition to the Consent for Establishment issued by the Board in electronic format under Section (25) of the Water (Prevention & Control of Pollution) Act, 1974 the applicant shall comply with the following additional conditions also for construction of **Residential Apartment with 400 Flats resulting in Total Built up Area of 1,07,833.32 SQM**, installation of STP of capacity **285 KLD** for treatment and discharge of sewage effluent from the project by **Mana Projects Private Limited** proposed to come up on at Sy No. **21/2A, 21/2B, 21/3, 21/4, 161 & 162 of Doddakannahalli Village, Varthur Hobli, Bengaluru East Taluk, Bengaluru.**

References:

1. CFEst applications submitted at Regional Office, Bommanahalli with PCB Id **134520** dated: 15.10.2022.
2. Proceedings of the Enforcement Committee Meeting held on 28th October 2022.

A. Environmental Aspects and its Management During the Course of Construction:

1. This Consent for Establishment issued from pollution control point of view without prejudice to any case in any court of law is valid for a period of **5 years** or coterminous with the validity of Environmental Clearance (EC) issued by State Level Environment Impact Assessment Authority, Karnataka if applicable. Conditions stipulated in the Environmental Clearance shall be completely complied with.
2. Services such as water supply, sanitation and sewage treatment shall be arranged at the construction site as well as the workforce colony and same shall be maintained without any adverse impact to the environment. Such treated sewage shall be used for the curing non load bearing structures, dust suppression and such allied activities as usage of fresh water for construction activity is banned as per Government Order No: FEE 188 ENV 2003, dated 14.03.2003.

B. Water Consumption:

1. The water consumption for the Said project activity shall not exceed **313 KLD**. The applicant shall obtain No Objection Certificate (NoC) issued by Karnataka Ground Water Authority (KGWA) within 3 Months in respect of abstraction of Groundwater from the existing or proposed borewells. The same shall be submitted if the water is proposed to be procured through tankers, the copy of the NoCs obtained by the supplier shall be furnished.

C. Water Pollution Control:

1. The total quantity of sewage shall not exceed **282 KLD** and shall be treated in the sewage treatment plant of capacity **285 KLD** with the treatment scheme submitted along with the application in order to meet the standards stipulated below before utilizing the same for secondary urban reuse such as landscape, gardening, toilet flushing, fire protection and heating ventilation and air conditioning. STP shall be constructed on modular basis to cater to phase-wise development if need be.

Sl. No	Parameter	Prescribed Standards	Sl. No	Parameter	Prescribed Standards
01.	pH	6.5 – 9.0	05.	NH ₄ -N (mg/l)	Not more than 5
02.	BOD ₃ at 27°C (mg/l)	Not more than 10	06.	N-Total (mg/l)	Not more than 10
03.	COD (mg/l)	Not more than 50	07.	Fecal Coliform (MPN/100 ml).	Less than 100
04.	TSS (mg/l)	Not more than 20			



2. All the treatment units shall be made impervious and if they do not achieve the standards stipulated above or if it is found to be inadequate, the applicant shall have to modify the units or upgrade the STP with prior consent of the Board, in order to attain standard stipulated.
3. The applicant shall make provisions for dual piping system to use the treated sewage effluent for toilet flushing, gardening and other secondary purposes. If the treated sewage is used for car or basement or floor wash, a separate treatment unit shall be provided in the STP chain for removal of oil and grease.
4. Separate energy meter and flow meter shall be provided to STPs with log records maintained in a register.
5. Applicant shall add appropriate disinfectant to treated sewage to ensure residual chlorine preferably in the range of 1 mg/l. to 3 mg/l. In case of excess treated sewage is an arrangement can be made with the end users such as civic authority parks or nearby construction projects with proper documentation and prior approval of the Board.
6. **DANGER** sign board near the STP shall be installed to maintain safety of the personnel involved in its operation and maintenance. Proper signage shall be displayed in both Kannada and English languages near the taps that discharge treated sewage as non potable water. Access to STPs shall be given to authorized persons only with issue of necessary permits.
7. The applicant shall make use of the Mechanical Cleaning Equipment's to clean the STPs, instead of resorting to manual cleaning by contacting the Urban Local Body or any other authorized private agency in this regard by making use of Sucking & Jetting Machines. Necessary protective equipments, safety gadgets, lifesaving oxygen supply shall be made available at the STP at all times. Precaution shall be taken to avoid any personnel coming in contact with Methane Gas generated. Necessary protective equipment with prescribed calibration shall be made available at all times.
8. In event of breakdown of regular power supply alternate source such as a captive diesel generator set to run and operate the essential units of sewage treatment plant shall be provided. The services of qualified Environmental Engineer or Scientist shall be availed for the management of environmental aspects such as STP operation & cleaning, municipal solid waste management, domestic hazardous waste management, etc. The STP operators shall be trained & certified by a reputed organization such as Environmental Management Policy Research Institute. The STP shall be located 30 m away from the periphery of the Water Bodies such as lakes, tanks etc., and 50m, 25m, 15m away from the central line of the primary, secondary, Tertiary Rajakaluve respectively.

D. Air Pollution Control:

1. There shall not be any source of air pollution in the premises of the apartment other than diesel generators, All diesel generators sets above the capacity of 125 KVA shall be fixed with a retrofitting emission control device having a minimum specified particulate matter capturing efficiency of at least 70% as per Board order No. 2887 dated 17.09.2021 which in turn is as per directions of the honorable NGT in matters related to OA 681/ 2018, order dated 06.08.2019. Any installation of additional air pollution sources shall be done with prior permission of the Board.
2. The applicant shall deploy suitable dust control measure to suppress the dust generated during the activity of the project using minimal quantity of water.

E. Solid Waste Management:

1. The applicant shall earmark suitable place with adequate space for management of solid wastes such as segregation, treatment and scientific storage. Organic solid waste shall be treated in in-house organic waste processing facility. Inorganic portion shall be handed over to authorized agency or ULB collection system with proper documentation.
2. Biomedical waste shall be handled & disposed as per the provisions of Biomedical Waste Management Rules, 2016. Separate bins shall be provided for the collection of the same



3. Used sanitary napkins shall be stored and disposed scientifically as per prevailing law. The sanitary napkins shall be collected in separate bins with proper precautions and markings.
4. Plastic waste shall be handled & disposed as per provisions of Plastic Waste Management (Amendment) Rules, 2021. The waste plastic shall be handed over to authorized plastic waste processes duly maintaining appropriate records.
5. E waste shall be managed & disposed as per E-Waste (Management) Rules, 2016. Separate bins shall be kept at appropriate location in the premises for collection of the same with proper notification and markings.
6. Battery waste shall be managed & disposed as per Battery (Management & Handling) Rules 2010.

F. Construction & Demolition Waste:

1. The applicant shall strictly follow Construction & Demolition Waste Management Rules published by Ministry of Environment, Forest and Climate Change, New Delhi on 29.03.2016.
2. The applicant shall collect and hand over the wastes generated only to the KSPCB Authorized C & D waste processing facility without causing environmental pollution, ensuring it free from plastics and other organic matter.
3. Records pertaining to generation, transportation of C&D waste, including vehicle numbers, invoices/payment receipts, shall be maintained and furnished to the Board once in 03 months. In case there is no such waste generated or transported 'Nil' returns with signature of the authorized persons shall be furnished.
4. At no instances the waste shall be disposed illegally by dumping in valley, lakes or any other places directly or indirectly through the transporter. The generator will be held responsible to proceed with legal action for such violations even if the disposal is carried out by the transporter.
5. The applicant shall explore to use sand derived from crushed C& D waste as an alternative instead of using river sand for construction.
6. The trucks entering and exiting the construction site shall be subject to "wheel and trucks bottom washing" with a permanent arrangement and to reuse the waste water again.
7. The data on the management of C&D waste as per CPCB guidelines of March 2017 shall be furnished.

G. Health & Safety:

1. The applicant shall provide all necessary personal protective equipment & healthcare facilities to workers as per the prevailing policies of the competent authorities.
2. Wastes such as mask, gloves generated during the pandemic periods shall be packed separately without mixing with the other wastes and handed over to Common Biomedical Waste Management Facilities.
3. Used sanitary napkins, tampons and such allied materials shall be packed separately and handed over to the civic authorities for the safe disposal.

H. General:

1. Applicant shall install Rain Water Harvest System to reduce draft on fresh water along with providing Percolation Pits to augment ground water table. The details with drawings shall be furnished within a month.
2. The proposed project site is surrounded by the following activities

Towards North	Road	Towards East	Private residential houses/apartments
Towards South	Private residential apartment	Towards West	Road and residential apartment

3. The prospective buyers shall be notified about existing surrounding schedule of the property.
4. All pages of the Consent for Establishment (CFE) obtained by the Board shall be displayed at prominent places Viz, marketing office, model apartment for the information of customers.
5. The applicant shall explore separation of sullage and sewage and make separate proposal for Treatment & utilization for secondary proposes other than drinking usage.



6. Used oil, oil soaked waste, oil filters generated from servicing the diesel generators shall be disposed to KSPCB authorized handlers.
7. Greenery of shrubs flowering and foliage trees shall be created in the premises as much as practicably possible.
8. The applicant shall not change or alter (a) number of flats, quantity or rate of discharge of effluents / emissions and (b) install/replace/alter the water or air pollution sources without the prior approval of the Board.
9. The applicant is liable to reinstate or restore, damaged or destroyed elements of environment at their cost, failing which, the applicant or occupier as the case may be shall be liable to pay the entire cost of remediation or restoration and pay in advance an amount equal cost estimated by Competent Agency or Committee. In case of the any complaint the applicant shall stop the construction activity and shall take appropriate measures before resuming construction activity with due information to the Board.
10. All necessary steps to keep the storm water drains within the project premises clean shall be taken keeping the top open along with de silting the same to keep it clean aiding smooth flow of water in it.
11. Shall provide necessary electrical charging facilities for battery operated vehicles in the car parking area or at vantage places as per the prevailing policies of the Government.
12. The applicant shall earmark buffer distance as per the bylaws of the local planning authority.
13. All the environmental pollution control measures shall be installed and made operational before handing over the project to others.
14. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions.
15. The applicant shall submit Half Yearly Consent Conditions Compliance Report to the Regional & Board Office as per schedule mentioned here in – April to September months to be submitted before 31st October, while October to March to be submitted before 30th April.
16. The Board reserves the right to withdraw the consent if non compliances to conditions stipulated are observed.
17. The applicant shall create awareness on environmental issues and Ozone Depleting Substances and educate the residents about Ozone layer and its importance and ban use of ODS in the apartment premises.
18. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
19. The applicant shall obtain Environmental Clearance from competent authority before taking up of construction activities and CFO will be considered only after submission of EC and compliance.

Please note that separate consent for operation of the Board for discharge of liquid effluent shall be obtained by remitting prescribed consent fee. The application for Consent has to be made 45 days in advance so as to make necessary inspection of the project to ascertain the pollution control measures provided. Issue of Consent will be considered only after complete installation of all the pollution control measures and its satisfactory operation. The receipt of CFE may please be acknowledged.

For and on behalf of
Karnataka State Pollution Control Board


Senior Environmental Officer
