## MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437

Fax: 24023516

Website: http://mpcb.gov.in Email: ast@mpcb.gov.in



Kalpataru Point, 2nd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

Date: 13/10/2022

RED/M.S.I (R58) No:- Format1.0/AS(T)/UAN No.0000137865/CR/2210001024

To,

Bakul Aromatics and Chemicals Private Limited., A-6, MIDC Industrial Area Patalganga, Kaire-Village, Khalapur, Dist.-Raigad.



Sub: Grant of Renewal of Consent to Operate under Red/MSI category.

**Ref:** Consent to Operate granted by the Board vide Consent No. Format

1.0/AST/UAN No. 0000027956/R/CC- 1801000614, Date. 16.01.2018 valid

upto 30.06.2022.

Your application No.MPCB-CONSENT-0000137865 Dated 28.04.2022

For: Grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- The consent to renewal is granted for a period up to 30/06/2024
- The capital investment of the project is Rs.8.45 Crs. (As per C.A Certificate submitted by industry Existing CI is-Rs. 3.6 Crs + Expansion/Increase in C.I. -Rs. 4.8 Crs)
- 3. Consent is valid for the manufacture of:

Sr No	Product	Existing Quantity	Proposed Quantity	Total	иом
Prod	ucts				
	a). Theophylline				
1	b). Aminophylline	45	0	45	MT/M
1	c). Caffeine				
	d). Uracil/Nitroso				
2	Lithium Antimony Thiomalate	0.1	0	0.1	MT/M
3	Theobromine	7	0	7	MT/M

4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	100	As per Schedule-I	Partly recycle 20 CMD & partly CETP 80 CMD



Sr No	Description	Permitted	Standards to	Disposal
2.	Domestic effluent	5	As per Schedule-I	Soaked in soak pit

5. Conditions under Air (P& CP) Act, 1981 for air emissions:

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	S-1	Boiler (2 TPH) & Boiler (0.8 TPH)	1	As per Schedule -II
2	S-2	D.G Set (320 KVA)	1	As per Schedule -II
3	S-3	Process Reactor Vent -1	1	As per Schedule -II
4	S-4	Process Reactor Vent -2	1	As per Schedule -II

#### 6. Non-Hazardous Wastes:

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	MS Scrap	80	Kg/M	Sale	Sale to authorized party

7. Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	3650 HEIV	Nos./Y	Recycle*	Sale to authorised party / CHWTSDF
2	35.3 Chemical sludge from waste water treatment	10	MT/A	Landfill after treatment	CHWTSDF
3	28.1 Process Residue and wastes	30	MT/A	Incineration	CHWTSDF
4	28.2 Spent catalyst	5	MT/A	Recycle*	Sale to authorised party / CHWTSDF
5	28.3 Spent carbon	5	MT/A	Incineration	CHWTSDF
6	37.3 - MEE / ATFD Slats	300	MT/A	Landfill after treatment	CHWTSDF
7	5.1 Used or spent oil	100	Ltr/A	Recycle*	Sale to authorised party / CHWTSDF
8	28.1 - By-product Acetic Acid	51	MT/M	Recycle*	Sale to authorised party / CHWTSDF

<sup>\*</sup> Industry shall ensure disposal of Hazardous Waste to the Actual user having permissions under Rule 9 of Hazardous and other Waste (M & TM) Rules, 2016.

## 8. Conditions under Plastic Waste Management Rules, 2016 (Notification dtd. 18/03/2016):

2	Sr No	Type of Waste	Quantity	UoM	Disposal Path
	1	Plastci Waste	20.00	Kg/M	Sale to Authorized Recycler

- 9. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
- 10. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- 11. The industry shall obtain necessary permission from the Directorate of Industrial Safety and Health (DISH).
- 12. The applicant shall not carry out any excess production or produce new products without Consent of the Board and without Environmental Clearance wherever it applicable.
- 13. The applicant shall properly collect, transport & regularly dispose-off the Hazardous Waste to CHWTSDF, in compliance of the Hazardous and other Waste (M & TH) Rule-2016 through online manifest system.
- 14. The industry shall ensure connectivity of continuous online monitoring system to the Board server & data to be transmitted directly from Data Logger to the Board server.
- 15. Industry shall submit the Board resolution stating increase in Capital investment without permission of the Board and violated the provisions of Environmental laws and will not do such activity henceforth within 15 days.
- 16. Industry shall comply the Boards Circular dtd. 05.02.2020 for use of cleaner fuel.
- 17. The industry shall dispose the by-products as Hazardous waste and shall comply the provisions of Hazardous & Other Wastes (M & TM) Rules, 2016.
- 18. The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent. (Operate/Renewal)

#### Received Consent fee of -

Sr.N	o Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	125000.00	MPCB-DR-11502	29/04/2022	NEFT
2	15000.00	MPCB-DR-14353	19/09/2022	NEFT

# Balance amount of Rs. 75000 will be considered at the time of next renewal of consent.

#### Copy to:

- 1. Regional Officer, MPCB, Raigad and Sub-Regional Officer, MPCB, Raigad I
- They are directed to ensure the compliance of the consent conditions.
- 2. Chief Accounts Officer, MPCB, Sion, Mumbai

## **SCHEDULE-I**

## **Terms & conditions for compliance of Water Pollution Control:**

- 1. A] As per your application, you have segregated trade effluent into weak stream & strong stream and provided Effluent Treatment Plant (ETP) comprising of:
  - i) Strong COD/TDS stream of 20 CMD Treatment system comprising of Primary (Collection tank, Neutralization tank, Equalization tank, Flash mixer, Primary Clarifier/Primary Settling Tank, Primary after stmt) , Multi effect evaporator (2 stage) with design capacity of 20 CMD followed by ATFD. The MEE condensate is treated in weak stream ETP.
  - **ii) Weak COD/TDS stream of 80 CMD -** Treatment system comprising of Primary (Collection tank, Neutralization tank, Equalization tank, Flash mixer, Primary Clarifier/Primary Settling Tank), Secondary (Activated sludge process), Tertiary (Pressure sand filter, Activated carbon filter) with design capacity of 150 CMD.
  - B] The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent:

Sr.No	Parameters	Limiting concentration not to exceed in mg/l, except for pH	
(1)	рН	6.5 - 8.5	
(2)	BOD (3 days 27°C)	100 mg/l	
(3)	COD	250 mg/l	
(4)	TSS	100 mg/l	
(5)	Oil & Grease	10 mg/l	
(6)	Ammonical Nitrogen	50 mg/l	
(7)	Phenolic Compounds 1 mg/l		
(8)	Total Dissolved Solids	2100 mg/l	
(9)	Chloride	600 mg/l	
(10)	Sulphate	1000 mg/l	
(11)	Iron	3 mg/l	
(12)	Zinc	5 mg/l	
(13)	Sulphide	2 mg/l	
(14)	Cromium Hexavalent 0.1 mg/l		
(15)	Cyanide 0.1 mg/l		
(16)	Bio-assay Test	100% Survival of fish in effluent for 96 Hours.	

C] The partly treated strong stream effluent 20.0 CMD shall be recycled and reused in the process/utilities & partly treated weak stream effluent 80.0 CMD shall be disposed to CETP for further treatment and disposal after confirming above standards. In no case, effluent shall find its way outside factory premises.

- D] The treated effluent shall be send to CETP through drainage line provided by MIDC for further treatment and disposal after confirming above standards.
- E] The industry shall ensure connectivity online monitoring system to the MPCB server including separate energy meter for pollution control system and comply with direction issued to CETP on 22.01.2021, regarding installation of two-way SCADA, Auto-sampler, Non-Return Valve (NRV) with positive discharge to CETP chamber.
- 2. A] As per your application, you have provided Septic Tank followed by Soak pit for the treatment of 5 CMD of sewage.
  - B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

Sr.No	Parameters	Standards (mg/l)		
1	Suspended Solids	Not to exceed	50	
2	BOD 3 days 27°C	Not to exceed	30	

- C] The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise after confirming above standards. In no case, sewage shall find its way for gardening / outside factory premises.
- 3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- 4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	72.00
2.	Domestic purpose	30.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	160.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	0.00

The applicant shall not increase water consumption and effluent quantity prescribed in the consent. Also, shall not use of other water supply from unauthorized sources like Tanker/ borewell, etc. 6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

#### **SCHEDULE-II**

## **Terms & conditions for compliance of Air Pollution Control:**

1. As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:

Stack No.	Source	APC System provided/prop osed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
	Boiler	Stack		LSHS/LDO 1824		TPM	150 Mg/Nm³
S-1	(2 TPH)	Stack	- 22.00	Kg/Day	1	SO2	36.28 Kg/Day
3-1	Boiler (0.8 TPH)	Stack		LSHS/LDO 960 Kg/Day	1	TPM	150 Mg/Nm³
						SO2	19.2 Kg/Day
S-2	D.G Set (320 KVA)	Acoustic Enclosure Stack	5.00	HSD 18 Ltr/Hr	1	Acid Mist	35 Mg/Nm³
S-3	Process Reactor	I VANTURV	0.00	9.00 - 0NA		Acid Mist	35 Mg/Nm³
	Vent-1	Scrubber				SO2 (process)	50 PPM
C 4	Process	Reactor Scrubber	9.00	0 NA	7.17	Acid Mist	35 Mg/Nm³
S-4	Vent-2		9.00 - 0NA		-	SO2 (process)	50 PPM

- (D.G Set stack height shall be above roof of building)
- 2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
- 3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Parameters Parameters Parameters	Standards (mg/l)	
Total Particulate Matter	Not to exceed	30 mg/ Nm3

- 4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

- 6. Solvent Management shall be carried out as follows:
  - a. Reactors shall be connected to Water / Chilled Water /Brine Condenser system.
  - b. Reactors and solvent handling pumps shall have mechanical seals to prevent the leakages.
  - c. The condensers shall be provided with adequate Heat transfer area (HTA) and residence time so as to achieve more than 97% overall recovery
  - d. Solvents shall be stored in a separate space specified with all safety measures.
  - e. Proper earthing shall be provided in all the equipment's, wherever solvent handling is done.
  - f. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
  - g. All the solvent storage tanks shall be connected with vent condensers with Water / chilled water / Brine circulation.
  - h. Fugitive emissions shall be controlled at 99.95% with effective chillers.
  - i. Solvent transfer shall be through pump.
  - j. Metering and control of quantities of active ingredients to minimize wastes.
  - k. Use of automatic filling to minimize spillage.
  - I. Use of close feed system into batch reactors.
  - m. Venting equipment through vapour recovery system.

## **SCHEDULE-III**

## **Details of Bank Guarantees:**

Sr. No	Consent (C2E/ C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	Rs.2.0 Lakh	15 Days	Towards Operation and Maintenance of Pollution Control Systems and Compliance of consent conditions	30.06.2027	28.02.2028
2	C to R	Rs.2.0 Lakh	15 Days	Towards submission of Board resolution stating increase in Capital investment without permission of the Board and violated the provisions of Environmental laws and will not do such activity henceforth.	30.06.2027	28.02.2028

The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days from the date of issue of Consent.

## **BG Forfeiture History**

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
1	C to R	Rs. 1.0 Lakh	-	Towards Operation and Maintenance of Pollution Control Systems and Compliance of consent conditions as per the previous consent conditions	Rs.1.0 Lakh	Towards exceedance of JVS of treated effluent of ETP.

## **BG** Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
1	NA	NA	NA	NA

#### **SCHEDULE-IV**

#### **General Conditions:**

- 1. The waste generator shall.
  - a) take steps to minimize generation of plastic waste and segregate plastic waste at source in accordance with the Plastic Waste Management Rules, 2016 or as amended from time to time.
  - b) not litter the plastic waste and ensure segregated storage of waste at source and handover segregated waste to urban local body or gram panchayat or agencies appointed by them or registered waste pickers', registered recyclers or waste collection agencies;
- All institutional generators of plastic waste, shall segregate and store the waste generated by them in accordance with the Plastic Waste Management Rules, 2016 amendment from time to time and handover segregated wastes to authorized waste processing or disposal facilities or deposition centers either on its own or through the authorized waste collection agency.
- All waste generators shall pay such user fee or charge as may be specified in the byelaws of the local bodies for plastic waste management such as waste collection or operation of the facility thereof, etc.;
- 4. Every person responsible for organizing an event in open space, which involves service of food stuff in plastic or multilayered packaging shall segregate and manage the waste generated during such events in accordance with the Plastic Waste Management Rules, 2016 amendment from time to time.
- 5. The Energy source for lighting purpose shall preferably be LED based
- 6. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
- 7. Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
  - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
  - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
  - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
  - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
  - f) D.G. Set shall be operated only in case of power failure.
  - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
  - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
- 8. The applicant shall maintain good housekeeping.

- 9. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
- 10. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 11. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 12. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
- 13. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 14. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
- 15. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- 16. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 17. The PP shall provide personal protection equipment as per norms of Factory Act 1948
- 18. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
- 19. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
- 20. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 21. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 22. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.

- 23. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
- 24. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 25. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 26. The industry should not cause any nuisance in surrounding area.
- 27. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
- 28. The industry shall create the Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
- 29. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 30. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
- 31. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 32. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
- 33. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
- 34. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
- 35. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

- 36. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
- 37. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

This certificate is digitally & electronically signed.

