

# MAHARASHTRA POLLUTION CONTROL BOARD

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RED/LSI

Consent No. BO/(JD(APC)/EIC No.NG-KP-12977-13/O/CC-7093 Date: 26/08/2013

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 / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Trans Boundary Movement) Rules 2008.

[To be referred as Water Act, Air Act and H W (M, H & TM) Rules respectively].

CONSENT is hereby granted to

**M/s Sinewave Biomass Power Pvt. Ltd.,  
Gat No. 315, 375, Vill- Tung,  
Dist- Sangli.**

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of H W (M, H & TM) Rules, subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

1. The Consent to Operate is granted for a period up to – 31/08/2014.

2. The Consent is valid for the manufacture of:-

<u>Sr. No.</u>	<u>Product</u>	<u>Maximum Quantity</u>
1)	Power electricity (from biomass only)	10 MW

3. **CONDITIONS UNDER WATER (Prevention and Control of Pollution) ACT, 1974:**

- (i) The quantity of trade effluent from the factory shall not exceed 70.0 m<sup>3</sup>/day.  
(ii) The quantity of sewage effluent from the factory shall not exceed 5.0 m<sup>3</sup>/day.  
(iii) **Trade Effluent Treatment:** The applicant shall provide comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:  
The industrial effluent arising from various sections of Power Plant shall be given such treatment either collective or individually as the site condition permits that the final quality of effluent shall have following character standards:

a) **Condenser Cooling Water:**

- |                            |  |
|----------------------------|--|
| 1) pH                      | Between 6.5 to 8.5   |
| 2) Temperature             | Not to exceed 5 Degree C.<br>Higher than the intake water temperature. |
| 3) Free available Chlorine | Not to exceed 0.5 mg/l   |

b) **Boiler Blow down:**

- |                     |                         |
|---------------------|-------------------------|
| 1) Suspended Solids | Not to exceed 100 mg/l. |
| 2) Oil & Grease     | Not to exceed 20 mg/l.  |
| 3) Copper (Total)   | Not to exceed 1 mg/l.   |
| 4) Iron (Total)     | Not to exceed 1 mg/l.   |

- c) **Cooling Tower Blow down:**
- |                            |               |     |       |
|----------------------------|---------------|-----|-------|
| 1) Free available Chlorine | Not to exceed | 0.5 | mg/l. |
| 2) Zinc                    | Not to exceed | 1   | mg/l. |
| 3) Chromium (Total)        | Not to exceed | 0.2 | mg/l. |
| 4) Phosphate               | Not to exceed | 5   | mg/l. |

- d) **D.M. Plant Effluent:**
- |                          |               |          |       |
|--------------------------|---------------|----------|-------|
| 1) PH                    | Between       | 5.5 to 9 |       |
| 2) BOD 3 days 27 Deg. C. | Not to exceed | 30       | mg/l. |
| 3) COD                   | Not to exceed | 250      | mg/l. |
| 4) Suspended Solids      | Not to exceed | 100      | mg/l. |
| 5) Oil & Grease          | Not to exceed | 10       | mg/l. |
| 6) TDS                   | Not to exceed | 2100     | mg/l. |

(iv) **Trade Effluent Disposal:** The total treated effluent shall be recycled/reused for ash handling and dust suppression etc and industry shall achieve zero discharge.

(v) **Sewage Effluent Treatment:** The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards.

- |                      |               |     |       |
|----------------------|---------------|-----|-------|
| (1) Suspended Solids | Not to exceed | 100 | mg/l. |
| (2) BOD 3 days 27 C. | Not to exceed | 100 | mg/l. |

(vi) **Sewage Effluent Disposal:** The treated domestic effluent shall be recycled/ reused for ash handling and dust suppression etc.

(vii) **Non-Hazardous Solid Wastes:**

<u>Type of waste</u>	<u>Quantity</u>	<u>Treatment</u>	<u>Disposal</u>
1) Fly Ash	56 MT/Day	---	Should be send to cement Manufacturer & dispose as per Govt. of India Guidelines / Notification, vide No. SO 763(E), dtd 14-09-1999.

(viii) **Other conditions:**

- The industry should monitor effluent quality regularly.
- Green Belt a forestation shall be done up to 33% on available open space land.
- The firm shall provide continuous flow meter for the measurement of the flow of the effluent.
- Industry shall adopt clean technology like ozonization for cooling water treatment.
- Industry shall provide dry fly ash handling & collection system and utilize the fly ash as per the fly ash notification of the Govt. of India.
- Transportation of coal & fly ash shall be by closed system, Conveyor system wherever possible.
- Fly ash shall be 100% utilized within six years as per fly ash Notification.

4. The applicant shall comply with the provisions of the Water (Prevention Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules there under:

The daily water consumption for the following categories is as under:

- |  |      |        |      |
|--|------|--------|------|
| (i) Domestic                               | ...  | 6.0    | CMD. |
| (ii) Industrial Process                    | ...} |        |      |
| (iii) Cooling water                        | ...} | 1560.0 | CMD  |
| (iv) Boiler Blow Down, DM Plant, Softening | ...} | 00.0   | CMD  |
| (v) Other uses like gardening etc.         | ...  | 15.0   | CMD  |

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act which is also available on MPCB website at <http://mpcb.gov.in/images/cessform1.pdf>

5. **CONDITIONS UNDER AIR (Prevention & Control of Pollution) ACT, 1981:**

- (i) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of Emission and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

**Standards for Emissions of Air Pollutants:**

(i)	SPM/TPM	Not to exceed	100 mg/Nm <sup>3</sup>
(ii)	SO <sub>2</sub>	Not to exceed	2.0 T/day

- (ii) **The applicant shall observe the following fuel pattern :-**

<u>Sr. No.</u>	<u>Type of Fuel</u>	<u>Quantity</u>
(i)	Biomass	85.70

- (III) **The applicant shall erect the chimney(s) of the following specifications:-**

<u>Sr. No.</u>	<u>Chimney attached to</u>	<u>Height in Mtrs.</u>
1	Boiler	60
2	DG Set ( 1250 KVA)	5

- (IV) **Control Equipment:**

1. Electrostatic Precipitator of sufficient capacity shall be provided to Boiler and any other sources of particulate matter, so as to ensure that TPM emission do not exceed 100 mg/Nm<sup>3</sup>
2. There shall not be any fugitive emission from rice husk handling and fly ash handling.

- (V) 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.

- (VI) 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.

- (VII) **Other Conditions:**

1. The rice husk handling system shall be covered with proper hooding and ventilation arrangements connected to dust suppress agent so as not to allow any fugitive emissions.
2. A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.
3. The industry shall not cause any nuisance in surrounding area.
4. The industry shall monitor stack emissions & ambient air quality regularly.
5. The applicant shall operate continuous monitoring equipments for stack emission analysis and submit a report on fortnightly basis to the respective Regional Office/ Sub-Regional Office.
6. Regular monitoring of the ambient air quality shall be carried out in and around the power plant and maintained the records.
7. If due to any technological improvements or otherwise this Board is of opinion that all or any of the conditions referred above require variation (including the change of any control equipment either in whole or in part), this Board shall after giving the applicant an opportunity of being heard very all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions so varied.

### 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. The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
- d. Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
- e. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- f. 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.
- g. D.G. Set shall be operated only in case of power failure.
- h. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set

### 6. CONDITIONS UNDER HW (M &H) RULES, 1989 & AMENDMENT RULES, 2003:

- (i) The applicant shall handle hazardous wastes as specified below:

Sr. No.	Item No. of Process generating HW as per Schedule-I	Type of Waste	Quantity	Disposal
Industry shall not generate any hazardous waste.				

- (ii) The authorization is hereby granted to operate a facility for collection, storage, transport and disposal of hazardous waste.

7. 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.

### 8. General conditions:

- (i) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30<sup>th</sup> September every year on available open plot area, no. of trees surviving as on 31<sup>st</sup> March of the year and no. of trees planted by September end.
- (ii) The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by he applicant and operate the same in case of power failure to maintain compliance with the terms and conditions of the consent. In the absence of same, the applicant shall stop, reduce or otherwise, control production to abide by terms & conditions of this consent regarding pollution levels.

- (iii) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers down- stream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- (vi) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous wastes to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- (vii) 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.

9. This is issued with the approval of **Consent Committee meeting** of the Board held on 17<sup>th</sup> August, 2013.
10. **The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.** The applicant shall not change or alter 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.
11. The industry shall submit the Bank Guarantee of Rs.5/- Lakhs at Regional Office, Kolhapur within 15 days period towards operation and maintenance of pollution control system. The Bank Guarantee shall be valid upto 31/12/2014.
12. Total capital investment of the industry is Rs.47.50 Crores.

For and on Behalf of the  
Maharashtra Pollution Control Board,

(V.M.Motghare)  
Member Secretary

To,  
M/s Sinewave Biomass Power Pvt. Ltd.,  
Gat No. 315, 375, Vill- Tung,  
Dist- Sangli.

**Copy to:**

1) Regional Officer, MPC Board, Kolhapur. 2) Sub Regional Officer, MPC Board, Sangli. -- They are directed to ensure the compliance of consent condition & obtained BG of Rs.5/- Lakhs from the industry.

2) Chief Accounts Officer, MPC Board, Mumbai.

Received Consent fee of -

Sr.No.	Amount(Rs.)	DD.No.	Date	Drawn On
1	Rs.75,100/-	913922	23/04/2013	SBI Bank

4) Cess Branch, MPC Board, Mumbai. 5) Master file.