### MAHARASHTRA POLLUTION CONTROL BOARD

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Mumbai: 400 022.

No. MPCB/JD(WPC)/B: 435

Date: 10/01/2013

### **CIRCULAR**

Sub: Grant of consent to sugar, co-generation, distilleries those

are within same premises and operational BGs.

Ref: Minutes of CAC meeting dated 07/12/2011 and 05/12/2012

It has been observed that many of the sugar industries, co-generation plants and distilleries are operating within same premises. The Effluent Treatment Plant provided by the sugar industry is commonly utilized for the effluent generated from co-generation plants. Detailed discussions were held in the CAC meeting dated 07/12/2011 and 05/12/2012. As utilization of common ETP by sugar, co-generation plant and hence it was decided to amalgamate the consents of sugar and co-generation plants. The consent of distillery shall be kept separate as the treatment of industrial effluent generated from distilleries is not being treated in the ETP of sugar industry. While considering the applications the total Capital Investment of industry shall be considered including sugar, co-generation plant and distillery. The application of distillery shall be treated separately for calculation of fees and fees to be collected as per Capital Investment separately. However, while submitting the application the total capital investment of the industry is to be considered and the application shall be submitted to concerned authority as per the Office Order dated 07/03/2008 issued in respect of delegation of powers for grant/refusal of consent. All consents of sugar- co-generation, distillery and other units located in same premises shall be granted period upto 31st July of the respective year. All such applications shall reach to MPCB prior to 60 days before expiry of consent period.

The necessary guidelines and conditions to be incorporated in the consent are enclosed as Annexure-I. These guidelines and consistent approach are to be scrupulously followed.

This circular is issued with an overriding effect to earlier circular issued vide

No. MPCB/JD(WPC)/B-7138 dated 16/12/2011

(Rajeev Kumar Mital)
Member Secretary

Copy submitted to: Hon'ble Chairman, MPC Board, Mumbai

Copy to:

JD(WPC)/JD(APC)/AST/JD9PAMS)/PSO/RO(HQ), MPC Board, Mumbai

Copy to:

Sr.Law Officer (P & L Divn.), MPC Board, Mumbai – for information

To,

Regional Officer, MPC Board, Mumbai/Navi Mumbai/Kalyan/Thane/Raigad/Pune/Nashik/ Kolhapur/Aurangabad/Amravati/Nagpur/Chandrapur

Sub-Regional Officer, MPC Board, Mumbai-I,II,III,IV/Navi Mumbai-I,II, Taloja/Kalyan-I,II,III, Bhiwandi/Thane-I, II, Tarapur-I, II/Raigad-I,II, Mahad/Pune-I, II, Pimpri-Chinchwad, Solapur, Satara/Nashik, Jalgaon-I, II, Ahmednagar/Kolhapur, Ratnagiri, Chiplun, Sangli/Aurangabad-I, II, Nanded, Parbhani, Latur/Amravati-I, II, Akola/Nagpur-I, II, Bhandara/Chandrapur

### ANNEXURE-I

### A-Sugar and Co-generation

The sugar industry generates significant quantity of industrial effluent and also causes air emissions due to the use of bagasse as fuel. The inadequate treatment and improper disposal of liquid effluent is the priority area to be handled in view of the regular complaints and Assembly matters on this issue.

It has been observed that the liquid effluent management has following concerns in the sugar industry.

- The effluent collection system within the industry premises is not covered and therefore ingress of extraneous material particularly the bagasse is observed. This ingress of bagasse add to the pollution load and also, treatability of effluent is significantly hampered.
- The effluent collection lines within the industry are generally passing through the crushing area and therefore ingress of bagasse and other waste is also observed.
- 3. The sugar industry is a seasonal industry and in order to cater the demand of crushing most of the sugar industries are found to be crushing more quantity of cane than the consented capacity. This enhanced crushing of cane is resulting in generation of additional quantity of effluent which is causing shock loads in the ETP.
- 4. The ETP is also not operated properly as skilled man power is not deputed and there is lack of a top management supervision.
- 5. The effluent disposal is generally on the land, however the effluent distribution network is not properly designed and provided, and therefore, many a time run of effluent is reaching the nearby water bodies.

It is, therefore, necessary to initiate following steps.

- Bagasse handling and storage systems should be properly designed and isolated to avoid mixing of the bagasse with the effluent. The bagasse conveyance system should be properly covered.
- The effluent collection lines should be covered to avoid ingress of bagasse and other materials.

- The effluent treatment plants operations should be handled by trained technical staff and top management should take regular review of ETP and disposal arrangement.
- 4. The adequate air pollution control arrangements as per the consent shall be provided and operated properly.
- 5. The regular monitoring of treated effluent and air emissions shall be conducted by the sugar industry during their operations.
- The monitoring frequency for the sugar industries should be twice in a month in the crushing period and RO/SRO shall ensure that, regular JVS samples for effluent and air are collected.
- 7. Board is granting consents to Sugar, Co-generation, and other associated industries located in same premises. Many of the industries are applying for consent to establish i.e expansion in the existing industry. Regular review of compliance of consent conditions is being taken at regular intervals as well as at the time of renewal of consent or application of consent to establish for expansion. To have an uniformity in granting / refusal of consent following consistent approach as follows.

## (A) For Sugar and Co-generation Unit:

(1) Consent to Establish	<ul> <li>a) B. G. of Rs. 2 lakhs to be imposed on industries for compliance of C to E conditions as well as avoiding of ingrasse of baggasse and other material.</li> <li>b) B.G. of Rs. 5 lakhs for provision of Pollution Control Systems as per CREP Guidelines.</li> </ul>
(2) Consent to Operate	<ul> <li>a) Verification of Compliance of conditions of C to E as per CREP.</li> <li>b) If complied consent to operate to be granted with condition of B.G. of Rs. 5 lakhs for O &amp; M of Pollution control Systems. (Air &amp; Water)</li> <li>c) If the industry is complied the B.G. obtained at the time of C to E may be return to industry.</li> <li>d) If industry is non complied consent to operate to be refused and necessary action is to be initiated as per legal provisions.</li> </ul>
(3) Renewal of Consent	<ul> <li>a) Verification of compliance of 1<sup>st</sup> Consent to Operate issued.</li> <li>b) B.G. of Rs. 2 lakhs to be imposed on old units wherein earlier B.G. for avoiding ingress of bagges and other foreign material, was not imposed.</li> <li>c) If Complied regular renewal of consent to be issued with Operational B.G. of Rs. 5 lakhs</li> <li>d) If the exceedence in JVS standards up to 10% shall be considered as complied.</li> </ul>

3.(a ) CREP non complied	<ul> <li>e) If non complied with respect to JVS B.G. to be forfeited once and necessary B.G. to be obtained as per legal matrix.</li> <li>f) If consistently non complied (After encashment of B.G for two times i.e. 5 lakh and 10 lakhs) despite of forfeiture of B.G. closure directions to be issued.</li> <li>a) Not to restart / resume operations till the confinence in the complex till the confinence in the complex till the confinence in the co</li></ul>
Industry	<ul> <li>a) Not to restart / resume operations till the confirmation from Regional Officer about CREP compliance.</li> <li>b) Necessary directions shall be issued by Regional Officers.</li> <li>(i) You shall operate &amp; maintain existing air pollution control system round'O clock, so as to prevent any sort of air pollution in the surrounding area.</li> <li>(ii) You shall submit concrete proposal within 1 month to provide upgrade existing air pollution control devices comprising E.S.P./Bag filter/ Wet scrubber/ High Efficiency Scrubber within 4 months time, to achieve the standards laid down under the provisions of the Environment (Protection) Rules, 1986.</li> <li>(iii) You shall furnish an irrevocable bank guarantee of Rs.3 Lakhs ensuring the compliance of the above conditions, which shall be valid for a period of one year, to be submitted within 15 days time, from the receipt of these directions in favour of the Regional Officer, MPCB</li> </ul>
3 (b ) CREP Partially complied	
(4) Increase in capital investment, But not increase in pollution load generated by industry	<ul> <li>a) If Complied regular renewal of consent with increase in C.I. to be issued by obtaining necessary fees for increase in C.I. with Operational B.G. of Rs. 5 lakhs</li> <li>b) If the exceedence in JVS standards up to 10% shall be considered as complied.</li> <li>c) If non complied with respect to JVS B.G. to be forfeited once and necessary B.G. to be obtained as per legal matrix. (After encashment of B.G. for two times i.e. 5 lakh and 10 lakhs)</li> <li>d) If consistently non complied despite of forfeiture of B.G. Amendment for increase in C.I. to be refused and closure directions to be issued.</li> </ul>
(5) Consent to Establish (Expansion) Increase in pollution load due to expansion as compared to existing pollution load	<ul> <li>a) If existing industry complied consent to establish (Expansion)to be issued with Operational B.G. of Rs. 5 lakhs towards provision of pollution control systems as per VREP.</li> <li>b) If the exceedence in JVS standards up to 10% shall be considered as complied.</li> <li>c) If non complied with respect to JVS B.G. to be forfeited once and necessary B.G. to be obtained as per legal matrix. (After encashment of B.G. for two times i.e. 5 lakh and 10 lakhs)</li> <li>d) If consistently non complied despite of forfeiture of B.G. Consent to establish for expansion to be refused and closure directions to existing industry to be issued.</li> </ul>

(6) Consent to Operate
(Expansion &
Amalgamation with
existing consent)
Increase in pollution
load due to
expansion as
compared to existing
pollution load

- a) If Complied with conditions of consent to establish (Expansion), consent to operate to be issued with Operational B.G. of Rs. 5 lakhs towards O & M of pollution control systems. If seprate consent to operate is issued and not amalgamated with existing consent.
- b) If the exceedence in JVS standards up to 10% shall be considered as complied.
- c) If non complied with respect to JVS B.G. to be forfeited once and necessary B.G. to be obtained as per legal matrix. (After encashment of B.G. for two times i.e. 5 lakh and 10 lakhs)
- d) If consistently non complied despite of forfeiture of B.G. Consent to establish for expansion to be refused and closure directions to existing industry to be issued.

### (B) For Distilleries:

(1) Consent to Establish	a) B. G. of Rs. 2 lakhs to be imposed on industries for
(2) Consent to Operate	compliance of C to E conditions.  a) Verification of Compliance of conditions of C to E b) If complied consent to operate to be granted with condition of B.G. of Rs. 2 lakhs for continued compliance and return BG of Rs. 2.0 lakh obtained for Consent to Establish.
(3) Renewal of Consent	<ul> <li>a) Verification of compliance of 1<sup>st</sup> Consent to Operate issued.</li> <li>b) If complied regular renewal of consent to be issued with B.G. of Rs. 2 lakhs for continued compliance.</li> <li>c) If consistently non complied (for two time after encashament of BG of Rs. 2.0 lakh and Rs. 4.0 lakhs) despite of forfeiture of BG closure directions to be issued.</li> </ul>
<ol><li>(a) Renewal of CREP non complied Distilleries on proof of CREP compliance.</li></ol>	<ul> <li>a) Up to 30 KLPD – Rs. 2 lakh B.G. with time period of 6 months for compliance of CREP norms.</li> <li>b) 31 to 45 KLPD – Rs. 3 lakh B.G. with time period of 6 months for compliance of CREP norms.</li> <li>c) 45 KLPD &amp; above – Rs. 5 lakh B.G. with time period</li> </ul>
(4) Increase in capital nvestment, But not increase n pollution load generated by ndustry	of 6 months for compliance of CREP norms.  a) If Complied regular renewal of consent with increase in C.I. to be issued by obtaining necessary fees for increase in C.I. with B.G. of Rs. 2 lakhs for continued compliance.
5 ) Consent to Establish Expansion) Increase in pollution pad due to expansion as compared to existing pollution pad	<ul> <li>a) If Complied consent to establish (Expansion)to be issued with B.G. of Rs. 2 lakhs compliance of C to E conditions.</li> </ul>
(6) Consent to Operate Expansion & Amalgamation ith existing consent) Increase in collution load due to expansion as compared to existing collution load.	<ul> <li>a) If Complied with conditions of consent to establish (Expansion), consent to operate to be issued with B.G. of Rs. 2 lakhs for continued compliance.</li> <li>b) If consistently non complied (for two time after encashament of BG of Rs. 2.0 lakh and Rs. 4.0 lakhs) despite of forfeiture of BG closure directions to be issued.</li> </ul>

# Thumb Rule Criteria for compliance of Distilleries

- 1) 1 Tone Press Mud = 2.0 M3 Spent Wash 15 days interval
- 2) 1 KLPD Alcohol = 10 to 12 M3 Spent Wash
- 3) 1 Acre land 850 MT Press Mud
- 4) 30 to 45 day cycle for composting + 5 days recurring
- 5) 270 days distilleries are in operation in general except few.
- 6) Spent wash storage, Pakka pit 30 days.
- 1) 30 KLPD distillery requires 5 to 6 Acre of compost yard + 2 Acre post maturation area
- 2) 45 KLPD distillery requires 9 to 10 Acre of compost yard + 2 Acre post maturation area.
- 3) 90 KLPD distillery requires 18 to 20 Acre of compost yard + 2 to 4 Acre post maturation area.

# Treatment Technologies to achieve zero discharge

- 1) Reboiler where spent is heated and volume reduction achieve from 10 to 8 litrs/T Alcohol mfg.
- 2) RO where 60% clear treated effluent can use for condensate cooling & 40% concentrate used for composting.
- 3) MEE concentrate liquid used for composting or mixed with baggasse and incinerate in boiler?
- 4) Bio-methanization followed by two stage treatment facility.