

# MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24010437/24014701/24020781  
Fax : 24024068/24023516  
Website: <http://mpcb.gov.in>.  
E-Mail: apae @mpcb.gov.in



KALPATARU POINT, 3<sup>rd</sup> Floor,  
Sion-Matunga Scheme Rd. No.8,  
Opp. Sion Circle, Sion (East),  
Mumbai-400 022.

## RED/LSI

Consent No. BO/JD(APC)/ EIC NO NK-10562-11/R /CC- ~~CAC-313~~ Date: 22/2/2012  
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 & Transboundary Movement) Rules, 2008.[To be referred as Water Act, Air Act and HW (MH & TM) Rules respectively].

CONSENT is hereby granted to

M/s Shirpur Gold Refinery Ltd.,  
S.No.147 Gut No.269/1/2/3,270/1/2 & 271/1/2,  
Village-Dahiwad, Tal-Shirpur, Dist-Dhule.

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW(MH&TM) Rules and amendments thereto 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 – 31.12.2012.
2. The Consent is valid for the manufacture of -

Sr. No.	Product	Maximum Quantity
1.	Gold Bars,Pendants,Medalians,Coins,Grains.	18.08 MT/Month
2.	Silver Bars,articles, coins, grains.	18.08 MT/month

### 3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory shall not exceed 14.0 m<sup>3</sup>.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 17.5 m<sup>3</sup>.
- (vi) **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:

1	pH	Between	5.5 to 9.0
2	Oil & Grease	Not to exceed	10 mg/l
3	Suspended Solids	Not to exceed	100 mg/l.
4	BOD 3 days 27 degree C	Not to exceed	30 mg/l.
5	COD	Not to exceed	250 mg/l.
6	Sulphates	Not to exceed	1000 mg/l.
7	Chlorides	Not to exceed	600 mg/l.
8	Total Dissolved Solids	Not to exceed	2100 mg/l.
9	Total residual chlorine (as Cl <sub>2</sub> )	Not to exceed	1.0 mg/l.
10	Sulphide	Not to exceed	0.2 mg/l.
11	Nitrate	Not to exceed	10 mg/l.
12	Cadmium (as Cd)	Not to exceed	0.2 mg/l
13	Nickel (as Ni)	Not to exceed	2.0 mg/l
14	Zinc (as Zn)	Not to exceed	5.0 mg/l
15	Arsenic	Not to exceed	0.1 mg/l.
16	Copper (as Cu)	Not to exceed	2.0 mg/l.
17	Cyanide	Not to exceed	0.2mg/l.

(vii) **Trade Effluent Disposal:** The metal bearing industrial effluent shall be segregated and reused back into process and remaining treated effluent shall use on land for gardening. There shall not be any discharge outside the factory premises. The industry shall become member of CETP as and when proposed. Industry shall provide necessary facilities to recycle the entire industrial effluent back into the process in six months.

(viii) **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 27o C.	Not to exceed	100	mg/l.

(vii) **Sewage Effluent Disposal:** The treated domestic effluent shall be soaked in a soak pit, which shall be got cleaned periodically. Overflow, if any, shall be used on land for gardening / plantation only.

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

Sr.No.	Type of waste	Quantity	Treatment	Disposal
1.	Boiler Ash	3.5 Mt/day	...	By sale to brick manufacturer

(viii) **Other conditions:** The industry shall monitor effluent quality regularly.

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:

Domestic	20.0 CMD
Industrial processing generating Bio-Degradable waste water	20.0 CMD
Industrial processing generating Non-Bio-Degradable waste water	--- CMD
Industrial Boiler/Cooling etc.	... CMD
Any other and gardening.	450.0 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.

5. **CONDITIONS UNDER AIR ACT :**

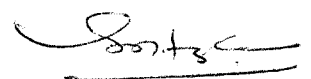
(i) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of emission and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

**A) Control Equipment:**

- 1) Adequate fume extraction system followed by Wet scrubber of sufficient capacity provided to Gold melting furnace and silver melting furnace shall operate and maintain the continuously so as to achieve the following standards.
- 2) Industry shall provide suitable air pollution control system to Gold reactor circuit, gold electro-refining cells, silver precipitation vessel and Copper reaction vessels & operate & maintain the same so as to achieve the following standards.
- 3) Scrubber of sufficient capacity shall be provided to bagasse fired boiler.
- 4) There shall not any secondary (fugitive) emissions.
- 5) The continuous monitor for chlorine gas should be installed with the arrangement of alarm system adjusted to 1 ppm.

**B) Standards for Emissions of Air Pollutants:**

(i)	SPM/TPM	Not to exceed	150 mg/Nm <sup>3</sup>
(ii)	HCL	Not to exceed	35 mg/Nm <sup>3</sup>



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(ii)	Chlorine	Not to exceed	3 ppm
(iv)	SO <sub>2</sub>	Not to exceed	130 kg/day
(v)	SO <sub>2</sub> (Process)	Not to exceed	50 ppm
(vi)	NO <sub>x</sub>	Not to exceed	50 ppm

**C) Conditions for DG Sets: -**

10. Noise from DG Sets shall be controlled by providing acoustic enclosure or by treating the room acoustically.
11. Applicant should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room shall 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 shall be done at different points at 0.5 meters from acoustic enclosure/ room and then average.
12. The Applicant should make efforts to bring down noise level due to DG Set, outside the premises, with ambient noise level requirements by proper setting and control measures.
13. Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer;
14. A proper routine and preventive maintenance procedure for DG Set shall be set and followed in consultation with the DG manufacturers, which would help to prevent noise levels of DG Sets from deteriorating with use.
15. The DG set shall be operated only in case of power failure. The applicant shall make arrangement for regular electrical power.
16. The Applicant shall not cause any nuisance in the surrounding area due to operation of DG sets.
17. In case of problems, the D.G. set shall not be operated until it is set back to satisfactory position.

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

<u>Sr.No.</u>	<u>Type of Fuel</u>	<u>Quantity</u>
1.	HSD	1.5 KL/day
2.	Bagasse	20 Mt/day

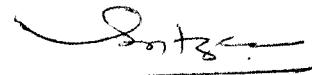
(iii) **The applicant shall erect the chimney(s) of the following specifications:-**

<u>Sr.No.</u>	<u>Chimney attached to</u>	<u>Height in Mtrs.</u>
1.	Steam Boiler (2 Nos)	30.0
2.	Gold Melting Furnace	11.0
3.	Silver Melting Furnace	12.0
4.	Gold reactor, Gold Electro refining cells & Silver Precipitation reactor	11.0
5.	Copper Reaction Vessel	11.0
6.	DG sets (2 x 1250 KVA)	14.0

- (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 industry should not cause any nuisance in surrounding area.
- 2) The industry should monitor stack emissions and ambient air quality regularly.



## 6. CONDITIONS UNDER HAZARDOUS WASTE (MH &amp; TM) RULES, 2008:

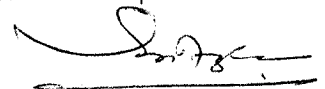
- (ii) The applicant shall handle hazardous waste as specified below:-

Sr. No.	Type of Waste	Quantity	UOM	Disposal
1.	34.3 Chemical sludge from waste water treatment	0.3	MT/M.	CHWTSDF.

- (ii) The authorization is hereby granted to operate a facility for collection, storage, transport & 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 the 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) 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. The applicant shall also submit a comparative statement of designed power and chemical consumptions vis-a vis actual power and chemical consumption along with Environmental statement.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) The applicant shall maintain good house keeping and take adequate measures for control of pollution from all sources so as not to cause nuisance to surrounding area / inhabitants.

**18. 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.

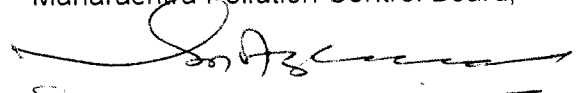


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13. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant;
14. This consent is issued to the pursuant to the decision taken in the Consent Appraisal Committee Meeting held on 14.2.2012.
15. The Total Capital investment of industry is **Rs.351.83/- crore**.

**This consent is issued as per the Office Note dated 2.2.2012 approved by Hon'ble Chairman of the Board.**

For and on Behalf of the  
Maharashtra Pollution Control Board,



(V.M.Motghare) 22/2/12  
Joint Director (Air Pollution Control)

To,  
M/s Shirpur Gold Refinery Ltd.,  
S.No.147 Gut No.269/1/2/3,270/1/2 & 271/1/2,  
Village-Dahiwad, Tal-Shirpur, Dist-Dhule.

Copy to:

- 1) Regional Officer, MPCB, Nashik 2) Sub-Regional Officer, MPCB, Jalgaon-II.

They are directed to submit the performance report along with monitoring results within one month period.

- 3) Chief Accounts Officer, MPCB, Mumbai

Received Consent fee of -

<u>Amount</u>	<u>D.D.No.</u>	<u>Date</u>	<u>Drawn on</u>
Rs. 3,51,510/-	000437	29.12.2011	IDBI
Rs. 3,52,268/-	000502	4.01.2012	IDBI

Consent Fees received as per revised consent fee GR of Env Deptt, GoM, dated 25.8.2011.

- 4] Cess Branch, MPCB.