

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 4010437/4020781
/4037124/4035273
Fax : 24044532/4024068 /4023516
Email : enquiry@mpcb.gov.in
Visit At : <http://mpcb.gov.in>



Kalpataru Point, 3rd & 4th floor, Sion- Matunga
Scheme Road No. 8, Opp. Cine Planet Cinema, Near
Sion Circle, Sion (E),

Mumbai - 400 022

Red/L.S.I

Date:23/ 5/2012

Consent No: BO/JD-PAMS/EIC No.MU-3131-12/R/CAC- 431

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 HW (M&H) Rules respectively].

CONSENT is hereby granted to

M/s.Hindustan Petroleum Corporation Limited..
Mumbai Refinery, B.D. Patil Marg, Mahul,
Mumbai-400074

located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW(M&H) 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:31/12/2013.
2. The Consent is valid for Refinery, Green Fuels and Emission Control Project (GFCEP), NFCCU and LOBS-

Sr. No.	Product Name	Maximum Quantity in Thousand Metric Tonnes/Year
1	Light Distillates (LPG,LAN, HAN, Reg. Gasoline, Premium Gasoline)	1968
2	Middle Distillates (ATF, SKO, HSD, LDO)	3313
3	Lube Oil Base Stock	331
4	Other Heavy Products including refinery fuel loss (IFO, Asphalt, CBFS, Fuel + Losses)	2288
5	Elemental Sulphur	26

3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory integrated Effluent Treatment Plant operation and effluent from Purge Treatment Unit should not exceed 6312 CMD & shall be recycled to maximum extent.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 600.00M³.
- (iii) The daily quantity of sea cooling water effluent from the factory shall not exceed 72410 M³

(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:

SN.	Parameter	Limiting value -	
1	pH	Between	6.0 to 8.5
2	Oil & Grease	Not to exceed	5 mg/l
3	Suspended Solids	Not to exceed	20 mg/l.
4	BOD 3 days 27 Deg. C	Not to exceed	15 mg/l.
5	COD	Not to exceed	125 mg/l.
6	Phenol	Not to exceed	0.35 mg/l.
7	Sulphides	Not to exceed	0.5 mg/l.
8	CN	Not to exceed	0.20 mg/l.
9	Ammonia nitrogen (as N)	Not to exceed	15 mg/l.
10	TKN	Not to exceed	40 mg/l.
11	P	Not to exceed	3.0 mg/l.
12	Cr (Total)	Not to exceed	2.0 mg/l.
13	Pb	Not to exceed	0.1 mg/l
14	Hg	Not to exceed	0.01 mg/l.
15	Nickel (as Ni)	Not to exceed	1.0 mg/l
16	Zinc (as Zn)	Not to exceed	5.0 mg/l
17	Chromium as Cr Hexavalent	Not to exceed	0.1 mg/l.
18	Copper (as Cu)	Not to exceed	1.0 mg/l.
19	V	Not to exceed	0.2 mg/l.
20	Benzene (as Fe)	Not to exceed	0.1 mg/l.
21	Benzo (a)- pyrene	Not to exceed	0.2 mg/l.

Notes: (i) Concentration limits shall be complied with at the outlet discharging effluent (excluding discharge from sea water cooling systems) to receiving environment (surface water bodies, marine systems or public sewers). In case of application of treated effluent directly for irrigation/ horticulture purposes (within or outside the premises of refinery). Make-up water for cooling system, fire fighting etc. the concentration limits shall also be complied with at the outlet before taking the effluent for such application. However, any use in the process such as use of sour water in desalter is excluded for the purpose of compliance.

(ii) In case of circulating seawater cooling, the blow-down from cooling system shall be monitored for Ph and oil & grease (also Hexavalent & total chromium, if chromate treatment is given to cooling water) and shall conform to the concentration limits for these parameters. In case of reuse of treated effluent as cooling water make-up. All the parameters (as applicable for treated effluent) should be monitored and conform the prescribed standards.

(iii) In case of once through cooling with seawater, the oil & grease content in the effluent from cooling water shall not exceed 1.0 mg/l.

NOTE: Above standards are prescribed as per Notification from MOEF, vide No. G.S.R.186 (E), dated 18/03/2008.

(iv) **Trade Effluent Disposal:** The industry should operate arrangement to recycle treated effluent to the maximum extent possible and the rest should be connected to the sewerage system provided by MCGM. Alternatively, till such a facilities are created it should be discharged in to nalla meeting Mahul creek.

(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 27o C. Not to exceed 100 mg/l.
 (vi) **Sewage Effluent Disposal:** The treated domestic effluent should be connected to the sewerage system provided to MCGM. Alternatively, till such a facilities are created it should be discharged in to nalla meeting Mahul creek.

(vii) **Quality of sea cooling water outlet / discharge to sea:**

1. pH Not to exceed 6.0 to 8.5
 2 Oil & Grease Not to exceed Inlet + 10 mg/l.
 3 Temperature Not to exceed 5 Deg. C higher than intake water temperature.
 4 Free Chlorine Not to exceed 1mg/l.

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

Sr. No	Type Of Waste	Quantity	Disposal
1	Wooden Scrap	130 T/Y	Saie to autho. party
2	Batteries (from company vehicles)	50 Nos/Y	Sale
2	Old equipments/old vehicles	5 Nos/Y	sale
3	Pc's	100 Nos/Y	sale
4	Tube/Tyre scrap	5.00 T/Y	sale
5	Misc. Scrap	90800.00	sale
6	Plastic Scrap (Drum, Cans, Catalyst Bags, Misc. Plastic Waste)	5 T/Y	Sale
7	Ferrous Scrap	4000 T/Y	sale
8	Non-Ferrous Scrap (Titanium cut tubes, Tube Sheets etc.)	25 T/Y	sale
9	Aluminium scrap (Old cladding sheets etc.)	35 T/Y	sale
10	Cable scrap	70 T/Y	sale
11	Valve Scrap	15 T/Y	sale
12	Empety lube oil drum	5000 Nos/Y	sale
13	Decanted Asphalt Drums	200 Nos/Y	sale
14	Motors	60 T/Y	..-
15	Pump with Motors	5 Nos/ Lot	---,,---
16	Edible oil tins	1200 Nos/Y	-----,,-----

(viii) **Other Conditions:** Industry should 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 amendment Rules, 2003 there under

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

- (i) Industrial cooling 78722 CMD
 (ii) Domestic purpose ... 750 CMD
 (iii) Industrial Processing ... 6900 CMD
 (iv) Agriculture / Gardening ... 875 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 Carbon monoxide boiler for control of carbon monoxide emissions for existing FCC should be operated and maintained properly.
- 2 The storage tanks provided with floating roofs with inert gas blanket should be kept in good working conditions
- 3 The unit should provide, operate and maintain the fugitive emissions control devices.

B) Standards for Emissions of Air Pollutants :

- | | | | |
|------|-----------------------|---------------|--------------------------------------|
| (i) | SPM/TPM | Not to exceed | 150.0 mg/Nm ³ |
| (ii) | SO ₂ , NOX | Not to exceed | CPCB guidelines of source emissions. |

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

Sr. No.	Type Of Fuel	Quantity	UOM
1	Liquid Fuel	827.40	T/Day
2	Refinery Gas/Natural Gas	850	T/Day
3	Coke	166.50	T/Day
4	Liquid Naphtha	630.00	T/Day

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

Sr. No.	Chimney Attached To	Height in Mtrs.
1	Furnace 11-F-1	61.00
2	Furnace 12-F-1	61.00
3	Furnace 11-F-2	61.00
4	Furnace 31-F-1	61.00
5	Furnace 32-F-1	59.00
6	Furnace 14-F-1-X	61.00
7	Furnace FCCU Regen stack	61.00
8	Furnace SG-5	30.5
9	Furnace SG-7	30.5
10	Furnace SG-8	30.5
11	Furnace SG-9	60
12	Furnace 71-F-01	60
13	Furnace 71-F-01/02	60
14	Furnace 75-F-01	60
15	Furnace GTG 1	60
16	Furnace GTG 2	60
17	Furnace GTG 3	60
18	Furnace GTG 4	60
19	Furnace GTG 5	65
20	Furnace F- 101	59
21	Furnace F- 201/202	45
22	Furnace F- 4101	60
23	Furnace F- 3201/3202	45
24	Furnace F- 4201/4202	61
25	Furnace CO Boiler (Coke)	58.
26	Furnace F- 401	30.5
27	Naphtha Spilter Unit (NSU)	60
28	Common Stavk for continuous catalytic Rotomer (CCR)Charge Heater & interheater No. 1 in NHT-CCR Unit	60
29	Common Stavk for continuous catalytic	60

	Rotomer (CCR) Charge Heater & interheater No. 2, interheater No. 3 & NHT-CCR Unit	
30	NHDT in NHT- ISOM Unit	60
31	FCC Gasoline Hydrotreater in PRIME G+ Unit	60
32	Common stack for two new 100 TPH Boilers instead of GTG/HRSG	60
33	New FGSU Stack	60
34	Common stack for 99-F-01/99-F-03 (LOUP)	71
35	New FCCU	64

- (iii) 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.
- (iv) 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.
- (vi) **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 (MANAGEMENT, HANDLING & TRANSBOUNDARY MOVEMENT) RULES, 2008:

- (i) The Industry shall handle hazardous wastes as specified below.

Sr. No	Type Of Waste	Quantity	Disposal
1	4.1- a.Oily sludge from crude & product tank b. Residual sludge cake - c. slit accumulation from the incoming sea water	6000 MT/Yr 3000 MT/Yr 1000 MT/Yr	a) To adopt suitable In-situ/Ex- situ recovery treatment, whenever Crude/product tanks are taken for outage. b) Sale to MPCB approved contractors. c) To employ Bio-remediation treatment & land farming. d) To dispose of to SPCB approved CHWTSDF.
2	4.1 & 4.5- sludge from w.w.t. - Spent resins Spent catalysts- Insulation material- Spent/obsolete chemicals-	20 MT/Yr 50 MT/Yr 3000 MT/Yr 500 MT/Yr --	a) solid compaction by dewatering centrifuging/oil extraction thru Mechanical Oil Recovery treatment b) Sale to MPCB approved contractors. c) To employ Bio-remediation treatment & land farming. d) To dispose of to SPCB approved CHWTSDF.
3	Schedule - II B-1, B6- Cupronickel scrap	8 MT/YR	Sale to autho. Party with MSTC. OR CHWTSDF.

- (ii) Treatment: - NIL

- a. 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

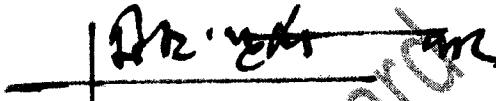
Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.

- b. The unit has to display and maintain the data online outside the factory main gate in Marathi & English both on a 6'x4' display board in the manner and the report of the compliance along with photograph shall be submitted to this office & concerned Regional Office/ Sub Regional Office.
- c. It shall be ensured that the Hazardous waste is handled, managed & disposed of strictly in accordance with the Hazardous Waste (Management & Handling) Rules, 1989 as amended on 2003 and shown & submitted to the Board as & when asked for.

7. Industry shall comply with following additional conditions:

- i. The applicant shall maintain good housekeeping and take adequate measures for control of pollution from all sources so as not to cause nuisance to surrounding area / inhabitants.
- ii. The applicant shall bring minimum 33% of the available open land under green coverage/ tree plantation.
- iii. Solid waste – 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 to dumping ground.
- iv. The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by he applicant 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 & conditions of this consent regarding pollution levels.
- v. 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.
- 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.
- vii. The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.
- viii. The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as pre the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- ix. As inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- ix. The applicant shall install a separate electric 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.
- xi. 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.

- xii. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 8 This consent is issued pursuant to decision of Consent Appraisal Committee meeting of the Board dtd. 16.04.2012.
- 9 Review by team of MPCB Officers of the compliance in May, 2012.
10. This is issued with an overriding effect on earlier consent granted by the Board vide consent No. BO/JD-PAMS/EIC No. MU-3131-12/R/CAC-334, dtd. 13/03/2012.
11. The Capital investment of the industry is Rs. 5951.48/-Crs.


 (Milind Mhaiskar, IAS)
 Member Secretary

To-
 M/s.Hindustan Petroleum Corporation Limited..
 Mumbai Refinery, B.D. Patil Marg, Mahul,
 Mumbai-400074

Copy to:

- 1) Regional Officer, MPCB, Mumbai } They are directed to submit the
 2) Sub-Regional Officer, MPCB, Mumbai } compliance of consent conditions within
 15 days.
- 3) Chief Accounts Officer, MPCB- Mumbai
- 4) Cess Branch, MPCB. 5) Master file.

Received Consent fee of -

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	23805932	571288	23 Nov 2011	SBI Bank
2	100	090996	21 Nov 2011	SBI Bank