MAHARASHTRA POLLUTION CONTROL BOARD

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MAHARASHTRA

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

Sion Circle, Sion (E), Mumbai - 400 022

Consent order No:- Formate 1.0/BO/CAC-Cell/EIC No MU-5683-14/5th CAC/6303
Date-04 10 12014

To,

Bharat Petroleum Corporation Ltd.

Refinery, Mahul, Chembur

Mumbai - 400 074

Subject: Consent to Establish for expansion RED category.

- Ref: 1. Existing Consent granted vide no. Formate1.0/BO/AST/EIC NoMU-4796-13/6th/CAC/7113 dtd 26.08.2013 which is valid upto 31.08.2014
 - 2. Existing Consent granted vide no. Formate1.0/BO/AST/EIC NoMU-4882-13/4th/CAC/7112 dtd 28.08.2013 which is valid upto 31.08.2014
 - 3. Minutes of CAC meeting held on 29.05.2014

Your application: CE1402000387

Dated:18.02.2014

For: Consent to Establish for installation of new CDU/VDU4 unit of capacity of 6 MMTPA.

under Section 25 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 5 of the Hazardous Wastes (M, H & T M) Rules 2008 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:

- 1. The consent is granted for a period upto commissioning of the unit or 5 years whichever is earlier.
- 2. The proposed capital investment of the industry is Rs.1419.00 Crs. (As per Undertaking submitted by industry). Total capital investment of the industry is Rs 6666.31 + 1419= Rs 8085.31 crs
- 3. The Consent is valid for the manufacture of -

Sr. No.	Product Name	Maximum Quantity in MT/D
1	LPG	352
2	Stabilised Nap	2648
3	Heavy Nap	1235
4	LT Kero	1019
5	HY Kero	1945
6	LT Gas Oil	4616
7	Vacuum Diesel	569
8	LVGO	2506
9	HVGO	1995
10	SLOP	155
11	VR	925

Hyd.

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

Sr. no.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1.	Trade effluent	1440 CMD from process	As per Schedule -I	100% recycled as make-up water into cooling water re-circulation system
		13608 as sea water blow down.	As per Schedule –I	The blowdown from the cooling water shall be discharged into the sea through separate channel.
2.	Domestic effluent	Nil	N.A	N.A

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

Sr.	Description of stack /	Number of Stack Standards to be		
no.	source	374 - ¹	achieved	
1.	Furnace	1	As per Schedule -II	

- 6. Conditions for Non-Hazardous Waste
 There shall be not be any generation of non-hazardous waste due to proposed expansion.
- 7. Conditions under Hazardous Waste (MH & TM) Rules, 2008 for treatment and disposal of hazardous waste:

 There shall be not be any generation of hazardous waste due to proposed expansion.
- 8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
- 9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
- 10. Industry shall obtain Locational Clearance before applying for Consent to First Operate for expansion.
- 11. Industry shall carry out water audit within 3 months and submit BG of Rs 2 lakks for the compliance of the same.
- 12. Industry shall comply with the conditions stipulated in Environmental Clearance granted by MoEF vide No. F.No-j-11011/140/2012-IA II (I) dtd12.06.2013.

For and on behalf of the Maharashtra Pollution Control Board

> (Rajeev Kumar Mital, IAS) Member Secretary

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Received Consent fee of -

	Amount(Rs.)	DD. No.	Date	Drawn On
1	2838000.0	441039	19.12.2013	SBI Bank

Copy to:

- 1. Regional Officer -Mumbai and Sub-Regional Officer-Mumbai-3, MPCB, They are directed to ensure the compliance of the consent conditions.
- 2. Chief Accounts Officer, MPCB, Mumbai.
- 3. CC/CAC desk- for record & website updation purposes.



Schedule-I

Terms & conditions for compliance of Water Pollution Control:

- 1) A] As per your application, you have provided the existing Effluent Treatment Plant (ETP) with the design capacity of 5670 CMD for the proposed effluent from the process i.e 1440 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	Standards prescribed by Board (If any)		
		Limiting Concentration in mg/l, except for pH		
01	pН	6.0-8.5		
02	Oil & Grease	5		
03	BOD (3 days 27oC)	15		
04	COD	125		
05	Suspended Solids	<u>20</u>		
06	Phenols	0.35		
07	Sulphide (as S)	0.5		
08	Cyanide	0.2		
09	Ammonia as N	15 10		
10	TKN			
11	P	3		
12	Cr (Hexavalent)	0.1 2 0.1		
13	Cr (Total)			
14	Pb			
15	Hg	0.01		
16	Zn	5		
17	Ņ	1		
18	Cu	1		
19	V	0.2		
20	Benzene	0.1		
21	Benzo(a)-Pyrene	0.2		

C) The treated effluent from the process $\,$ shall be 100% recycled in the cooling water system.

Quality of sea water outlet/discharge to sea.

Sr No	Parameters	Standards prescribed by Board (If any)
		Limiting Concentration in mg/l, except for pH
01	pН	6.0-8.5
02	Oil & Grease	20

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The sea water blowdown from the cooling system i.e 13608 CMD shall be discharged into sea through a separate channel.

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

In case of circulating seawater cooling, the blowdown from the cooling systems shall be maintained 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 makeup, all the parameters (as applicable for treated effluent) shall be monitored and conform to the prescribed standards.

In case once through cooling with sea water, the oil & grease content in the effluent shall not exceed 1.0 mg/l.

- 2) 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/and extension or addition thereto.
- 3) 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.
- 4) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I 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	15120
2.	Domestic purpose	0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	1545.6
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0

5) 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.

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Schedule-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have proposed to install the Air pollution control (APC)system and also proposed to erect following stack (s) and to observe the following fuel pattern-

Sr.	Stack	APC	Height	Type of	Quantity &	S %	SO_2
No.	Attached To	System	in Mtrs.	Fuel	UoM		mg/Nm^3
1	CDU/VDU4	Low Nox	89	LSHS/	9250 Kg/Hr/	1	Refer
	furnace	,low noise		Refinery	9000 Kg/Hr	*	Sr. No 3
		burners		Fuel gas		4.	2

- 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:

Particulate matter	Not to exceed	100 mg/Nm ³ .
SO2	Not to exceed	1700 mg/Nm ³
NOx	Not to exceed	450 mg/Nm ³
CO	Not to exceed	200 mg/Nm ³
H2S in fuel	Not to exceed	150 mg/Nm ³
Nickel and	Not to exceed	5 mg/Nm^3
Vanadium (Ni		
+ V)		
Sulphur	Not to exceed	1 %
content in		
liquid fuel,		
weight%		

- 4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacementalteration 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).

M/s BPCL Refinery, Mahul

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Schedule-III Details of Bank Guarantees

	Sr.	Consent	Amt of	Submissi	Purpose of BG	Complian	Validity
	No.	(C to	BG	on Period		ce Period	Date
		E/O/R)	Imposed				
	1	C to E	Rs 2	Ву	Carrying out Water	31.08.2014	31.12.2014
			lakhs	23.06.2014	audit		
1	2	C to E	Rs 10	$\mathbf{B}\mathbf{y}$	Towards compliance	30.06.2019	30.10.2019
Ŧ.	_		lakhs	23.06.2014	of EC and consent		
					conditions		

M/s BPCL Refinery, Mahul

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Schedule-IV

General Conditions:

- 1) The applicant shall comply with the conditions stipulated in Environmental Clearance granted by MoEF vide No. F.No-j-11011/140/2012-IA II (I) dtd12.06.2013.
- 2) 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.
- 3) Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
- 4) 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.
- 5) 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.
- 6) 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.
- 7) 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 per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 8) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the HW(MH&TM) Rules 2008, 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.
- 9) The industry should comply with the Hazardous Waste (M,H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous Waste (M,H & TM) Rules, 2008 for the preceding year April to March in Form-IV by 30th June of every year.
- 10) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 11) The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual commencement of the Unit/ Activity).
- 12) 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).
- 13) The industry should comply with the Hazardous Waste (M, H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous Wastes (M,H &TM) Rules, 2008 for the preceding year April to March in Form-IV by 30th June of every year.
- 14) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 15) 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

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- pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 16) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 17) 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.

18) 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 MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel
- 19) The industry should not cause any nuisance in surrounding area.
- 20) 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.
- 21) The applicant shall maintain good housekeeping.
- 22) 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.
- 23) 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.
- 24) 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.
- 25) 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.
- 26) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 27) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dtd. 16.111.2009 as amended.

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