

**MAHARASHTRA POLLUTION CONTROL BOARD**

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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 RD-2651-14/6th CAC - 9434**  
**Date-13/10/2014**

To,  
Reliance Industries Limited,  
(PTA Division),  
B- 4, MIDC Industrial area,  
Patalganga, Dist: Raigad  
Maharashtra - 410220.

Subject: Renewal of consent to operate RED category.  
Ref: 1. Earlier Consent granted vide no. BO/BO/JD(PAMS)/EIC No. RD-2023-11/R/201 dated 03/11/2011.  
2. CAC meeting held on 12.06.2014

Your application :CR1311000177  
Dated: 22.11.2013.

For: Renewal of 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 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:

- The consent is granted for a period from 01.01.2014 to 31.08.2015.
- The actual capital investment of the industry is Rs. 751.32 Crs. (As per C.A.Certificate submitted by industry)
- The Consent is valid for the manufacture of -

Sr. No.	Product / By-Product Name	Maximum Quantity in MT/M
1.	PTA	25000
2.	Raffinate & other by products ( IG Benzene, Remax, Renine)	50509
3.	Electricity	48 MW
4.	Steam	250
5.	LPG	2250
6.	Pentene (N and iso)	1042
7.	P - Xylene ( By- Product )	20840

- 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	5077.40	As per Schedule -I	CETP
2.	Domestic effluent	100.90	As per Schedule -I	CETP

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

Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1.	Boiler ( I to III )	3	As per Schedule -II
2.	Heater ( IV to X )	7	As per Schedule -II
3.	Flare	1	As per Schedule -II
4.	HRSB - I & II	2	As per Schedule -II
5.	Incinerator	1	As per Schedule -II

6. Conditions about Non Hazardous Wastes:

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Biological ETP	1000 MT/A	—	Used as manure

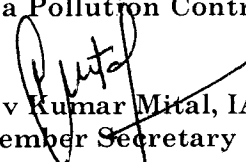
7 Conditions under Hazardous Waste (MH & TM) Rules, 2008 for treatment and disposal of hazardous waste:

Sr. No.	Type Of Waste	Categc y	Quantit y	UOM	Treatr ent	Disposal
1	Spent catalyst/ Fullers earth / spent clay	1.7	300	MT/A	NA	Sell to offsite recycler/ reprocessor having valid consent of State Pollution Control Board or to be sent to CHWTSDF
2	Slop oil	1.8	200	MT/A	NA	Sell to offsite recycler/ reprocessor approved by (registered with) MOEF/ CPCB having valid consent of State pollution Control Board
3	Oil containing sludge	3.1	50	MT/A	NA	Sell to offsite recycler/ reprocessor approved by (registered with) MOEF/ CPCB having valid consent of State pollution Control Board
4	Used Oil	5.1	125	MT/A	NA	
5	Discarded Asbestos	15.2	300	MT/A	NA	CHWTSDF
6	Oil soaked cotton rags/ hand gloves	35.1	100	MT/A	NA	CHWTSDF
7	Process Ash	36.2	250	MT/A	NA	Sell to offsite recycler/ reprocessor having valid consent of State Pollution Control Board
8	Purge Steam	—	12000	MT/ A	NA	sale to offsite reprocessor having valid consent of State Pollution Control Board
9	Electronic Waste	E-Waste	1.5	MT/A	NA	Disposal to Electron Recycler.

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 carry out treatability study of ETP from IIT/NEERI and submit the report by 30.11.2014. Also submit BG of Rs 2 lakhs for the compliance of the same.
11. Industry shall provide CAAQMS by 28.02.2015 and submit BG of Rs 10 lakhs for the compliance of the same.

For and on behalf of the  
Maharashtra Pollution Control Board

  
( Rajeev Kumar Mital, IAS )  
Member Secretary

Received Consent fee of -

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1.	45,04,500	000172	25.09.2013	HDFC Bank
2.	100	000169	25.09.2013	HDFC Bank
3.	3420	0479	11.08.2014	HDFC Bank

The balance fees Rs.20,03,520/- with the Board will be considered at the time of next renewal of consent.

Copy to:

1. Regional Officer -Raigad MPCB and Sub-Regional Officer- Raigad -1 MPCB, They are directed to ensure the compliance of the consent conditions. The BG of Rs 5 lakh towards O & M of PCS shall be forfeited as JVS results of treated effluent dated 18.03.2014, 25.02.2014, 04.01.2014 are exceeding the consented the norms.
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 combined Effluent Treatment Plant (ETP) for treatment of trade and domestic effluent with the design capacity of 5500 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	pH	5.5 - 9.0
02	Oil & Grease	10 mg/l
03	BOD (3 days 27oC )	100 mg/l
04	Total Dissolved Solids	2100 mg/l
05	Suspended Solids	100 mg/l
06	COD	250 mg/l
07	Chloride	600 mg/l
08	Sulphate	1000 mg/l

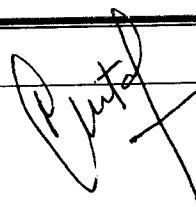
C) The treated effluent shall be discharged to CETP.

2) A.] As per your consent application, the domestic effluent shall be treated in ETP.

3) In case the treatment system is combined for trade effluent and sewage then the standards and disposal path prescribed at sr. no.1 B & C of schedule I shall be applicable.

4) 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 extension or addition thereto.

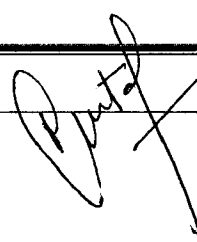
5) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.



- 6) 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	12923
2.	Domestic purpose	121
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	3916
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0

- 7) 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.



**Schedule-II**

**Terms & conditions for compliance of Air Pollution Control:**

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

Sr. No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S %	SO <sub>2</sub> Kg/Day
1	Boiler(I to III)	Stack	30 each	LSHS+ By Products/ NG	3.1 TPH each * / 0.29 MMSCMD	0.2*/0.01	297.6 / For NG, see point 3
2	Heaters (IV to X)	Stack	30 each	Process off gas / NG	4.613 TPH/ 0.25 MMSCMD	0.009/0.01	20/ For NG, see point 3
3	Flare ( XI)	Stack	100	LPG (Standby) /NG	--	--	--
4	Incinerator ( XII)	Stack	30	C9/FO/LSH S/NG	0.075 TPH/ 0.0024 MMSCMD	--/0.01	For NG, see point 3
5	HRSG ( I & II )	Stack	60 each	Naphtha/ Kerosene**/ NG	29.2 TPH** / 0.55 MMSCMD	0.5	7008 / For NG, see point 3

Natural gas should be used as a fuel. Due non-availability of NATURAL GAS ONLY, LSHS/FO shall be used and accordingly SO<sub>2</sub> standard shall be maintained.

(\*): Liquid by products from manufacturing process are blended with LSHS. FO used for start up only @ 4.0 tph

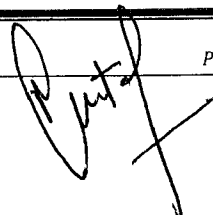
(\*\*): HSD is used @ 10.2 tpd only during start up / shut down.

The emission from various sources in the factory shall be restricted as to limit the ambient level of non-methane hydrocarbon in the factory premises to 0.24 ppm on 24 hours average basis.

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	150 mg/Nm <sup>3</sup> .
NO <sub>x</sub> from captive power plant	Not to exceed	150 ppm
SO <sub>2</sub> Boiler (Natural gas as fuel)	Not to exceed	498 Kg/D

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



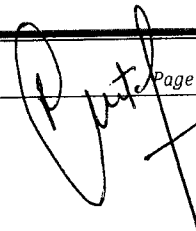
**Schedule-III  
Details of Bank Guarantees**

**History of BG:**

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	Rs 5 lakh	To be forfeited	JVS results of treated effluent dated 18.03.2014, 25.02.2014, 04.01.2014 are exceeding the consented the norms.	To be forfeited	To be forfeited

**Proposed BG:**

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	Rs 10 lakhs	Within 15 days from the date of issue of consent	O & M of PCS	31.08.2015	31.12.2015
2	C to R	Rs 2 lakhs	Within 15 days from the date of issue of consent	Towards treatability study of ETP	30.11.2014	30.03.2015
2	C to R	Rs 10 lakhs	Within 15 days from the date of issue of consent	Towards providing CAAQMS	28.02.2015	30.06.2015





#### Schedule-IV

##### General Conditions:

- 1) 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.
- 2) If the MIDC pipeline is broken/ overflowing chamber, in such cases industry shall not discharge their treated effluent into MIDC drain, it shall be sent to CETP by tanker.
- 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 30<sup>th</sup> 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 make an application for renewal of the consent at least 60 days before the date of the expiry of the consent**
- 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](http://www.mpcb.gov.in)).
- 13) 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.
- 14) 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 pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 15) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 16) 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.

17) 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 siting 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

18) The industry should not cause any nuisance in surrounding area.

19) 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.

20) The applicant shall maintain good housekeeping.

21) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a statement on available open plot area, number of trees surviving as on 31<sup>st</sup> March of the year and number of trees planted by September end, with the Environment Statement.

22) 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.

23) 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.

24) 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.

25) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.

26) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dtd. 16.11.2009 as amended.

27) The applicant shall install three continuous automatic ambient air and micrometeorological monitoring station at location indicated by State Board to be set up and operate at its own cost measure SO<sub>2</sub>, NO<sub>x</sub> and particulate matter. These CAAQMS shall also have necessary provision of networking to the Air Quality Monitoring network of MPCB.

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