

# MAHARASHTRA POLLUTION CONTROL BOARD

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Consent order No 1.0/BO/CAC-Cell/EIC No:-TN-5102-14/CAC- 964

Date-28/01/2015

To,

M/s. Tarapur Atomic Power Station,  
Unit No 3 & 4, Nuclear Power Corporation of India Ltd.,  
Revenue Survey No 11, 12, 13, Vill. Akkarpatti,  
Tq. Palghar, Dist. Thane

Subject: Renewal of Consent to Operate in Red category.

- Ref : 1. Earlier Consent granted vide noBO/JD(APC)/EIC No. TN-2793-11/R-CC-286-dated 07.06.2011.  
2. Your application approved in CAC meeting held on 14.08.2014.

Your application:- CR1405000438.

Dated: 26.02.2014

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:

1. The consent to operate is granted from 01.04.2014 to 31.08.2017
2. The actual capital investment of the industry is Rs. 5789.59 Crs. (Existing CI- Rs. 5699.40 Cr + increased CI- Rs. 90.19 Cr i.e. total CI Rs. 5789.59 Cr as per C. A. Certificate submitted by industry)
3. The Consent is valid for the manufacture of -

Sr. No.	Product / By-Product Name	Maximum Quantity
1.	Electricity Generation (Nuclear Energy Based Power Plant)	2 x 540 MWe

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

Sr. no.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal
1.	Trade effluent			
	From process (DM Plant/softening plant washing)	70 CMD	As per Schedule -I	Recycled to the maximum & excess shall be used on land for gardening
	Cooling water discharge	276800M3/hr	As per Schedule -I	Into Arabian Sea
2.	Domestic effluent	85 CMD	As per Schedule -I	On land for gardening/plantation.

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.	Main Reactor Plant	1	As per Schedule -II
2.	Auxiliary Boiler	1	As per Schedule -II
3.	DG set (2720 KVA x 8 Nos.)	8	As per Schedule -II

6. Conditions about Non Hazardous Wastes:

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Plastic Waste	0.5 MT/Y	---	Sale to authorized recycler
2	Metal scrap (not contaminated with oil)	2 MT/Y	---	Sale to authorized recycler

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

Sr. No.	Type Of Waste	Category	Quantity	UOM	Treatment	Disposal
1	Used/Spent oil	5.1	124	KL/Y	---	Sale to authorized re-processor
2	Waste Container Oil/grease	5.2	1.0	MT/Y	---	Sale to authorized recycler
3	Empty containers	33.3	1.0	MT/Y	---	Sale to authorized recycler
4	Asbestos Containing material	15.2	0.5	MT/Y	---	Sale to authorized recycler
5	Lead Acid Scrap Batteries	B4	60	Nos./Y	---	Sale to authorized recycler
6	E Waste		10	MT/Y	---	Sale authorized 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 installed adequate capacity sewage treatment plant by 30.06.2015.

For and on behalf of the  
Maharashtra Pollution Control Board

  
(Dr. P. Anbalagan, IAS)  
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	DD. No.	Date	Drawn On
1.	Rs. 3,41,96,400/-	272341	26.02.2014	State Bank of India
2.	Rs. 1,25,100/-	039602	17.12.2014	State Bank of India
3.	Rs. 53,65,833/-	039601	17.12.2014	State Bank of India

Copy to:

1. Regional Officer-MPCB, Navi Mumbai and Sub-Regional Officer- Taloja, M.P.C.B, - They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Mumbai.
3. CC/CAC desk- for record & website up-dation purposes.



Evolution Control Board

**Schedule-I**

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

1) A) As per your application, you have provided Neutralization pit having two compartments with designed capacity 24.15 m<sup>3</sup> each.

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
<b>A</b>		
<b>Condenser Cooling Water</b>		
01	pH	6.5 to 8.5
02	Temperature	Not to exceed 5 degree C higher than the intake water temperature
03	Free available chlorine	Not to exceed 0.5 mg/lit
<b>B</b>		
<b>D.M. Plant Effluent</b>		
05	pH	5.5 to 9.0
06	BOD 3 days at 27°C	Not to exceed 30 mg/lit
07	COD	Not to exceed 250 mg/lit
08	Suspended Solids	Not to exceed 100 mg/lit
09	Oil & Grease	Not to exceed 10 mg/lit
10	TDS	Not to exceed 2100 mg/lit

C) The treated effluent from D.M. plant & other process shall be recycled to the maximum possible & excess if any shall be used on land for gardening only after confirmation of above standards. There shall not be any discharge outside the factory premises.

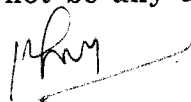
D) Effluent generated through cooling water of 2,76,800M<sup>3</sup>/hr discharged after maintaining temperature dispose into Arabian Sea at a point specified by National Institute of Oceanography, Goa.

2) A) As per your consent application, you have provided septic tank and soak pit followed by anaerobic up flow filter for treatment of domestic effluent.

B) The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

- |     |                   |               |     |       |
|-----|-------------------|---------------|-----|-------|
| (1) | Suspended Solids. | Not to exceed | 50  | mg/l. |
| (2) | BOD 3 days 27°C.  | Not to exceed | 30  | mg/l. |
| (3) | COD               | Not to exceed | 100 | mg/l. |

C) The treated effluent shall be used on land for gardening after confirmation of above standards. There shall not be any discharge outside the factory premises.



- 3) 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.
- 4) 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.
- 5) 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
1.	Industrial Cooling, spraying in mine pits or boiler feed	276800 M <sup>3</sup> /hr
2.	Domestic purpose	270 CMD
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	700 CMD
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	Nil

- 6) 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 provided the Air pollution control (APC) system and also erected following stack (s) 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	Main Reactor Plant	---	100 (common for unit III & IV)	Natural Uranium	200 MT/Y	---	---
2	Auxiliary Boiler	---	45	LDO	476 kg/hr	1.8	411.2
3	DG set (2720 KVA x 8 Nos.)	---	12 above roof	HSD	700 lit/hr	1	336

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. (Concern section shall mention specific control equipments)
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:

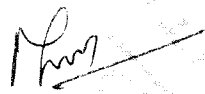
Particulate matter	Not to exceed	150 mg/Nm <sup>3</sup> .
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4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration 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).

  
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Schedule-III  
Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amount of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	Rs. 5 lakhs	15 days	Towards installation of adequate capacity of Sewage Treatment Plant (STP)	30.06.2015	31.12.2017
2	CtoR	Rs. 5 lakhs	15 days	Towards compliance of consent conditions	31.08.2017	31.12.2017



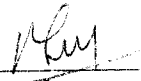




#### Schedule-IV

##### 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) Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
- 3) 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.
- 4) 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.
- 5) 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.
- 6) 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.
- 7) 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.
- 8) 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.
- 9) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 10) The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.**
- 11) 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)).
- 12) 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.
- 13) 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.
- 14) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 15) 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.

16) 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
- 17) The industry should not cause any nuisance in surrounding area.
- 18) 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.
- 19) The applicant shall maintain good housekeeping.
- 20) 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.
- 21) 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.
- 22) 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.
- 23) 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.
- 24) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 25) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009 as amended.
- 26) Industry shall provide continuous flow meter for the measurement of flow of the effluent and in-take water from Arabian Sea.
- 27) Industry shall provide on line Temperature indicator & recording system for effluent & in-take water from Arabian Sea.
- 28) The applicant shall comply with the conditions stipulated in Environmental Clearance granted by GOI and GoM vide No. ENV (NOC) 1088/1520/CR-275/D-I dtd. 15.05.1989.**

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