BY REGD. POST WITH AD

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
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CONSENT ORDER

No. 3694 / IND-I-CON-6426 Dt. 15.03.2023 /

CONSENT ORDER NO. 2786.

Sub : Consent for discharge of sewage and trade effluent under Section 25/26 of Water (PCP) Act, 1974 and emission under Section 21 of Air (PCP) Act, 1981 for operation of the Hospital.

Ref : Your online application **ID No. 4194520, Dated 10-05-2022 and online reply dated 04-03-2023.**

Consent to operate is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed thereunder to:

Name of the Industry: **M/s AMRI Hospitals Ltd.**

Name of the Occupier & Designation: **Ms Nilanjana Mukherjee, Unit Head & Vice President**

Address: **Plot No.1(Pt), Beside Satya Sai Enclave, Khandagiri, Bhubaneswar-751005, India**

Details of the Hospital:

Sl. No.	Product	Quantity
1.	Multi-Specialty Hospital	Bed Strength of 400 Nos.

This consent order is valid for the period from **01.04.2023 to 31.03.2027.**

This consent order is valid for the specified outlets, discharge quantity and quality of effluents (ii) quantity of emission and its quality, specified chimney / stack (iii) quantity of solid waste and its disposal as specified below.

This consent is granted subject to the General and Special Conditions stipulated below:

A. Discharge permitted through the following outlet subject to the standard

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Prescribed Standard							
				pH	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	NH_4-N (mg/l)	N-total (mg/l)	Fecal Coliform (MPN/ml)	O & G (mg/l)
01	ETP-cum-STP Outlet	To be used for cooling, development and gardening purpose at maximum extent and surplus treated water, if any shall be discharged to Municipal sewer line	120 KLD	6.5-9.0	30	250	100	5	10	<1000	10

B. Emission permitted through the following stack subject to the prescribed standard

Chimney Stack No.	Description of Stack (attached to)	Stack height (m) Above DG set	Quantity of emission (m^3/hr)	Prescribed Standard			
				PM (mg/Nm^3)	HC (mg/Nm^3)	NO_x (ppm(v))	CO (mg/Nm^3)
1.	DG set (3 x 1010 KVA)	7.0 m	--	75	100	710	150

C. Disposal of solid waste permitted in the following manner

Sl. No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site (TPD)	Quantity to be reused off site (TPD)	Quantity disposed off (TPD)	Description of disposal site.
01.	Garbage	384 kg/day	--	--	--	To be handed over to Bhubaneswar Municipal Corporation
02.	STP Sludge	--	--	--	--	To be handed over to Bhubaneswar Municipal Corporation
03.	Biomedical Waste	328 kg/day	--	--	--	To be handed over to Common Facilitator

D. GENERAL CONDITIONS FOR ALL UNITS

1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground for liable to review/variation/revocation of the consent order under section 27 of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
2. The occupier would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order without any negligence on his/her part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law.
5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
7. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
8. An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
9. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
10. The applicant shall maintain good house-keeping within the premises.
11. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Acts or Rules made therein.
12. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
13. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
14. Any upset condition in hospital facilities / activities which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned shall be reported to the Headquarters and Regional Office of the Board by E-mail within 2 hours of its occurrence.

15. The occupier has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
16. All solid wastes other than BMW arising in the premises shall be properly classified and disposed of to the satisfaction of the Board by :
    i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
    ii) Controlled incineration, wherever possible in case of combustible organic material.
    iii) Composting, in case of bio-degradable material.
17. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.
18. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
19. The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.
20. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.
21. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
22. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
23. In case the consent fee is revised during this period, the occupier shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
24. The occupier shall comply to the conditions stipulated in CTE order issued by Odisha State Pollution Control Board and conditions stipulated in Environmental Clearances issued by MoEF&CC, Govt. of India.
25. The occupier shall abide by E(P) Act, 1986 and Rules framed there-under.
26. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate.

E. SPECIAL CONDITIONS:

01. The effluent generated from Laboratories, Operation Theaters and dialysis shall be pretreated in Effluent Treatment Plant (ETP) and the treated water shall be routed through the Sewage Treatment Plant (STP).
02. The unit shall maintain and operate the sewage treatment plant consisting of oil & grease trap, bar screen, grit chamber, equalization tank, FAB reactor, tube settler, sludge holding tank, filter press. In Case, any discharge during monsoon, the treated effluent shall meet Board's prescribed standards mentioned in Section-A of this consent order.
03. The unit shall use the treated effluent to the maximum and in no case the untreated wastewater shall be discharged to outside.
04. The unit shall construct a lined tank for collection of treated wastewater which shall be used for gardening inside their own premises.
05. The treated and disinfected wastewater shall be stored in separate tanks for the purpose of utilizing it for toilet flushing. There shall be separate overhead tank and pipe network for distribution of wastewater for this purpose.
06. The Bio-medical waste shall not be mixed with general wastes and the wastes shall be treated properly as per the provisions of Bio-Medical Waste Management Rules, 2016. Under no circumstances untreated biomedical waste shall be handed over to the municipality for disposal.
07. The solid waste generated in form of garbage, rejected plastic bottles, plastic closures, packaging straps, corrugated cartoons, sludge from ETP, activated carbon and other solid waste shall be disposed off properly without causing any public nuisance or environmental contamination.
08. The unit shall provide acoustic enclosure in the DG set for treat the DG Room acoustically to control noise level as per E(P) Act, 1986.
09. The unit shall provide adequate stack height to the DG sets as per the following formula:
    i) $H = h+0.2\sqrt{KVA}$
    ii) H = Height of stack attached to the DG in mtr.
    iii) h – Height of the DG room where DG set is housed
    iv) KVA = capacity of DG Set
10. The ambient air quality in the plant premises shall conform to the National Ambient Air Quality Standard prescribed for industrial area under E(P) Act, 1986.
11. The internal road shall be made black topped. Water sprinkling arrangement shall be provided to control fugitive emission.
12. The green belt of adequate width and density preferably with local species along the periphery of the hospital shall be raised so as to provide protection against particulates and noise. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come.

13. The unit shall obtain authorization under Biomedical Waste Management Rules, 2016.
14. The unit shall set up a full-fledged Environment Management Cell with monitoring laboratory for monitoring pollutants and effective remedial measures in case of necessity.
15. The unit shall abide the provisions of Environment (Protection) Act, 1986 and Rules framed thereunder.
16. Proper house-keeping shall be maintained by a dedicated team.
17. In case the consent fees is revised upward during this period, the industry shall pay the differential fees to the Board (for the period & remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
18. The Board reserves the right to revoke / refuse consent to operate / to modify or stipulate additional conditions as deemed appropriate at any time during period for which consent is granted.
19. Rainwater harvesting shall be followed by utilizing the rainwater collected from the roof of the hospital and other buildings for recharging of ground water within the premises as per the concept and practices prescribed by CPCB.

To

The Unit Head & Vice President,
M/s AMRI Hospitals Ltd.,
Plot No.1(Pt.), Satya Sai Enclave, Khandagiri,
Bhubnaeswar-751030, Dist-Khurda, Odisha

CHIEF ENV. ENGINEER (M)
STATE POLLUTION CONTROL BOARD, ODISHA

Memo No._____/Dt._____/

Copy forwarded to:

i) Regional Officer, SPC Board, **Bhubaneswar.** He is requested to conduct wastewater monitoring of ETP-cum-STP to verify the efficiency of the system and submit report.
ii) District Collector, **Khurda**
iii) DFO, **Khurda**
iv) CES, Central Laboratory, SPC Board, Bhubaneswar
v) ACEE, H.W.M. Cell, (Head Office)
vi) Consent Register

ADDL. CHIEF ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ODISHA

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS PART – A : EFFLUENTS

Sl. No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour & odour	Colourless/ Odourless as far as practible	–	See 6 of Annex-1	See 6 of Annex-1
2.	Suspended Solids (mg/l)	100	600	200	a. For process wastewater – 100 b. For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850	–	–	
4.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
5.	Temperature	Shall not exceed 5°C above the receiving water temperature	–	–	Shall not exceed 5°C above the receiving water temperature
6.	Oil & Grease mg/l max.	10	20	10	20
7.	Total residual chlorine	1.0	–	–	1.0
8.	Ammonical nitrogen (as N) mg/l max.	50	50	–	50
9.	Total Kajeldahl nitrogen (as NH_3) mg/1 max.	100	–	–	100
10.	Free ammonia (as NH_3) mg/1 max.	5.0	–	–	5.0
11.	Biochemical Oxygen Demand (5 days at (20°C) mg/1 max.	30	350	100	100
12.	Chemical Oxygen Demand, mg/1 max.	250	–	–	250
13.	Arsenic (as As) mg/1 max.	0.2	0.2	0.2	0.2

Sl. No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
14.	Mercury (as Hg) mg/1 max.	0.01	0.01	–	0.001
15.	Lead (as pb) mg/1 max.	01.	1.0	–	2.0
16.	Cardmium (as Cd) mg/1 max.	2.0	1.0	–	2.0
17.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0	–	1.0
18.	Total Chromium (as Cr) mg/l max.	2.0	2.0	–	2.0
19.	Copper (as Cu) mg/l max.	3.0	3.0	–	3.0
20.	Zinc (as Zn) mg/l max.	5.0	15	–	15
21.	Selenium (as Sc) mg/l max.	0.05	0.05	–	0.05
22.	Nickel (as Nil) mg/l max.	3.0	3.0	–	5.0
23.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
24.	Fluoride (as F) mg/l max.	2.0	15	–	15
25.	Dissolved Phosphates (as P) mg/l max.	5.0	–	–	–
26.	Sulphide (as S) mg/l max.	2.0	–	–	5.0
27.	Phennolic compounds as (C_6H_5OH) mg/l max.	1.0	5.0	–	5.0
28.	Radioactive materials a. Alpha emitter micro curle/ml. b. Beta emitter micro curle/ml.	 10^{-7} 10^{-6}	 10^{-7} 10^{-6}	 10^{-8} 10^{-7}	 10^{-7} 10^{-6}
29.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
30.	Manganese (as Mn)	2 mg/l	2 mg/l	–	2 mg/l
31.	Iron (Fe)	3 mg/l	3 mg/l	–	3 mg/l
32.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	–	0.2 mg/l
33.	Nitrate Nitrogen	10 mg/l	–	–	20 mg/l

NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual *	50	20	- Improved west and Gaeke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual *	40	30	- Modified Jacob & Hochheiser (Na Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or $PM_{10}\mu g/m^3$	Annual *	60	60	- Gravimetric - TOEM
		24 Hours **	100	100	- Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}$ $\mu g/m^3$	Annual *	40	40	-Gravimetric - TOEM
		24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O_3) $\mu g/m^3$	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) $\mu g/m^3$	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper.
		24 Hours **	1.0	1.0	- ED XRF using Teflon filter
7.	Carbon Monoxide (CO) mg/m^3	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR)
		1 Hours **	04	04	Spectroscopy
8.	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	- Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) $\mu g/m^3$	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP)- Particulate phase only, mg/m^3	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), mg/m^3	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni), mg/m^3	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.