MAHARASHATRA POLLUTION CONTROL BOARD

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MAHARASHTR



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: |4 /Feb/2012

Consent No: BO/PAMS/O/EIC NO.PN-10597-11/CAC-294

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 & Transboundry Movement) Rules 2008

[To be referred as Water Act, Air Act and HW (M&H) Rules respectively].

CONSENT is hereby granted to

M/s Lupin Ltd (Reaserch park) 46A/47A, Village- Nande, Taluka- Mulshi, Dist Pune Maharashtra

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:. 31.08.2012
- 2. The Consent is valid for the manufacture of -

	Product Name	
1	Reaserch & Development activity of Pharrmaceutical products	

3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory shall not exceed 111.00M³ (Including 1.0 m³ received from sister concern M/s. Lupin Ltd.Panchshil Tech park, Hinjewadi.)
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 75.00 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:

1	рН	Between	5.5 to 9.0
2	BOD 3 days 27 deg C	Not to exceed	100 mg/l
3	Oil & Grease	Not to exceed	10 mg/l
4	Suspended Solids	Not to exceed	100 mg/l.
5	COD	Not to exceed	250 mg/l.

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6	Total Dissolved Solids	Not to exceed	2100 mg/l.
7	Chlorides	Not to exceed	600 mg/l.
8	Sulphates	Not to exceed	1000 mg/l.
9	Phenolic Compound	Not to exceed	01 mg/l.
10	Mercury	Not to exceed	0.01 mg/l
11	Arsenic	Not to exceed	0.20 mg/l.
12	Lead (as Pb)	Not to exceed	0.1 mg/l.
13	Hexavalent Chromium	Not to exceed	0.1 mg/l.
14	Cyanide (as 'CN')	Not to exceed	0.2 mg/l.
15	Sulphide (as S)	Not to exceed	02 mg/l.

- (iv) **Trade Effluent Disposal:** The treated effluent shall be recycled to maximum extent and remaining shall be used on land for gardening only.
- (vi) Sewage Effluent Treatment & Disposal: The applicant shall treat the sewage effluent alongwith the trade effluent in the comprehensive treatment system provided and after treatment the treated waste water shall be used for gardening / plantation only.

(vii) Non-Hazardous Solid Wastes:

Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
-	-NA-	-		-	

(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) Domestic purpose	82.00 CMD
(ii) Water gets Polluted &	
Pollutants are Biodegradable	107.00 CMD
(iii) Water gets Polluted, Pollutants	
are not Biodegradable & Toxic	0.00 CMD
(iv) Industrial Cooling, spraying	
in mine pits or boiler feed	20.00CMD
(v) Gardening / Plantation	110.00 CMD
(3)	-+0.00 OMD

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. Scrubber of sufficient capacity should be provided to scrub fumes/ gaseous emissions from the process and to incinerator to control air emissions.

- II. There shall not be any secondary (fugitive) emissions.
- b. Standards for Emissions of Air Pollutants:

(i) SPM/TPM	Not to exceed	150.0 mg/Nm3
(ii) SO2	Not to exceed	366.0 Kg/day
(iii)Sox (From Process)	Not to exceed	50.0 ppm
(iv) NOx (from Process)	Not to exceed	50.0 ppm
(v) Acid Mist	Not to exceed	35.0 mg/Nm3

6. Standards for Stack Emissions:

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

Sr. No.	Type Of Fuel	Quantity	UOM
1	HSD	762.00	Ltr /Hr

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

Sr. No.	Chimney Attached To	Height in Mtrs.
1	DG Set (1500 KVA)	32.00*
2	DG set (625 KVA)	10.00*
3	DG Set (1010 KVA x 2 Nos)	32.00*
4	Incinerator	30:00
	- Luna	0 0111

* above the roof of bldg.

- (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.

Standards for Incinerator as per CPCB guidelines:

Applicant shall provide and/or upgrade the existing incinerator so as to comply the following standards and conditions.

A] Emission limit of Incineration while operating properly at 100 % rated capacity, shall have an emission limit from the discharge stack to atmosphere of less than or equal to :

Parameter	Emission limit (mg/Nm ³)
Particulate Matter	50
HCI	50
$\overline{\mathrm{SO}_2}$	200
СО	100
Total Organic Carbon	20
HF	4
NOx	400

All values corrected to 10% oxygen on a dry basis.

- B] Hydro carbons 10 ppm over an hourly rolling average dry basis, measured as propane.
- C] Capacity : While operating properly at 100% rated capacity, the system shall be have a visible emission rate of less than or equal to 10% except for condensed water vapour from the discharge stack to atmosphere (one hour rolling averages).
- D] Dioxin Furans: While operating properly at 100% rated capacity; the system shall be an emission of dioxins and furans of less than of equal to 0.1 TEQ/NM3 corrected to 10% oxygen. Sampling period shall be minimum 5 hours and maximum 8 hours. Analysis at dioxin and furans as well as reference measurement methods to calibrate automated measurement system shall be carried out as given by CEN standards. II CEN standards are not available. ISO Standards, National or International Standards which will ensure the provision of data of an equivalent scientific quality shall apply.
- E] Metals: While operating properly at rated capacity, the system shall have an emission rate from the discharge of stack to atmosphere less than or equal to:

Metal	
Cd+Th (and its compounds)	0.05Mg/NM3
Hg (and its compounds)	0.05
Sb+As+Pb+Cr+Co+Mn+Nr+V	0.5
(and their compounds)	

All values corrected to 11% oxygen on a dry volume basis.

F] Operating Standards;

- 1. Combustion efficiency (CE) shall be at least 99.9% and shall be computed as follows-
 - $CE = %Co2/% CO% + %CO] \times 100$
- 2. Temperature of the primary chamber shall be at least 850°C.
- 3. Secondary chamber gas residence time shall be at least 2 (two) second at 11009C will minimum 3% oxygen in the stack gas.
- 4. Destruction and Removal Efficiency (DRE) for each principal Organic hazardous constituent (POHC) in the waste lead shall be at least 99.99%.

5. DRE for hazardous waste containing PCBs. PCTs and other chlorinated compounds shall be 99.9999%.

- G] Air pollution control devices: The emission control system shall be installed for cleaning and removal of air pollutants. The system shall comprises of following equipment. Singly or in combination with design efficiencies to meet the emission norms:
 - i) Waste heat boiler/heat exchange/quench
 - ii) Bag filters (ESP)/Cyclone
 - iii) Dry/wet scrubber with hydrated lime or sodium hydroxide injection.
 - iv) Chimney / stack of minimum 30 m height or as per formula 14

(Q) ⁰¹ [Where Q is emission rate of SO₂ in Kg hr] which ever is more and designed as per GEP.

[Note Dry/wet ESP, spray dryer, dediex filter and mist eliminator shall also be considered as may be required,]

Operating Conditions: Incineration plants shall be operated in order to achieve a level of incineration such that the slag and bottom ashes Total Organic Carbon (TOC) content is less than 3% or their loss on ignition is less than 5 of the dry weight of the material. If necessary, appropriate techniques of waste pre-treatment shall be used. Incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the process is raised after the last injection of combustion air, in a controlled and homogenous fashion and even under the most unfavorable conditions to a temperature of 850°C as measured near the inner wall or at another representative point of the combustion chamber as authorized by the Competent Authority for two seconds. If hazardous wastes with a content of more than 1% of halogenated organic substances, expressed as chlorine, are incinerated, the temperature has to be raised to $1200^{\circ}C + 100$ for at least two seconds.

Each line of the incineration plant shall be equipped with at least one auxiliary burner. This burner must be switched on automatically when the temperature of the combustion gases after the last injection of combustion air falls below 850°C or 1100°C as the case may be is maintained at all times during these operations and as long as unburned wastes is in the combustion chamber.

During the start up and shut down or when temperature of the combustion gas falls below.: 850°C or 1100°C as line the case may be, the auxiliary burner shall not be fed with fuels emissions than those permitted.

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Monitoring requirements: Continuous monitoring and recording system for opacity CO, SO2 and NOx shall be installed and reported shall be sent to the State Pollution Control Boards on regular basis. Interlocking arrangements for CO and temperature controls (in primary and secondary chamber) with feeding devices shall also be provided waste feed has also to be terminated on lass of ignition in the after burner safety valve in case of high pressure development in the furnace.

J] Notification of Compliance: The operator of the incinerator shall undertake comprehensive performance test. Within 90 days of completion of comprehensive performance test. The operator shall issue a notification of compliance documenting compliance or non compliance, as the case may be, for public information.

Standards for	Emissions due to	Incineration o	f Industrial effluent:

Sr. No.	Pollutants	Limit	
1.	Particulate	30 mg/Nm ³	
2.	HCI	50 mg/Nm^3	
3.	SO_2	200 mg/Nm ³	
4.	CO	100 mg/Nm ³	
5.	HBr	60 mg/Nm^3	
6.	Dioxin/Furan	0.1 μg TEQ/Nm ³	
7.	Opacity	10%	

8.	Cadmium (Cd)	0.05 mg/Nm^3
9.	Thallium (TI)	0.05 mg/Nm^3
10.	Mercury (Hg)	0.05 mg/Nm^3
11.	Antimony (Sb)	$0.5 \text{ mg/Nm}^{\circ}$
12.	Arsenic (As)	0.5 mg/Nm^3
13.	Lead (Pb)	0.5 mg/Nm ³
14.	Chromium (Cr)	0.5 mg/Nm^3
15.	Cobalt (Co)	0.5 mg/Nm^3
16.	Copper (Cr)	0.5 mg/Nm^3
17.	Manganese (Mn)	0.5 mg/Nm³
18.	Nickel (N:)	0.5 mg/Nm^3
19.	Vnadium (V)	0.5 mg/Nm^3
20.	Tin (Sn)	0.5 mg/Nm^3

(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.

7. 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. The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
- d. 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.
- e. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- f. 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.
- g. D.G. Set shall be operated only in case of power failure

- h. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
- 8. CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING & TRANSBOUNDRY MOVEMENT) RULES, 2008:
 - (i) The Industry shall handle hazardous wastes as specified below.

Sr. No.	Type Of Waste	Quantity	UOM	Disposal
1	5.1 Used /spent oil	6.00	Lit/Day	By sale to authorized Reprocessor/CHWTSDF
2	28.5 Spent organic solvents	175.00	Lit/day	By sale to authorized Reprocessor/CHWTSDF
3	33.3 Discarded containers / barr / liners	As & when g	enerated	By sale to authorized Reprocessor after decontamination/CHWTSDF
4	34.3 Chemical sludge from wa water treatment	250.00	Kg/Day	CHWTSDF
5	36.2 Ash from incineration hazardous waste	As & when g	enerated	By sale to brick manufacture

- (ii) Treatment: NIL
- 1. The authorization is hereby granted to operate a facility for collection, storage, transport & disposal of hazardous waste.
- 2. The industry should comply with the Hazardous Waste (M&H) Rules, 2003.

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. Industry shall obtain registration from CPCB as a re-refiner of Used oil having environmentally sound technology as per the provisions of Hazardous Waste (Management & Handling) Rules 1989 & Amendment Rules 2003 before commencement of production.
- c. 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.
- d. 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.
- 9. Industry shall comply with following additional conditions:

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- 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.
- x. 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 flcw. 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.

- 10. This consent shall not be construed as any exemption from obtaining necessary No Objection Certificate from other Government agencies as may deemed fit necessary.
- 11. This consent is issued as per the decision taken in the meeting of the Consent Appraisal Committee of the Board held on 31/01/2012.
- 12. The industry shall submit the fresh Bank Guarantee of Rs.5 Lakhs for acquisition of required land for disposal of treated effluent or reduce the effluent quantity upto 160 CMD within 2 months period and 5 Lakhs for O & M of ETP, so as to achieve the consented standards.
- 13. The Capital investment of the industry is Rs 175.14 Crore (Existing C.I. Rs 155.94 Cr + Increased CI Rs 19.20 Cr)

(Ajay A. Deshpande) Joint Director (PAMS)

To,

M/s Lupin Ltd (Research Park) 46/47, Village- Nande, Taluka- Mulshi, Dist-Pune Maharashtra

Copy to :

RO, Pune / SRO Pune II

- He is directed to forefeet the existing Bank Guarantee of Rs 2.00 lakhs against the non-compliances. And collect fresh Bank Guarantee of Rs. 5 Lakhs for acquisition of required land and obtain separate Rs.5 Lakhs B.G. for O & M of ETP so as to achieve the consented standards.

- They are directed to ensure the compliance of consent conditions.

CAO/Cess Branch/Master file.

Received Consent fee of -

		Amount(Rs.)			Drawn On
-	1	175244/-	245537	30 Jun 2011	Citi Bank
	2	225140/-		11 Nov 2011	