MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781/24014701

Fax: 24024068 / 24023516

Website: http://mpcb.gov.in

E-mail: apac@mpcb.gov.in

Kalpataru Point, 2nd - 4th Fl. Opp. Cine Planet Cinema,

Near Sion Circle, Sion (E)

Mumbai-400 022.

Red/L.S.I

Consent No: BO/APAE/EIC No.PN-7854-10/CC-

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. Kirloskar Oil Engines Ltd., Laxmanrao Kirloskar Road, Khadki,

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:

The Consent to Operate is granted for a period up to - 31/12/2013.

2. The Consent is valid for the manufacture of -

. No.	Product Name	Maximum	UOM
1	IC Engines	Quantity 10000	Nos/M
2	Bearings	35,00,000	Nos/M
3	Generating Sets	500	Nos/M
4	Pumpsets	2000	Nos/M

3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory shall not exceed 50.0 M3.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 200.0 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:

Landoctoria L	pH	Between	5.5 to 9.0
2	Temperature	Should not exceed 5 c above the ambient temperature of the receiving body	
3	BOD 3 days 27 Deg, C	Not to exceed	30 mg/l
4	COD	Not to exceed	250 mg/l
Ē		Not to exceed	10 mg/l
5	Oil & Grease TDS	Not to exceed	2100 mg/l.
6	Chlorides	Not to exceed	600 mg/l.
7	Sulphates	Not to exceed	1000 mg/l.
8		Not to exceed	0.1 mg/l.
9	Lead	Not to exceed	3.0 mg/l.
10	Copper	Not to exceed	3.0 mg/l.

- (iv) Trade Effluent Disposal: The treated trade effluent shall reused/recycle to the maximum extent, excess if any, shall be used on land for gardening / plantation only.
- (v) Sewage Effluent Treatment: The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards.

100 mg/l. Not to exceed Suspended Solids (1) 100 mg/l. Not to exceed BOD 3 days 27o C.

(vi) Sewage Effluent Disposal: The treated domestic effluent shall be soaked in a soak pit, which shall be got cleaned periodically. Overflow, if any, shall be used on land for gardening / plantation only.

(vii) Non-Hazardous Solid Wastes:

(vii) Non-l Sr. No.	Type of Waste	Quantity (MT/A)	Disposal
1	Metal Scrap	250	By sale to authorized party
2	Wooden Scrap	265	By sale to authorized party
9	Al Alloybrags, bush	es, patta 1872	By sale to authorized party
1	ALAHovABB burr	120	By sale to authorized party
N.	Garbage paper, pla	By sale to authorized party	
6	E- Waste	25	By sale to authorized party
7	Grinding dust	12	By sale to authorized party
8	Glasswool	1	CHWTSDF

(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:

240,00 CMD (i) Domestic 95.00 CMD (ii) Industrial Processing 170.00 CMD (iii) Industrial Cooling 0.00 CMD (iv) Agriculture / Gardening 1200

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.

CONDITIONS UNDER AIR ACT: 5.

The applicant shall install a comprehensive control system consisting of control (i) 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:

Fume extraction system followed by dust collecting system of sufficient capacity shall

be provided to all sources of SPM/TPM

The industry shall take all the necessary precautions to control noise pollution in the industrial activities and also the nuisance due to vibration generated due to hammering operations. The industry shall take suitable acoustic measures including shielding, enclosures, noise barriers etc. to control the noise levels within the norms stipulated to avoid nuisance in the surrounding.

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.

e. 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

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

Standards for Emissions of Air Pollutants:

Not to exceed mg/Nm³ 150 SPM/TPM (i) T/Day 3.2 Not to exceed SO2 (ii)

The applicant shall observe the following fuel pattern:-

	ie applicant shall obs		
SEN	o. Type Of Fuel	Quantity	UOM
1	HSD	2800	Litr/D
9	Diesel	2.5	KL/M
3	Natural Gas	20000	M3/M
2 3	Diesel	2.5	KL/M

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

Sr. N	lo. Chimney Attached To	Height in Mtrs.
1	29 nos. of standby Genset	8
2	Engine / Genset Testbed	10
3	Paintbooths	10
4	Furnaces	8
5	Other Processes (Acid Etching)	8

- (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.

(vi) Other Conditions:

- 1) The industry should not cause any nuisance in surrounding area.
- The industry should monitor stack emissions and ambient air quality Regularly.

CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING & TRANSBOUNDRY MOVEMENT) RULES, 2008:

The Industry shall handle hazardous wastes as specified below.

27	Type Of Waste	Quantity	UOM	Disposal
1	5.1 Used / spent Oil	50	KL/M	CHWTSDF
2	5.2 Wastes/ residue containing oil	15	KL/M	CHWTSDF
3	12.4 Sludge from bath containing organic solvents	4	KL/M	CHWTSDF
-1	14.1 Cyanide, nitrate or nitrate- containing sludge	1	MT/M	CHWTSDF
5	15.2 Discarded asbestos	200	MT/Yr	CHWTSDF
G	21.1 Wastes and residues	3	Mt/M	CHWTSDF
7	33.3 Discarrded containers/ barrels/liners	500	MvsoVI	CHWTSDF
8	34.3 Chemical sludge from waste water treatment	2.5	MT/M	CHWTSDF

- (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.
- 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. 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.
- c. 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.

8. Industry shall comply with following additional conditions:

- 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 flow. 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.

9. The Capital investment of the industry is Rs.250.78/-Crs.

10. This is issued with the approval of Consent appraisal committee meeting held

on 17/08/2011.

Milind Mhaiskar, IAS) Member Secretary

To, M/s. Kirloskar Oil Engines Ltd., Laxmanrao Kirloskar Road, Khadki, Pune.

Copy to:

RO- MPCB Pune /SRO-MPCB Pune-II

- They are directed to submit the detail report of air pollution control within 1 month period.

CAO/Cess Branch/Master File

Received Consent fee of -

STIN	o. Amount(Rs.)	DD. No.	Date	Drawn On
1	Rs.100/-	117910	17/08/2010	HDFC
2	Rs.7,52,364/-	117911	17/08/2010	HDFC
3	Rs.7,52,364/-	124916	22/11/2011	HDFC

^{*} Consent fees received as per the revised consent fee GR of Envt. Dept., GoM, dated 25/08/2011