# MAHARASHATRA POLLUTION CONTROL BOARD

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Mumbai - 400 022

Red/L.S.I Date: 14/03/2012

Consent No: BO/JD(APC)/EIC No.PN-11590-11/O/CC-CAC-345

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. Tata Motors Ltd. Chinchwad Works, Chinchwad, Pune - 411 033

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: 31/12/2012.
- 2. The Consent is valid for the manufacture of-

Sr. No.	Product Name	Maximum Quantity	UOM
1	GI/SGI castings	40,000	MT/Year
2	Aluminium castings	2,500	MT/Year
3	Machined components – (Ancillary Product Division & Rear Axle Tube Production)	4,80,000	Nos./Year
4	Heat treated components – (Heat Treatment Shop)	1,300	MT/Year
5	Mine Protected Vehicles	60	Nos./Year
6	Supply of kits for Armoured Fighting Vehicles / Infantry Combat Vehicles / Main Battle Tanks and variants	1200	Nos./Year

#### 3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of trade effluent from the factory shall not exceed 380,00 M3.
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 295.00M3.

### (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	На	Between	5.5 to 9.0
2	BOD 3 Days 27 degree C	Not to exceed	30 mg/l.
3	COD	Not to exceed	250 mg/l.
4	Oil & Grease	Not to exceed	10 mg/l
5	Suspended Solids	Not to exceed	100 mg/l.
6	TDS	Not to exceed	2100 mg/l.
7	Chlorides	Not to exceed	600 mg/l
8	Sulphates	Not to exceed	1000 mg/l.
9	Total Metal	Not to exceed	10:0 mg/l.
10	Iron	Not to exceed	3,0 mg/l.
11	Residual Chlorine	Not to exceed	1.0 mg/l.
12	Copper	Not to exceed	3.0 mg/l.

- (iv) Trade Effluent Disposal: The treated trade effluent shall be reused/recycle to the maximum extent, excess if any, shall be used on land for gardening/plantation only. There shall not be any discharge outside the factory premises.
- (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.

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

(vi) Sewage Effluent Disposal: The treated sewage effluent shall be used on land for gardening/plantation only. There shall not be any discharge outside the factory premises.

#### (vii) Non-Hazardous Solid Wastes:

Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
1.	Canteen waste	1650	MT/year		By Landfilling at PCMC notified area - Moshi / Bio-gas plant at Tata Motors - Pimpri premises
2.	Foundry Slag	1,500	MT/year		By sale
3.	Aluminium Dross	2,500	MT/year		By sale
4.	(i) Bag Filter Dust from Sand Drying Plant, Sand Reconditioning Plant, Melting Shop	1,74,460	MT/year		(a) Landfilling in PCMC authorized area; (b) Use in brick kilns; (c) Offsite reclamation

Sr.	Type Of Waste	Quantity	UOM	Treatment	Disposal
No.	& Casting Finishing Shop (ii) Burnt mould sand, rejected and broken cores (iii) Broken furnace lining, (iv) Rotoclone (wet scrubber) Slurry, (v) Black burnt sand (fines) (vi) Hardened and unused core washes (vii) Glass bead powder				through waste sand re-cycling plant
5.	Ferrous casting scrap	25,000	MT/year	) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A	By sale
6.	Scrap CI, MS, Aluminium chips, burr, turning & boring, forgings etc.	25,000	MT/year		By sale
7.	Sheet metal scrap	20,000	MT/year	<b>L</b>	By sale
8.	Scrap empty containers (jerry cans, barrels, cartridges, bottles, tins, drums, carbouys etc)	30,000	MT/year		By sale
9.	Scrap rubber. plastic, tyres, etc.	1,000	MT/year		By sale
10.	Scrap gunny bags	125	MT/year		By sale
11.	Mixed trash / garbage from office and shops (scrap packaging waste including paper, plastic, thermocole, cardboard etc)	1,000	MT/year		By sale
12.	Scrap glass-wool used for insulation	100	MT/year		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:

(i) Domestic purpose(ii) Processing whereby water gets polluted and the pollutants are easily bio-degradable

368.00 CMD 550.00 CMD

(iii) Processing whereby water gets polluted and the

0.00 CMD

pollutants are not easily bio-degradable and are toxic

(iv) Industrial Cooling, spraying in mine pits or boiler feed

250.00 CMD

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:

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:

# 1. Control Equipment:

- 1. Fume extraction system followed by dust collecting system of sufficient capacity shall be provided to all sources of SPM/TPM.
- 2. Fume extraction system followed by scrubber system of sufficient capacity shall be provided to all sources of gaseous emission.
- 3. Painting activity shall be carried out in an enclosure.

# 2. Standards for Emissions of Air Pollutants:

(i) TPM	Not to exceed	$150 \text{ mg/Nm}^3$
(ii) SO <sub>2</sub>	Not to exceed	0.378 T/day
(iii)SO <sub>2</sub> from process	Not to exceed	50 ppm
(iv)Acid Mist	Not to exceed	35 mg/ Nm <sup>3</sup>
(v) NOx	Not to exceed	50 ppm

#### 6. 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 The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then
- 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 75 dB(A) during day time and 70 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

# 7. Standards for Stack Emissions:

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

Sr. N	o. Type Of Fuel	Quantity	UOM
1	High Speed Diesel (HSD)	Э.9	KL/day
2	Light Diesel Oil (LDO)	10.0	KL/day
3	Liquefied Petroleum Gas (LPG)	4.0	MT/day

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

specifications:-

Sr. No.	Chimney No.	Chimney Attached To	Height in Mtrs.
1.	Ch-1	Moulding Line-Wet Scrubbers (3 Nos.)	44.00
2.	Ch-2	Sand Reconditioning Plant-Wet Scrubbers (3 Nos.)	44.00
3.	Ch-3	Core Drying Oven (East Side)	35.75
4.	Ch-4	Core Drying Oven (South Side)	36.00
5.	Ch-5	Canteen – Steam Generator	22.50
6.	Ch-8	RATP - RA Paint Booth, A3 Bay, Col No. 8-9	8.0
7.	Ch-9	FOUNDRY-CORE SHOP: TCS#1 & #5 Fume Extraction System	18.15
8.	Ch-10	FOUNDRY-CORE SHOP: TCS#2, #3 & #4 Fume Extraction System	18.15
9.	Ch-11 FOUNDRY-CASTING FINISHING SHOP: Bag Filter attached to Shotblasting Machine		08.00
10.	Ch-12	FOUNDRY-MELTING SHOP: Primary and Secondary Fume Extraction System Bag Filter	18.15
11.	Ch-13	FOUNDRY MOULDING SHOP: Cooling tunnel Fume	
12.	Ch-14	FOUNDRY MOULDING CHOR: Cooling tunnel Fune	
13.	Ch-15	FOUNDRY-MOULDING SHOP: Pouring Zone Fume Extraction System#1	18.15
14.	Ch-16	FOUNDRY-MOULDING SHOP: Pouring Zone Fume Extraction System#2	18.15
15.	Ch-17	FOUNDRY-MOULDING SHOP: Pouring Zone Fume Extraction System#3	18.15
16.	Ch-18 FOUNDRY-MOULDING SHOP:Pouring Zone Fume Extraction System#4		18.15
17.	Ch-19	FOUNDRY MOUI DING SHOP: Pouring Zone Frame	
18.	Ch-20	FOUNDRY-CORE SHOP: Cold Core Box TEA Fume Extraction System (H40)	18.15
19.	Ch-21	FOUNDRY-CORE SHOP: Cold Core Box TEA Fume	18.15

Sr. No.	Chimney No.	Chimney Attached To	Height in Mtrs.
		Extraction System (scrubber)	
20.	Ch-22	Ch-22 FOUNDRY-SAND COATING PLANT: Sand Coating Plant #3	
21.	Ch-23	FOUNDRY-SAND COATING PLANT: Fume Extraction System #2	18.15
22.	Ch-24	FOUNDRY-SAND COATING PLANT: Fume Extraction System #3 (South)	18.15
23.	Ch-25 FOUNDRY-CASTING FINISHING SHOP: Bag Filter attached to Tumblasting Machine		
24.	Ch-26 FOUNDRY-CASTING FINISHING SHOP: Casting Paint Booth		
25.	Ch-27	FOUNDRY-SAND DRYING PLANT: Sand dryer dust	
26.	Ch-28	FOUNDRY-SAND DRYING PLANT: Sand cooler dust extraction system	12
27.	Ch-29	ALUMINUM FOUNDRY: Furnace fume extraction system	18.45
28.	Ch-30a & Ch-30b	2.5 MW-Fuji D.G. Set No. 1 (2 chimneys);	14
29.	Ch-31	2.23 MW-Niigata D.G. Set No. 2;	14
30.	Ch-32	D.G. Set: GI/SGI Foundry - for Holding Furnace;	10.80
31.	Ch-33	D.G. Set: GI/SGI Foundry – for Press-Pour Furnace;	10.80

- (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.

# (y) 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.

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

(ii) The Industry shall handle hazardous wastes as specified below.

77	Description of Waste Category No. as per Rules	of Hazardous Waste Waste description	Quan tity	UOM	Disposal
1.	5.1 Used / spent oil	All types of scrap/waste oil 'LOTS' which are disposed through scrap auction / tender	200	МТУҮ	Sale to CPCB/MPCB "Registered Re- cyclers/Re- refiners"
2.	5.2 Wastes / residues containing oil	Oil soaked fabric/corrugated cardboard and oily scum/sludge	50	MT/Y	CHWTSDF
3.	5.2 Wastes / residues containing oil	Grinding sludge	100	MT/Y	CHWTSDF
4.	5.2 Wastes / residues containing oil	Scrap oil / fuel Filters	5	MT/Y	CHWTSDF
4.	12.9 Chemical sludge from waste water treatment	sludge	13,	MT/Y	CHWTSDF
5.	14.2 Spent hardening salt	Salt bath sludge from - Heat Treatment Shop	5	MT/Y	CHWTSDF
6.	15.1 Asbestos-containing residues  15.2 Discarded asbestos	Insulating material/Scrapped vehicle parts/ Personal Protective Equipment containing asbestos	50	МТ/Ү	CHWTSDF
7.	20.1 Contaminated aromatic, aliphatic or napthenic solvents not fit for originally intended use	All kinds of contaminated solvents & waste / spent thinners, trichloroethylene, Iso-	10	KL/Y	By sale to MPCB authorised Spent Solvent
1	20.2 Spent solvents	propyl alcohol (IPA)			re-processors/ CHWTSDF
8.	21.1 Wastes and residues	Paint sludge, thinned down /obsolete paint, hardened paint residues, scrap paint soaked filters, tins with hardened residue, paint/oil soaked cardboard, cotton waste, cloth etc.	100	MT/Y	CHWTSDF
9.	23.1 Wastes/residues (not made with vegetable or animal materials)	(i) Residues of core adhesives / washes (ii) Scrap & shelf-life expired resins used in core sand making,	10	MT/Y	CHWTSDF
10.	34.1 Flue gas cleaning residue	Soot from chimney / duct cleaning	25	MT/Y	CHWTSDF
11.	34.2 Toxic metal- containing residue from used - ion exchange material in water purification	Spent resins (from DM Plant)	25	MT/Y	CHWTSDF
12.	34.3 Chemical sludge from waste water treatment	Industrial sludge from ETP	50	MT/Y	CHWTSDF
13.	Hazardous wastes as per SCHEDULE-4: List of	Copper based scrap consisting of brass / bronze / copper cuttings, punching, casting, bushing, turning & borng scrap etc. (Lot No. HB-18C)	100	MT/Y	Sale to CPCB/MPCB Registered Re- cyclers

	Description Waste Category No. as per Rules	of Hazardous Waste Waste description	Quan tity	UOM	Dismens
14.		Scrapped brass, copper turning & boring mixed with MS chips etc. & cotton waste and rags beyond segregation (Lot No. HB-20C & HB-20/1C)	100	MT/Y	Sale to CPCB/MPCB Registered Re- cyclers
15.		Scrapped stainless steel components with copper based metal like bronze / copper / MS attached to it (Lot No. HB- 782C)	100	МТ/Ү	Sale to CPCB/MPCB Registered Re- cyclers
16.		Used / scrapped electrical PVC coated copper cable, telephone cables, jelly filled telephone cables, copper druid etc., (Lot No. HB-956)	100	MT/Y	Sale to CPCB/MPCB Registered Re- cyclers
17.		Scrap copper based radiators/heat exchangers items with / without bracket along with brass / aluminium/MS attached to it (Lot no. HB-970)	100	MT/Y	Sale to CPCB/MPCB Registered Re- cyclers
18.		Used/scrapped copper electrodes (Lot no. HB-906)	100	МТ/Ү	Sale to CPCB/MPCB Registered Re- cyclers
19.		Scrapped/Used Lead Acid Batteries with/without MS box, caps etc. (Lot No. HB-03)	100	МТ/Ү	Sale to CPCB/MPCB Registered Re- cyclers
20.	'Hazardous Waste' as per Schedule-I of the "e-waste (Management Handling) Rules 2011" notified on 12/05/11	e-waste (waste electrical and electronic equipment)	10	МΊ/Υ	Sale to CPCB/MPCB Registered Re- cyclers

#### (ii) Treatment: - NIL

- 1. The authorization is hereby granted to operate a facility for collection, storage, transport & disposal of hazardous waste.
  - 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. The unit has to display and maintain the data online outside the factory main gate in Marathi and 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 and 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 under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundry Movement) Rules 2008 & when asked for.

# 9. Industry shall comply with following general conditions:

- 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 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.
- 10. This is issued with approval of Consent Appraisal Committee meeting of the Board held on dtd. 02/03/2012
- 11. You shall submit Bank Guarantee of Rs.10,00,000/- in favor of Regional Officer Pune within 15 days against to provide Sewage Treatment Plant within 12 months period. The Bank Guarantee shall be valid for one year.
- 12. The Capital investment of the industry is Rs. 335.98 Crs

(Milind Mhaiskar IAS) Member Secretary

To, Tata Motors Ltd. Chinchwad Works, Chinchwad, Pune-411 033 Maharashtra

# Copy to:

RO-MPCB Pune / SRO-MPCB Pimpri Chinchwad

- They are directed to ensure the compliance of consent conditions & obtain the B.G. of Rs. 10 Lakhs from the industry & submit the detail report of pollution control System within 1 month period.

#### CAO/Cess Branch/Master File

Received Consent fee of -

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	15,000/-	123608	13/09/2011	HDFC Bank
2	6,66,960/-	124364	21/10/2011	HDFC Bank
3	15,000/-	124391	24/10/2011	HDFC Bank
4	6,96,960/-	024689	09/03/2012	HDFC Bank

<sup>\*</sup>The consent was refused earlier. Hence, it was decided to obtain one term fees for reconsideration of case. Accordingly industry has paid above (4) consent fees.