# MAHARASHATRA POLLUTION CONTROL BOARD

MAHARASHTRA

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MPCB-CONSENT-0000055141 RO-Nashik/Consent/18/200/109 Date: 17/12/2018

Udyog Bhavan, First Floor Trimbak Road,

Near ITI, Satpur, Nashik-422007.

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 & Transboundry Movement) Rules 2016

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

### **CONSENT** is hereby granted to

### M/s. Swami Vessels Pvt. Ltd., Plot No - N 101, MIDC Area, Jalgaon Tal. & Dist .:- Jalgaon

Located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW (M&TM) 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 : 31.07.2021.
- 2. The Consent is valid for the manufacture of following products/by-products

Sr. No.	Product Name	Maximum Quantity	UOM
A	Products	100	MT/M
1)	Pyrolysis Oil Carbon Black Powder	75	MT/M
3)	Fabrication Work for Pyrolysis Plant without any metal surface treatment, Spray painting, Powder Coating, Melting, Heating etc. Activity	1500	MT/A
B	By-Products Steel Wire / MS Scrap	40	MT/M

(Consent is granted for use of Pyrolysis Pilot Plant for only testing of Pyrolysis Unit and the use of Pyrolysis Plant for Commercial purpose is not allowed. )

# 3. CONDITIONS UNDER WATER ACT:

(i) The daily quantity of trade effluent from the factory shall not exceed 0.5 M3.

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- (ii) The daily quantity of sewage effluent from the factory shall not exceed 2.0 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 the effluent quality and operate and maintain the same continuously so as to achieve the quality of the effluent to the following standards:



nH	Between	5.5 to 9.0
	Not to exceed	10 mg/l
	Not to exceed	100 mg/l
	Not to exceed	30 mg/l
	Not to exceed	250 mg/l
	Not to exceed	2100 mg/l
	Not to exceed	1000 mg/l
	Not to exceed	600 mg/l
	Not to exceed	10 mg/l
	pH Oil & Grease Suspended Solids BOD 3 Days 27 degree C COD TDS Sulphate Chloride Total metal	Dil & Grease     Not to exceed       Suspended Solids     Not to exceed       BOD 3 Days 27 degree C     Not to exceed       COD     Not to exceed       TDS     Not to exceed       Sulphate     Not to exceed       Chloride     Not to exceed

- (iv) Treated Effluent Disposal: The treated effluent shall be reused in the process at maximum extend and remaining shall be used on the land for gardening purpose within the factory premises. There shall not be any discharge of effluent 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.

1. Suspended Solids	Not to exceed	100 mg/
2. B.O.D. 3 days 27 oC	Not to exceed	100 mg/

- (vi) Sewage Effluent Disposal: The treated domestic effluent shall be used on land for gardening / plantation in scientific manner so as to avoid any sort of percolation and seepages in the ground water.
- (vii) Non-Hazardous Solid Wastes:

Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
1.	MS Scrap	0.5	MT/M		Reprocessor

(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:

 3.0	CMD
 0.0	CMD
1.0	CMD
0.5	CMD
	0.0 1.0 0.5

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 :**

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:

#### **Control Equipment:**

The Industry shall provide dust collector/ scrubber of sufficient capacity to control the emissions from processing section and same shall be operated continuously and effectively so as to avoid any sort of air pollution and smell nuisance problems in the surrounding area. There shall not be any secondary (fugitive) emissions.

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- i. Industry shall provide fumes extraction system followed by dust collection system to carbon black handling section (s).
- ii. Industry shall provide dust collector followed by wet scrubber to Pyrolysis Kilns/Reactors.
- iii. There shall not be any secondary (fugitive) emissions.
- iv. Industry shall install sensors for gases like CO along with alarms set at suitable threshold limit. The necessary piping arrangements for gases along with sensors shall be done in the work environment so as ensure safe operational practices.

#### b. Standards for Emissions of Air Pollutants:

(i)	SPM/TPM	Not to exceed	150 mg/Nm <sup>3</sup>
(ii)	SO <sub>2</sub>	Not to exceed	Kg/Day
(iii)	Acid mist	Not to exceed	35 mg/Nm <sup>3</sup>

c. The applicant shall observe the following fuel pattern :-

Sr. No.	Type Of Fuel	Quantity	UOM
1	Wood	800	Kg/Day
2	Pyro gas		01

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

Sr. No.	Chimney Attached To	Height in Mtrs.
1	Reactor / Pyrolysis Kilns	30 each

e. 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.

f. 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.

#### g. Other Conditions:

- i. The industry should not cause any nuisance in surrounding area.
- ii. The industry should monitor stack emissions and ambient air quality regularly.

#### h. Conditions for D.G. Set:

- Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- ii. 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.

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.



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- iv. 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.
- Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- vi. 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. D.G. Set shall be operated only in case of power failure.
- vii. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set

# 6. CONDITIONS UNDER HAZARDOUS AND OTHERS WASTE (MANAGEMENT & TRANSBOUNDRY MOVEMENT) RULES, 2016.

i. The Industry shall handle hazardous wastes as specified below.

Sr. No.	Type Of Waste	Quantity	UOM	Disposal
1	Nil		\	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

#### 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&TM) Rules, 2016.
- 3. 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.
- It shall be ensured that the Hazardous waste is handled, managed & disposed of strictly in accordance with Hazardous Wastes (Management & Transboundry Movement) Rules, 2016 and shown & submitted to the Board.
- 7. 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 equipment's, the production process connected to it shall be stopped.

#### 8. Specific Conditions for tyre pyrolysis plant:-

- i. Industry shall make necessary provisions for storage of carbon dioxide gas which is used for degassing of the reactor to vent out off gassed through condenser – water – burning chamber where these gases are burnt into flame. The degassing of reactor by carbon dioxide shall be done so as to ensure safe closure of the batch process.
- ii. The flue gases from burning chamber, if any specifically during start-up and burning of excess off gases from reactor, shall be vent out through chimney having adequate height 11 mtrs or as per provisions of emission regulation Part-IV issued by CPCB whichever is higher.

Industry shall use clean fuel such a LPG/PNG during start-up of the reactor. Industry shall ensure that there are no leakages from reactor piping so as to minimize fugitive emissions. The records of preventive maintenance schedule of burner, reactor vessel, pyrolysis chamber and allied piping shall be maintained and made available for inspection during official visits.

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- v. The pyrolysis oil condensed from the vessel shall be collected in storage thanks located in earmarked areas. The pipelines shall be equipped with floating valve so as to avoid spillage due to overflow.
- vi. There shall not be spillage of pyrolysis oil in and around the factory premises.
- vii. Pyrolysis oil tank shall be provided with arrangement of dyke wall and necessary safety arrangements.
- viii. The vent of pyrolysis oil tanks shall be equipped with adequate capacity carbon filters so as to minimize emission of off gases to avoid smell nuisance. The carbon filters media (fine carbon particle size) shall be replaced periodically to ensure effective adsorption of gases.
- ix. Industry shall maintain logbook which will specify plant operation time, raw material dead stock, product logistics along with their specifications, logistics of carbon dioxide, records of preventive maintenance etc. The records shall be made available to officials during inspections.
- x. Industry shall make earmarked storage area for raw materials which shall be covered with shed. The storage area shall have cement concrete flooring with plinth height of 0.5 Mtrs. Above the ground.
- xi. Industry shall maintain minimum distance of 10 Mtrs. between plant area, raw material storage area, carbon black storage area and pyrolysis oil storage area.
- xii. Industry shall keep 10 Mtrs. free passage area within work environment so as to get direct access to plant / raw material storage area, carbon black storage area and pyrolysis oil storage area in case of emergencies.
- xiii. Adequate fire fighting system shall be provided as per prevailing norms laid down by competent authority.
- xiv. The industry shall comply provision of "The manufacture, Storage & Import of Hazardous Chemicals Rules, 1989".
- xv. The rules and regulations notified by Ministry of Law and Justice, Govt. of India regarding Public Liabilities Insurance Act, 1991 shall be followed.
- xvi. Industry shall prepare on site and off site disasters management plan which shall be approved by competent authorities.
- xvii.' Industry shall not carry out further processing of pyrolysis oil.
- xviii. The by-products like steel wire shall be collected properly and stored in closed shed.

# 9. Industry shall comply with following additional conditions:

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SOARD

- 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.

The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the 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 before 60 days before expired of the said consent.
- viii. The firm shall submit to this office, the 30<sup>th</sup> day of September every year, the Environmental Statement Report for the financial year ending 31<sup>st</sup> March in the prescribed Form-V as pre the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992. As inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- ix. 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.
- x. 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.
- xi. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- xii. The industry shall obtain prior permission from the Board for any addition, moderation, expansion, change in products, alternation etc.

# 10. Other Conditions for tyre pyrolysis plant:-

- Suitable sensor will be installed to ensure that all gases from the reactor have been evacuated before opening of the reactor for transfer of carbon black/steel wire.
- ii. That the produced carbon black will be conveyed through hydraulic / screw conveyor in closed conditions. The carbon black generated from the mfg. process can also be conveyed / collected / handled by using any other suitable technology provided by the state board considering the technology to be appropriate.
- iii. It shall be ensured that the all the materials have been completely removed from the reactor for which a glass inspection window with provision of light (illumination) shall be provided at the outer enclosures of the reactor. The end of the conveyor will be attached to the bagging plant where all the carbon black will be bagged in HDPE bags and the bags will be properly sealed.

The bagging plant will be equipped with requisite air pollution control arrangements such as dust extraction system, back filter to arrest all the carbon particles which may get air born during bagging process and a vent of minimum height of 11m from the ground level.

Industry shall carry out ambient air quality monitoring at three locations simultaneously within their premises in consultations with the Regional Officer to monitor RSPM, carbon monoxide and methane / ethane gases at least once in three months through recognized laboratory or by the industry. It will be



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ensured that monitoring shall be carried out during the period when the plant is in operation.

- 11. The Board can reserves the rights to revoke the consent or add/amend/revoke any condition in the said consent and the same shall be binding on the applicant.
- **12.** The consent should not be construed as exemption from obtaining necessary NOC from any other Govt. agencies as may deem fit necessary.
- The industry shall obtain permission / NOC from CGWA towards ground water extraction if applicable as per rules.
- 14. The industry shall comply with the standards operating procedure (SOPs) with regard to waste pneumatic tyre and recovery of TPO from tyre scrap published by Ministry of Environment and Forest and Climate Change, HSM Division, Govt. of India vide office memorandum dtd. 24.11.2015 before commencement of production activity. The industry shall not start production activity till to compliance of said conditions.
- **15.** The industry shall not cause any Hazardous Nuisance to the adjacent area. In case of pollution problem due to the industry , the production activity shall be suspended immediately. The industry shall strictly follow the guidelines for tyre recycling prepared by MPCB.
- **16.** This is issued as per undertaking submitted by the industry on Rs.100/- stamp paper regarding compliance of standards operating procedure (SOPs) with regard to waste pneumatic tyre and recovery of TPO from tyre scrap published by Ministry of Environment and Forest and Climate Change, HSM Division, Govt. of India vide office memorandum dtd. 24.11.2015 before commencement of production activity.
- 17. The use of Banned Plastic and Thermocol Products as per Maharashtra Plastic and Thermocol Products Notification, 2018 is not permitted. The project proponent shall comply with Maharashtra Plastic & Themocol Products Notification,2018
- 18. Bank Guarantee imposed: The industry shall furnish following Bank Guarantee to Regional Officer, MPCB, Nashik within week period.

	Sr No	Bank Guarantee Regime for Tyre Pyrolysis unit. Condition No. of Consent	BG Rs.	Time Period
GIONAL	1	Towards provision and operation and maintenance of (Air and Water) pollution control system.	1.0 Lakh	Continuous
SOARD -	NOE * YUL	<ul> <li>a)Towards provision and operation of of suitable sensors for gas, temperature &amp; pressure installed inside the reactor to regulate safe operation of the reactor and proper collection system for Toxic gases.</li> <li>b)Towards provision and operation of of hydraulic / screw conveyor for conveyance of the produced carbon black in closed conditions.</li> </ul>	1.0 Lakh	Continuous

19. The capital investment of the industry is Rs. 48.48 Lakh (As per C.A. Certificate by the industry).



(P. M. Joshi) Regional Officer, Nashik

#### To, M/s

M/s. Swami Vessels Pvt. Ltd., Plot No - N 101, MIDC Area, Jalgaon Tal. & Dist.:- Jalgaon

#### Copy to:

- The Sub Regional Officer, MPC Board, Jalgaon It is directed to ensure the compliance of consent conditions and submit proposal for legal action in case of violations.
- ii. Cess Wing/Statistical Wing/Air Wing/HWMH Wing, MPCB, Mumbai.

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#### Received Consent fee of -

Transition No./Dr.No./DD No.	Amount	Date	
TXN1808002369	7500/-	24.08.2018	