# MAHARASHATRA POLLUTION CONTROL BOARD

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MAHARASHTRA



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:

# Red/L.S.I

Date:27/03/2012

# Consent No: BO/JD-PAMS/EIC No. TN-3168-11/A/CC-241

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 & Trans boundary Movement) Rules 2008

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

CONSENT is hereby granted to

M/s.Indofill'Industries Ltd, S.V. Road, Sandozbaugh, P.O. Azadnagar Thane

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:30/09/2013.

# 2. The Consent is valid for the manufacture of -

| Sr. No. | Product Name   | Maximum Quantity |
|---------|--|------------------|
|         | Mancozeb, Zineb, Maneb, Propineb,<br>Tricyclazole, Myclobutanil, Mancozeb<br>Flowable, Dodine, Cymoxanil, Metalaxyl,<br>Agro Formulation, Synthetic Tanning<br>Agents, Acrylic Solutions, Propargite,<br>Propiconazole, Tebuconazole,<br>Difenoconazole, Hexaconazole. | 23250 MT/A       |
| 2       | By product-Manganese Carbonate from<br>above Mancozeb product  | 750 MT/A         |

# 3. CONDITIONS UNDER WATER ACT:

(i) The daily quantity of trade effluent from the factory shall not exceed 120.0M<sup>3</sup>.
(ii) The daily quantity of sewage effluent from the factory shall not exceed 30.00M<sup>3</sup>.

#### (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 | pН                           | Between                      | 5.5 to 9.0 |
|---|------------------------------|------------------------------|------------|
| 2 | Suspended Solids             | Not to exceed                | 100 mg/l.  |
| 3 | BOD 3 days 27 deg.C          | Not to exceed                | 100 mg/l   |
| 4 | COD                          | Not to exceed                | 250 mg/l.  |
| 5 | Oil & Grease                 | Not to exceed                | 10 mg/l.   |
| 6 | Zinc                         | Not to exceed                | 5 mg/l.    |
| 7 | Manganese                    | Not to exceed                | 5 mg/l.    |
| 8 | Sulphides (as S)             | Not to exceed                | 5 mg/l.    |
| 9 | Bioassay test on fish should | show 90 % survival in 96 hrs | S.         |

- (iv) Trade Effluent Disposal: The treated trade effluent should be recycled to the maximum extent & remaining should be connected to sewerage system provided by Thane Municipal corporation, until such facilities are provided, it should be discharged into nearby Nallah (Sandoz Nallah) leading to Thane Creek.
- (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 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:

| Sr. Ne | Type Of Waste  | Quantit UOM | Disposal                       |
|--------|--|-------------|--------------------------------|
| 1      | Engineering scrap,<br>non-contaminated<br>paper, plastic waste | 500 kg/Day  | sold to scrap dealer           |
| 2      | Coal Ash   | 5 MT/Day    | Sale to Brick<br>Manufacturers |

(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 ,                 | 35 CMD  |
|-------|----------------------------|---------|
| · ii. | Industrial Processing      | 166 CMD |
| iii   | Industrial Cooling/ Boiler | 114 CMD |
| iv    | Agriculture/Gardening      | 85 CMD  |

The applicant should 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 should operate a comprehensive control system consisting of control equipments as is warranted with reference to generation of emission and maintain the same continuously so as to achieve the level of pollutants to the following standards:

#### (A) Control Equipment:

1) Air pollution control arrangement of adequate capacity should be provided to limit the emissions.

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

- (1) Noise from D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- (2) 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)should also be provided. The measurement of insertion loss will be done at different points at 0.5 metres from acoustic enclosure/room and then average.
- (3) The industry should 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.
- (4) Industry should make efforts to bring down requirements by proper siting and control measures.
- (5) Installation of D.G. set much be strictly in compliance with recommendations of D.G. set manufacturer.
- (6) A proper routine and preventive maintenance procedure for D.G. set should be set and followed in consultation with the D.G. manufacturer which would help to prevent noise levels of D.G. set from deteriorating with use.
- (7) D.G. set should be operated only in case of power failure.
- (8) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

#### (ii) Standard for Incinerator : -

Applicant should operate the incinerator as per the Gazette Notification on Environmental Standards for incinerator for Pesticide Industry published vide S.O. No. 600(E), on August 18, 2008 by the MoEF, New Delhi.

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

| Industry                           |   | Parameter   | Standard  |
|------------------------------------|---|---|---|
|                                    | , | 3   | 4   |
| Incinerator for pesticide Industry |   | A. Emission   |   |
|                                    |   | Limiting<br>concentration in<br>mg/Nm3 unless<br>stated | Sampling<br>Duration in<br>(minutes)<br>unless stated |

| Particulate Matter                  |                         | 50                         | 30                          |
|-------------------------------------|-------------------------|----------------------------|-----------------------------|
| HCL                                 |                         | 50                         | 30                          |
| SO <sub>2</sub>                     |                         | 200                        | 30                          |
| СО                                  |                         | 100                        | Daily average               |
| Total Organic Carbon                |                         | 20                         | 30                          |
| Tata Dioxins and furans*            | Existing<br>Incinerator | 0.2 ng TEQ/Nm <sup>3</sup> | 8 hours                     |
|                                     | New<br>Incinerator      | 1.5 ng TEQ/Nm <sup>3</sup> | 8 hours                     |
| Sb+As+Pb+Cr+Co+Cu+Mn+Ni             |                         | 1.5                        | 2 hours                     |
| * The existing plant shall comply v |                         | nd furans as 0.1 ng/TE     | EQ/Nm <sup>3</sup> within a |

period of five years from the date of publication of this notification.

#### Note.

- i. All monitored values shall be corrected to 11 % oxygen on dry basis.
- ii. The CO<sub>2</sub> concentration in tail gas shall not be less than 7%.
- iii. In case, halogenated organic waste is more than 1% by weight in input waste, all the facilities in single chamber incinerators shall be designed so as to achieve a minimum temperature of 1100° C, in the incinerator. For fluidized bed technology Incinerator, temperature shall be maintained at 950° C.
- iv. In case halogenated organic waste is more than 1% by weight in input waste, waste shall be incinerated only in twin chamber incinerators and all the facilities shall be designed to achieve a minimum temperature of 1100 °C in secondary combustion chamber with a gas residence time in secondary combustion chamber not less than two seconds.

v. Scrubber meant for scrubbing emissions shall not be used as quencher.

Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3% and their loss on ignition is less than 5% of the dry weight. The incinerators shall have a chimney of atleast thirty meter height.

| B. | Waste | Water |
|----|-------|-------|
|    |       |       |

 Wastewater (scrubber waste and floor washing) shall be discharge into receiving water conforming to the norms prescribed under Schedule. VI: General Standards for Discharge of Environment Pollutions (Part A – Effluents) notified under the Environment (Protection) Rules, 1986.

The built up in Total Dissolved Solids (TDS) in wastewater of floor washings shall not exceed 2100 mg/l over and above the TDS of raw water used.

- All values corrected to 10% oxygen on a dry basis.
- B] Hydrocarbons:10 ppm. Over an hourly rolling average dry basis, measured as propane.
- C] Opacity : 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 average)
- 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 ng/TEQ/Nm<sup>3</sup> corrected to 10% oxygen. Sampling period shall be minimum 6 hours and maximum 8 hours. Analysis of dioxin and furans as well as reference measurement methods to calibrate automated measurement system shall be carried out as given by GEN – standards. II GEN-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                     | mg/Nm <sup>3</sup> |
|---------------------------|--------------------|
| Cd+Th (and its compounds) | 0.05               |
| Hg (and its compounds)    | 0.05               |
| Sb+As+Pb+Cr+Co+Cu+Mn+Ni+V | 0.5                |
| (and their compounds)     |                    |

All values corrected to 10 % 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:

 $CE = \% CO_2 / [\%CO_2 + \%CO] X 100$ 

- 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 1100° C, 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)<sup>0.3</sup> [ Where Q is emission rate SO<sub>2</sub> in kg/hr] whichever 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.)

H] 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  $^{\circ}$ 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 wasters is in the combustion chamber.

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

- I] Monitoring requirements Continuous monitoring and recording system for opacity, CO, SO<sub>2</sub> and NOx shall be installed and reported shall be sent to the State Pollution Boards on regular basis interlocking arrangements for CC and temperature controls (in primary and secondary chamber) with feeding devices shall also be provided Waste feed has also to be terminated on loss 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.

| 1 | SPM/TPM                  | Not be exceed | 150 mg/Nm <sup>3</sup> |
|---|--------------------------|---------------|------------------------|
| 2 | SO <sub>2</sub> (Boiler) | Not be exceed | 450 kg/Day             |
| 3 | Mancozeb (Dithane plant) | Not be exceed | 80 mg/Nm <sup>3</sup>  |
| 4 | NOx/SO <sub>2</sub>      | Not be exceed | 50 ppm                 |
| 5 | Acid mist                | Not be exceed | 35 mg/Nm <sup>3</sup>  |
| 6 | CS <sub>2</sub>          | Not be exceed | 0.03 Kg/Hr.            |
| 7 | $H_2S$                   | Not be exceed | 10 ppm                 |

5. Standards for Stack Emissions:

(ii) The applicant should observe the following fuel pattern:

| · . |     | 1,          | and the second s |            |
|-----|-----|-------------|--|------------|
|     | Sr. | Fuel Type   |  | Quantity   |
| 1   | 1   | Furnace Oil | 2  | 5 Mī'/day  |
|     | 2   | Coal        |  | 550 Kg/Hr. |

(iii) The applicant should erect the chimney(s) of the following specifications.

| Chimney attached to | Height in mt.   |
|---------------------|---|
| Furnace Boiler      | 30.0 combined   |
| Coal fired Boiler   | stack   |
| Incinerator         | 30.5  |
| Spray dryer         | 30.5  |
| Spray heater        | 30.0  |
| Dryer Air Heater    | 22.0  |
| Industries S. dryer | 30.0  |
| process             |   |
| D-14 & PTN          | 30.5  |
| Precipitation       | 30.5  |
| Industrial plant    | 30.5  |
| central exhaust     |   |
| D.G.Set (750 KVA)   | 5.5*  |
| D.G. Set (640 KVA)  | 5.05*   |
| D.G.Set (608 KVA)   | 4.9*  |
|                     | Furnace Boiler<br>Coal fired Boiler<br>Incinerator<br>Spray dryer<br>Spray heater<br>Dryer Air Heater<br>Industries S. dryer<br>process<br>D-14 & PTN<br>Precipitation<br>Industrial plant<br>central exhaust<br>D.G. Set (750 KVA)<br>D.G. Set (640 KVA) |

(\*above the roof in which it is installed)

- (i) 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.
- (ii) 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.
- 2) The industry should monitor stack emissions and ambient air quality Regularly.

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

| Sr. No. | Type<br>Waste | Quantity  | UOM      | Disposal   |
|---------|---------------|---|----------|--|
| 1       | 21.1          | Wastes & Residues   | 5 MT/M   | Incineration<br>*/CHWTSDF                              |
| 2       | 29.2          | Chemical sludge from<br>WWTP  | 16 MT/M  | Incineration<br>*/CHWTSDF                              |
| 3       | 36.2          | Ash from incineration of<br>HW, flue gas cleaning<br>residues               | 300 Kg/M | CHWTSDF  |
| 4       | 33.3          | Discarded<br>containers/barrels/liners<br>contaminated with<br>HW/Chemicals | 15 Kg/M  | Sale to authorized<br>parties after<br>decontamination |
| 5       | 5.1           | Used/Spent Oi   | 70 Kg/M  | Sale to authorized<br>reprocessor                      |
| 6       | 34.2          | Spent ion exchange resin<br>containing toxic metals                         | 200 Kg/M | CHWTSDF  |

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

- (ii) Treatment: NIL
  - 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 & 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 & TB) Rules, 2008.

# 7. Industry shall comply with following additional 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 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.
- 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 dcmestic 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.

- 8. The Consent should not be construed as any exemption from obtaining necessary NOC from other Govt. agencies as may deemed fit necessary.
- 9. Industry shall comply with CREP conditions.
- 10. The Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
- 11. This is issued pursuant to the decision of Consent Committee meeting of the Board dtd. 14-03-2012.
- 12. This amended of consent granted has an overriding effect to earlier consent granted by the Board vide consent No. BO/RO-Thane/PCI-I/TN-1755-09/R/Amend/CC-5 Dated 13.02.2009.
- 13. The total capital investment of the industry is Rs. 46.11/- Cr.

Milind Mhaiskar, IAS) Member Secretary

To:

M/s. Indofil Industries Limited,

Off. S.V. Road, Azad Nagar, Sandoz baug P.O.,

Thane 400 607.

Copy to: RO, MPCB, Thane/SRO, MPCB, Thane – I/CAO/Cess Branch / Master File Received Consent fee of –

| Sr. No. | Amount(Rs.) | DD. No. | Date        | Drawn On                                    |
|---------|-------------|---------|-------------|---|
| 1       | 50000       | 106415  | 09 Sep 2011 | The Thane<br>Janata<br>Sahakari<br>Bank Ltd |
| 2       | 100100      | 814617  | 30 Aug 2011 | Union Bank<br>of India                      |
| 3       | 110000      | 814914  | 31 Oct 2011 | Union Bank<br>of India                      |