### MAHARASHTRA POLLUTION CONTROL BOARD

Phone :

4010437/4020781 /4037124/4035273

24044532/4024068 /4023516 Fax

enquiry@mpcb.gov.in Email :

Visit At : http://mpcb.gov.in



Kalpataru Point, 3rd & 4th floor, Sion- Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai - 400 022

Date-23/05/2014

Consent order No: - Format 1.0/BO/NK-16137-14/CC Cell/R/CC-4899

To,

M/s Spectrum Ethers Ltd., Gut No.367, Rasegaon Village, Nashik-Peth Road.Tal-Dindori,Dist-Nashik.

Subject: Consent to Operate RED/LSI category. Ref

: 1. Earlier Consent granted vide no. BO/JD-PAMS/EIC No.NK-9156-11/O/CC-149 Valid upto 31/03/2014.

#### Your application Dated: 31/01/2014

For: Consent to Operate 140131FT0188

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 under Rule 5 of the Hazardous Wastes (M, H & T M) Rules 2008 is considered and the consent is hereby granted subject to the following terms and conditions.

The consent is granted for a period from, 01/04/2014 to 30/11/2016. 1.

- The actual capital investment of the industry is Rs.26.31 Cr. (As per C.A. 2. Certificate submitted by industry)
- The Consent is valid for the manufacture of -3.

Sr. No.	Product / By-Product Name	Maximum Quantity	UOM
1.	Profenofos technical	500	MT/Y
2.	Ethion (Phorate Intermediate)	150	MT/Y
3.	Phorate Technical	2,200	MT/Y
4.	Terbufos Technical	100	MT/Y
5.	Temephos Technical	25	MT/Y
6.	Propiconazole technical	100	MT/Y
7.	Acetamaprid Technical	100	MT/Y
8.	Thiomethoxam Technical	· 25	MT/Y
9.	Fipronil Technical	25	MT/Y
10.	Pretilachlor(weedicide)	100	MT/Y
11.	Glyphosate(weedicide)	100	MT/Y
12.	Atrazine(weedicide) —	100	MT/Y

Flexibility to manufacture the product mix of above products No. 1 to 12 as per market demand within the sanction limit i.e. 3,525 MT/ Year. Flexibility is applicable to byproduct also accordingly and also consent was accorded for \*Formulation of Phorate tech, Ethion tech, Terbufos Tech, Temephos Tech, Profenophos tech and other pesticides (Technical).

Note: \*Total pesticides (technical used for these four products formulation not to exceed 100 MT/month ie 1,200 MT per annum. (As per consent letter of MPCB)

3.	Profenophos 50% EC			MT/Y
4.	Ethion 50% EC			MT/Y
5.	Hexaconazole 25% EC			MT/Y
6.	Tricyclozole WP			MT/Y
7.	Propiconazole 25% EC			MT/Y
8.	Acetamiprid 20% SP			MT/Y
19.	Thiomethoxam 25% WG			MT/y
20.	Imidacloprid 17.8% SL			MT/Y
21.	Indoxicorb 14% SL			MT/Y
22.	Monocrotophos 36% SL			MT/Y
23.	Endosulphan 35% EC			MT/Y
24.	Cypermethrin 10% EC		23	MT/Y
25.	Cartap Hydrochloride 4% G			MT/Y
26.	Chloropyriphos 20% EC			MT/Y
27.	DDVP 75% EC			MT/Y
28.	Quinolphos 25% EC		- 53.	MT/Y
29.	Acephate 75% WP			MT/Y
30.	Glyphosate SL		<u>35</u>	MT/Y
31.	Mancozeb % WP			MT/Y
32.	Buprofezin 50%0 SC	a contraction of the second	100	MT/Y
33.	Butachlor 50% EC		100	MT/Y

Flexibility to manufacture the product mix of above products from No. 13 to 33 as per market demand within sanction limit i.e. 12,000 MT/Annum

#### **By Products**

1.	Sodium Hydrogen Sulphide (100% basis)	303 MT/Y
2.	Sodium/Potassium/Hydrogen Bromide (100% basis)	133 MT/Y
3.	TMA Bromide (50% solution)	495 MT/Y
4.	Hydrochloric acid (30% solution)	11 MT/Y

## 4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr.	Description	Permitted	Standards to	Disposal
no.		quantity of	be achieved	
	1 Sada	discharge		
	38-	(CMD)		
1.	Trade effluent	44.00	As per	Recycle & reuse 100%
			Schedule –I	of treated effluent/
2.	Domestic effluent	6.9	As per	sewage into process and/or for gardening
			Schedule –I	and/or for gardening

## 5. Conditions under Air (P& CP) Act, 1981 for air emissions:

Shutton's under An (1 & C1 / Act, 1001 for all characteristics)						
Description of stack / source		Standards to be achieved				
-	of Stack					
DETA scrubber	1	As per Schedule –II				
	1	As per Schedule –II				
	1	As per Schedule –II				
	1	As per Schedule –II				
	1	As per Schedule -II				
	1	As per Schedule –II				
	3	As per Schedule –II				
	1	As per Schedule –II				
	1	As per Schedule –II				
	Description of stack / source DETA scrubber Phorate scrubber Formulation Scrubber ETP scrubber Boiler Multi fuel Boiler DG set 320 And 500 and 600 KVA Thermic Fluid Heater Plant-4	Description of stack / sourceNumber of StackDETA scrubber1Phorate scrubber1Formulation Scrubber1ETP scrubber1Boiler1Multi fuel Boiler1DG set 320 And 500 and 600 KVA3Thermic Fluid Heater1				

Page 2 of 9

### 6. Conditions about Non Hazardous Wastes:

Sr. No.	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Boiler ash	15 MT/D		Sale to brick manufacturer
2	Sodium Chloride salt	150 MT/year		CHWTSDF as per area allocations

# 7. Conditions under Hazardous Waste (MH & TM) Rules, 2008 for treatment and disposal of hazardous waste:

1) The Industry shall handle hazardous wastes as specified below.

Sr. No.	Type Of Waste	Category	Quantity	UOM	Treatment & Disposal
1	Waste residue containing pesticides	29.1	237.05	MT/Y	
2	Residue from dryer	29.2	722.85	MT/Y	
3	Expiry/off specific pesticides	29.3	121	MT/Y	CHWTSDF as per area
4	Chemical residue from decontamination	33.1	16.4	MT/Y	allocations
5	ETP sludge	33.2	6.6	MT/Y 🔩	
6	Discarded containers and Liners	33.3	336	MT/Y	
7	Distillation residue	36.4	50.2	MT/Y	

2) The authorization is hereby granted to operate a facility for collection, storage, transport & disposal of hazardous waste.

- 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.
- 4) 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 2008 and shown & submitted to the Board as & when asked for.
- 8. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
- 9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
- 10. Industry shall recycle & reuse 100% of treated effluent/sewage into process and/or for gardening and there shall not be any discharge outside Company's premise.
- 11. This applicant shall comply with the conditions of the Environmental Clearance granted by MoEF, GOI vide F.No. J-11011/317/2008-IA II (I) dtd. 24/11/2009.
- 12. This Consent is issued pursuant to the decision of the Consent Committee meeting held on 16/05/2014.
- 13. The consent is issued without prejudice to any legal action from the Hon'ble Court.

For and on behalf of the Maharashtra Pollution Control Board (Rajeev Kumar Member 3



Rece	eived Consent fee	of		
Sr.	Amount(Rs.)	DD. No.	Date	Drawn On
No.	D = 9.95.000/	787573	28/01/2014	SBI
<u> </u>	Rs. 2,25,000/- Rs. 75,000/-	787574	28/01/2014	SBI

Copy to:

- 1. Regional Officer, M.P.C. B., Nashik
  - He is directed to ensure the compliance of the consent conditions and forfeit Bank Guarantee of Rs. 1.0 Lakh.
- 2. Sub-Regional Officer, M.P.C. B., Nashik
- 3. Chief Accounts Officer, MPCB, Mumbai.
- 4. CC/CAC desk- for record & website updation purposes.

#### Schedule-I

## Terms & conditions for compliance of Water Pollution Control

- 1) A] The daily quantity of trade effluent from the factory shall not exceed 44 M<sup>3</sup>. (The process effluent generation shall not exceed 27.5 CMD from technical grade production and 16.5 CMD from formulation Product). Total quantity of trade effluent generated shall be fed to multiple effect evaporator followed by dryer. Condensate generated shall be treated in the effluent treatment plant.
  - B] The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr No.		Standards as per EP Act,1986	Standards prescribed by Board (If any)
	I. Compulsory Parameters	Limiting Concentration in mg/l, except for pH	Limiting Concentration in mg/l, except for pH
01		5.5 to 9.0	5.5 -9
02		10 mg/l	10 mg/l
	BOD (3 days 27oC )	Formulation 30 mg/l Technical 100 mg/l	30 mg/l
04	Total Dissolved Solids	2100 mg/l	2100 mg/l
	II Additional Parameters		
05	Suspended Solids mg/lit	100 mg/l	100 mg/l
06	COD mg/lit	250 mg/l	250 mg/l
07	Chloride mg/lit	600 mg/l	600 mg/l
08	Sulphate mg/lit	1000 mg/l	1000 mg/l
09	% Sodium	60%	60%
10	Phenolic Compound	1.0mg/l	1.0 mg/l

(In final consent order only standards prescribed by the Board as above shall be mentioned)

4 of 9

- C] Trade effluent disposal : The condensate from the effluent bearing streams, Multiple effective evaporator and cooling tower blow down after Biological treatment shall be used for green belt development within premise.
- 2) A] As per your consent application, the daily quantity of sewage effluent from the factory shall not exceed 6.5 M3.
  - B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

•	Suspended Solids.	Not to exceed	100	mg/l.
(2)	BOD 3 days 27oC.	Not to exceed	100	mg/l.

- C] The treated sewage effluent shall be soaked in a soak pit, which shall be got cleaned periodically. Overflow, if any shall be applied on land for gardening purpose within premise.
- 3) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of water, works for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto.
- 4) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 5) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said act.

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	459.0
2.	Domestic purpose	9.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	34.8
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.0

6) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.

#### <u>Schedule-II</u>

## Terms & conditions for compliance of Air Pollution Control:

1) As per your application, you have provided the Air pollution control (APC)system and also erected following stack (s) and to observe the following fuel pattern-

Sr. No	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S %	SO2 Kg/Day
•	DG set -320 KVA, 500 KVA & 600 KVA		4.0 each, above roof	Diesel	60 Ltrs/Day	0.52	1.05
2.	Boiler	Dust Collector	30	Baggase/ Coal	Coal-20 MT/Day, Baggase-35 MT/Day	170	340
3	Multi fuel Boiler	Dust Collector	36	Baggase/ Coal	Coal-40 MT/Day, Baggase-82 MT/Day	364	728
4	Thermic fluid Heater		17.5	Diesel	15 Ltr/Day	0.13	0.26
5	ETP	Scrubber	15				
6	DETA	Scrubber	22				
7	Phorate	Scrubber	22	<u>~~_</u>			
8	Formulation	Scrubber	22				<u> </u>
9	Plant-4	Scrubber	8,7 mts	L			<u> </u>

2) The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

ſ	Particulate	Not to exceed	150 mg/Nm <sup>3</sup>					
	matter							
	SO <sub>2</sub> (Boiler)	Not to exceed	1.1 TPD					
	H2S	Not to exceed	5.0 Kg/day					
	Chlorine	Not to exceed	5.0 Kg/day					
	P2O5	Not to exceed	10.0 Kg/day					
	(as H3PO4)							
	NH3	Not to exceed	30.0 Kg/day					
	Particulate	Not to exceed	20.0 Kg/day					
	matter with	-						
	pesticides							
	comp.							
	CH3Cl	Not to exceed	20.0 Kg/day					
	HBr	Not to exceed	5.0 Kg/day					
	SO <sub>2</sub> (process)	Not to exceed	50.0 kg/day					
	HC1	Not to exceed	20.0 Kg/day					

- 3) The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act,1986 and rule made there under from time to time / Environmental Clearance / CREP guidelines. (Concern section shall mention specific control equipments)
- 4) The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or

e 6 of 9

"M/s Spectrum Ethers Ltd." SRO Nashik/I/R/L/73830000

4

replacement/alteration well before its life come to an end or erection of new pollution control equipment.

The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary)

- 5) The height of stack shall conform to the following criteria.
  - H=14xQx0.3 where SO<sub>2</sub> is emitted &  $Q=SO_2$  emission as Kg/hr.
    - H=74xQX27 where Particulate matter is emitted and Q- particulate matter as tone/hr. If by using the formula given above the stack height arrived is more than 9 m then this higher stack should be used.

#### 6) Guidelines for Fugitive Emissions Control:

- i) Fufitive Emissions over reactors formulations areas, centrifuges, chemical loading, transfer areas etc. are to be collected through hoods and ducts by induced drafts and controlled by providing scrubber/dust collector.
- ii) Scrubber needs to be installed for canalized emissions so as to control fugitive emissions and are operated continuously. In addition, organic gaseous emissions (odour and toxic) be routed through activated carbon beds (adsorption) or to thermal oxidizer and for dust.
- iii) Emphasis shall be given to solvents management /solvent loss prevention.
- iv) Enclosures to chemicals storage area, collection of emissions from loading of raw materials, in particular solvents through hoods and ducts by induced draft, and control by scrubber/dust collector are to be ensured.
- v) Vapour balancing, Nitrogen blanketing ISO tanks etc. To be adopted, besides special care needs to be taken for control in respect of odours chemicals.

Schedule-III Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Čt0	Rs. 5:0 Lakh	15 days	towards recycle & reuse of 100 % of treated effluent/ sewage	30/11/2016	31/03/2017
2	C t O	Rs. 5.0 Lakh	15 days	towards O&M of Pollution Control System	30/11/2016	31/03/2017

The applicant shall submit an irrevocable Bank Guarantees of Rs. 5,00,000/- each with the validity upto 31/03/2017 in the Regional Office, Nashik within 15 days from the date of issue of the Consent towards recycle & reuse of 100 % of treated effluent/ sewage and towards O&M of Pollution Control System respectively.

#### <u>Schedule-IV</u>

#### General Conditions:

1) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.

7 of 9

2) Industry should monitor effluent quality monthly/quarterly.

- 3) The industry should monitor stack emissions and ambient air quality monthly/quarterly.
- 4) 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.
- 5) 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.
- 6) 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 and conditions of this consent regarding pollution levels.
- 7) The industry shall maintain visit book for visiting MPCB officials and shall made available at the time of visit and ensure recording of remarks of the officer thereon alone with his counter signature.
- 8) The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.
- 9) Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website(www.mpcb.gov.in).
- 10) The industry should comply with the Hazardous Waste (M, H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazardous Wastes (M,H &TM) Rules, 2008 for the preceding year April to March in Form-IV by 30<sup>th</sup> June of every year.
- 11) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day obligation toward pollution control and compliance of consent condition to be monitored/reviewed and to suggest further necessary improvement therein.
- 12) Separate drainage system shall be provided for collection of trade and sewage effluents. No effluent shall find its way other than in designed and provided collection system.
- 13) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 14) The applicant shall install a separate 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.
- 15) 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.

1

age 8 of 9

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.
- i) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel
- 16) The industry should not cause any nuisance in surrounding area.
- 17) 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.
- 18) The applicant shall maintain good housekeeping.
- 19) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
- 20) 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.
- 21) The applicant shall not change or alter the 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. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 22) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 23) The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences(format can downloaded from MPCB official site).
- 24) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 25) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 26) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009.
- 27) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the HW(MH&TM) Rules 2008, which can be recycled/processed/reused/recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc should go for that purpose, in order to reduce load on incineration and landfill site/environment.

Hage 9 of 9