

MAHARASHTRA POLLUTION CONTROL BOARD

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Mumbai - 400 022

Red/L.S.I

Date: 10 /Dec/2012

Consent No: BO/PAMS/O& Amalg/EIC No.NM-3974-12/CAC- 1085

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 & Transboundary Movement) Rules 2008

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

CONSENT is hereby granted to

M/s Deepak Fertilizers & Petrochemicals
Corporation Ltd.
K-1 to K-8, MIDC
Indl. Area, Taloja, Dist-Raigad,
Maharashtra

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: 31.08.2016
2. The Consent is valid for the manufacture of -

Sr. No.	Product Name	Maximum Quantity	UOM
1	Ammonia	140400	MT/A
2	Methanol	99996	MT/A
3	Weak Nitric Acid	445500	MT/A
4	Conc. Nitric Acid	83400	MT/A
5	Low Density Ammonium Nitrate plus Ammonium Nitrate melt	144000	MT/A
6	Ammonium Nitrate Phosphate	324900	MT/A
7	Liquid CO ₂	36000	MT/A
8	Iso Propyl Alcohol (IPA)	70200	MT/A
9	Electric Power	9.4	MW/Hr
10	Steam	1056	MT/Day
11	Bentonite Sulphur Pastilles	25000	MT/A
12	Ammonium Nitrate Prills (Low Density)	200000	MT/A
13	Ammonium Nitrate Prills (High Density)	100000	MT/A
14	Iso Propyl Alcohol *	15000	MT/A

15	Di Iso Propyl Ether (DIPE) *	15000	MT/A
16	Gas based Power Generation (Excluding D.G.Sets)	17.9	MW
* For drum filling operation (Packaging operation) only			
BY PRODUCT			
1	Propane	33000	MT/A
2	Calcium Phosphate	210	MT/A
3	Crude DIPE	1440	MT/A
4	Hydrogen Gas	960	MT/A
5	Crude IPA/NPA Mixture	1080	MT/A

3. CONDITIONS UNDER WATER ACT:

(i) The daily total quantity of trade effluent quantity generated from the processes of the units located on plot No. K-1 to K-8 in the entire complex shall not exceed 3878.28 M³/day.

(ii) The daily quantity of sewage effluent from the entire complex shall not exceed 153.50M³.

(iii) **Trade Effluent :**

Treatment: The applicant shall provide comprehensive treatment systems(2 nos.) 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	pH	Between	5.5 to 9.0
2	Suspended Solids	Not to exceed	100 mg/l.
3	BOD 3 days 27 ° 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	Total Dissolved Solids	Not to exceed	2100 mg/l.
7	Sulphates	Not to exceed	1000 mg/l.
8	Chlorides	Not to exceed	600 mg/l.
9	Ammonical nitrogen (as N)	Not to exceed	50 mg/l.
10	Free Ammonical Nitrogen	Not to exceed	4.0 mg/l.
11	Total Kj Nitrogen	Not to exceed	100.0 mg/l
12	Dissolved Phosphate	Not to exceed	5.0 mg/l

(iv) **Trade Effluent Disposal:** The treated effluent should be recycled / reused to the maximum extent and remaining should be disposed into CETP.

(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. No.	Type Of Waste	Quantity	UOM	Disposal
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1	Canteen Waste	105.00	Kg/Day	Sale
2	Paper Waste	40.20	Kg/Day	Sale
3	Damaged Bags	550.00	No/M	Sale
4	Metal Scrap	80.00	MT/A	Sale
5	ETP Sludge (Biological)	28.00	Kg/Day	Manure
6	Carbuoys	380.00	No/M	Sale
7	Damaged Drums of use	Approx 2 %		Sale
8	M.S.Drums	150.0	Nos/M	Sale
9	Ceramic packing	1.00	MT/A	sale

(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	...	172.00	CMD
(ii) Water gets Polluted & Pollutants are Biodegradable	...	2358.00	CMD
(iii) Water gets Polluted, Pollutants are not Biodegradable & Toxic	...	0.00	CMD
(iv) Industrial Cooling, spraying in mine pits or boiler feed		18813.00	CMD
(v) Gardening /Plantation		12.00	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 :

- (i) 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:

a. Control Equipment:

- 1) The following equipments / units shall be provided with Dust Collector of sufficient capacity to limit the emissions – A) Bag filter and coating section of ANP Plant. B) Coating section of LDAN Plant, C) Any other source of SPM.
- 2) Air pollution control arrangement should be provided to A) LDAN plant B) WNA plant, so as to limit the emissions.
- 3) Flare burner shall be provided to Ammonia and IPA plants.
- 4) Scrubber of sufficient capacity shall be provided to evaporator for scrubbing ammonia. (The scrubbed effluent shall be utilized in the process.)

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

Sr. No.	Type Of Fuel	Quantity	UOM
1	Natural Gas	41.62	MT/Day
2	Furnace Oil	127.50	MT / Day
3	Diesel	2000.00	MT / Day
4	Ethanol / Naptha	2050.00	MT/Day
5	HSD	250.00	Lit/Hr
6	Natural Gas	4.19	Million Sm ³ /M

c. Standards for emissions of Air Pollutants

- | | | | |
|----|-------------------------------------|---------------|----------------------------|
| 1. | SPM/TPM | Not to exceed | 150 mg/Nm ³ |
| 2. | SO ₂ | Not to exceed | 5732 Kg/Day |
| 3. | NO _x | Not to exceed | 50 ppm |
| 4. | NH ₃ | Not to exceed | 50 ppm |
| 5. | NO _x (Nitric acid plant) | Not to exceed | 3 Kg/T of weak Nitric Acid |
| 6. | NH ₃ (Ammonia Plant) | Not to exceed | 3 Kg/hr |

d. Standards for emission of VOC Pollutants

Sr. No.	Petrochemical Process / Compounds	Maximum emission limit (mg/Nm ³), dry basis
01	MA, PA, Phenol	20
02	Ethyl benzene (EB), Styrene, Toluene, Xylene, Aromatics, EG, PG	100
03	Non-methane HC (Paraffin), Acetone, olefins	150

(A) The industry shall phase out the Ozone Depleting Substances (ODS) as per ODS Rules 2000 and shall be informed to MPCB within a period of 3 months.

GUIDELINES FOR FUGITIVE EMISSION CONTROL

1. Fugitive emissions over reactors, formulation areas, centrifuges, chemicals loading, transfer areas etc. are yet to be collected through hoods and ducts by induced drafts and controlled by scrubber / dust collector.
2. Usually scrubbers installed for channelized emissions are used for fugitive emissions to control also & sometimes dedicated scrubbers are provided. This practice may be permitted as long as tail gas concentrations are within the prescribed limits.
3. In addition, organic gaseous emissions (odour & toxic) be routed to activated carbon beds (absorption) or to thermal oxidizer and for dust emissions cyclones / bag filters are to be provided.
4. Emphasis be given to solvent management / solvent loss prevention.
5. Enclosures to chemical storage area, collection of emissions from loading of raw materials. In particulars, solvents through hoods and ducts by induced draft , and control by scrubber / dust collector or to be ensured.
6. Vapour balancing, nitrogen blanketing ISO tanks etc. to be provided, besides special care needs to be taken for control in respect of odorous chemicals.

6. Standards for Stack Emissions:

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

Sr. No.	Chimney Attached To	Height in Mtrs.
1	D.G.Sets-2 Nos. (500 KVA each)	4.50 *
2	D.G.Set 2 Nos. (1000 KVA)	6.50 *
3	D.G.Set (200 KVA)	3.00 *
4	D.G.Set (1500 KVA)	6.50 *
5	D.G.Set (5 KVA)	3.00 *
(* Installed above the roof of the bag)		
6	Ammonia Primary Reformer	30.00
7	Boiler A & B	30.00
8	Methanol Primary Reformer	30.00
9	CNA Plants	42.00
10	WNA-I Plats	39.00
11	WNA-II Plats	39.00
12	WNA-III Plats	60.00
13	WNA-IV Plats	52.00
14	ANP Prilling Tower	84.00
15	LDAN Prilling Tower	84.00
16	ANP Bag Filter	30.00
17	ANP Vacuum Pump	27.80
18	LDAN Ventury Scrubber	24.50
19	Boiler-C	30.50
20	Boiler-D	63.00
21	CES-A Engine Exhaust Boiler	30.75
22	CES-B Engine Exhaust Boiler	30.75
23	CO ₂ Liquifier	8.00
24	Stripper	8.00
25	Combined	8.00
26	Turbine-1	30.00
27	HRSG-1	30.00
28	Turbine-2	30.00
29	HRSG-2	30.00
30	G.P.Vent	30.00
31	780 Weak nitric Acid plant	48.00
32	600 TPD Low Density Ammonium Nitrate (LDAN) prilling towers, dryers	2.00
33	300 TPD High Density Ammonium Nitrate (HDAN) prilling towers, dryers	11.00
34	300 TPD High Density AN prilling tower	2.00
35	40 TPH Boiler	86.00
36	15 TPH Boiler	86.00

37	Pastillator (2 Nos)	8 Each
38	Batch and Feed Tank	10.00

- (ii) 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.
- (iii) 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.

7. 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.
- 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 siting 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

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

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

Sr. No.	Type Of Waste	Quantity	UOM	Disposal
1	18.1 Spent catalyst	48.34	MT /Y	Sale to authorized party approved by CPCB/MPCB
2	31.1 Residues and wastes*	8.00	MT /Y	Sale to Recycler/CHWTSDF
3	33.3 Discarded containers / barrels / liners	346.00	MT /Y	Sale to authorized party for decontamination
4	5.2 Used Oil Filters (Non-Metallic)	25.00	Nos/Y	CHWTSDF
5	31.1 Residues and wastes* (Silica Gel)	60.00	MT/ 2 yr	Sale to Authorized party or recycler
6	28.3 Date-expired, discarded and off-specification drugs (Lead Acid Batteries)	34.00	Nos /Y	Sale to Reuser.
7	28.3 Date-expired, discarded and off-specification drugs (NI Cd batteries)	400.00	Nos/ Once in 5 yr	Sale to Reuser
8	28.3 Date-expired, discarded and off-specification drugs (Dry Cell Batteries)	300.00	Nos/ Once in 3 yr	Sale to Reuser
9	5.1 Used /spent oil	126.51	KL/Yr	Sale to authorized party approved by CPCB/MPCB
10	5.2 Wastes/residue containing oil	5.122	MT /Yr	CHWTSDF
11	33.3 Used Containers	3012.00	Nos/ Yr	CHWTSDF
12	33.3 Spray cans	800	Nos/Yr	CHWTSDF
13	17.2 Platinum Rhodium Catalyst as spent catalyst	100.00	Kg/Yr	CHWTSDF
14	17. 2 Used denoxed catalyst as Spent catalyst	10.00	MT/6 Yrs	CHWTSDF
15	5.2 Used oil filter (Non Metallic)	20.00	Nos/Yr	CHWTSDF

(ii) Treatment: NIL

9. Whenever due to any accident or gas leakage 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 Collector, Directorate of Industry, Safety and Health, Police Station, Fire Brigade, Directorate of Health Services, Department of Explosives, Board and Local Body and the production process should be stopped by taking all necessary safety measures. The industry shall also monitor the emission and ensure that the emissions do not cause any harm or nuisance in the surrounding. The industry should not restart the process without permission of the Board and other statutory organization as require under the law.

10. 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 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.
11. This consent shall not be construed as exemption from obtaining necessary NOC from any other Government agencies as may deemed fit necessary.
 12. If CETP does not work for achieving standards and problem of pollution occurs industry shall voluntary stop the production or reuse / recycle the effluent totally.

13. The applicant shall strictly adhere to the Environment Clearance condition mention in the Environment Clearance No SEAC 2010/CR.656/TC-2, dated 11/05/2011.
14. This consent is granted with amalgamation of earlier consent vide No BO/PAMS/R/EIC No.NM-3082-11/CAC- 296, dated 14/02/2012 valid upto 31/08/2016.
15. This is issued as per the decision taken in the meeting of the Consent Appraisal Committee of the Board held on 26.11.2012.
16. The total Capital investment of the industry is Rs. 1607.30 Crores. (Existing C.I. Rs 1528.30 Cr + Expansion Rs. 79 Cr.)

(Rajeev Kumar Mital)
Member Secretary

To,
M/s Deepak Fertilizers & Petrochemicals Corporation Ltd
Plot No. K-1 to K-8, MIDC Indl. Area, Talaja,
Dist- Raigad, Maharashtra

Copy to :
RO Navi Mumbai / SRO Talaja, Navi Mumbai III
-They are directed to ensure the compliance of consent conditions
CAO/CESS
Received Consent fee of -

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	6,25,000/-	000585	20 June 2012	IDBI