1 .	MA	HA	ARASHATRA	POLLUT	ION CONTROL BOARD
	Phone	•	4010437/4020781 /4037124/4035273		Kalpataru Point, 3rd & 4th floor, Sion- Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near
	Fax	:	24044532/4024068 /4023516	6 MAHARASHTRA	Sion Circle, Sion (E),
	Email		enquiry@mpcb.gov.in		Mumbai - 400 022
-	Visit At	:	http://mpcb.gov.in		

Red/L.S.I

Date:23/Dec/2011

# Consent No: MPCBHQ/JD-PAMS/Mumbai/CAC/R-CAC-106

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. Rashtriya Chemicals and Fertilizers Ltd.

Trombay Unit, Mahul Village Road, Chembur, Mumbai-400074 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:01/08/2016.

2. The Consent is valid for the manufacture of -

	the second s	A M	
Sr. No.	Product Name	Maximum Quantity	UOM
1	Ammonia	465000	MT/Annum
2	Biola	1200	MT/Annum
3	Microla	1200	Kiloliter / Annum
4	Sujala(19:19:19)/(Drip/Foiler)	22200	MT/Annum
5	Urea	483600	MT/Annum
6	Complex Fertilizer(15:15:15)	409200	MT/Annum
7	Complex Fertilizer(20:20:20)	446400	MT/Annum
8	Methanol	69960	MT/Annum
9	Methylamines	5242	MT/Annum
10	Ammonium Bicarbonate	25000	MT/Annum
11	Sodium Nitrite/Nitrate	5230	MT/Annum
12	Sulphuric acid	111600	MT/Annum
13	Nitric acid (100% basic)	398040	MT/Annum
14	Conc. Nitric acid	27000	MT/Annum
15	Phosphoric acid	37200	MT/Annum
16	Treated water from STP	4932000	M <sup>3</sup> / Annum
17	Rapid Wall panel	1400000	M <sup>2</sup> / Annum
18	Wall plaster	48000	MT/Annum
19	Wall putty	7200	MT/Annum
	BY Product		
1	Argon	4035500	Nm <sup>3</sup> /Annum
2	Ammonium Nitrate Melt (80%)	104160	MT/ Annum
3	Carbon dioxide gas	480000	MT/ Annum

## 3. CONDITIONS UNDER WATER ACT: '

(i) The daily quantity of trade effluent from the factory shall not exceed 9000.0M<sup>3</sup>.
(ii) The daily quantity of sewage effluent from the factory shall not exceed 2700.0M<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:

			Y
1	pH	Between	6.5 to 8.0
2	Ammonical nitrogen	Not to exceed	75 mg/l
3	Free Ammonical nitrogen	Not to exceed	100 mg/l
4	Nitrate Nitrogen	Not to exceed	20 mg/l
5	Cynide as CN	Not to exceed	0.2 mg/l
6	Vanadium as V	Not to exceed	0.2 mg/l
7	Arsenic as As	Not to exceed	0.2 mg/l
8	Phosphate as P	Not to exceed	5 mg/l
9	Oil & Grease	Not to exceed	10 mg/l
10	Suspended Solids	Not to exceed	100 mg/l.
11	Fluoride as F	Not to exceed	10 mg/l.
12	Hexavalent Chromium as Cr	Not to exceed	0.1 mg/l.
13	Total Chromium as Cr	Not to exceed	2.0 mg/l.
14	Total residual chlorine (as Cl2)	Not to exceed	1.0 mg/l.
-	Total residual chiofine (as Ciz)	NOT TO EXCEED	1.0 mg/

(iv) Trade Effluent Disposal: The treated effluent shall be discharged in to sea.

(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.
	BOD 3 days 270 C.	Not to exceed	100	mg/l.

(vi) **Sewage Effluent Disposal:** The treated domestic effluent shall be connected to the sewerage system provided by MCGM.

# (vii) Non-Hazardous Solid Wastes:

Q. 1		0	TIOM	
1	<b>V Type Of Waste</b> Gypsum	<b>Qty.</b> 15500	UOM MT/M	Disposal control waterial for Used in -house raw material for product of rapid wall panels, wall plaster & putty. Also disposed off by sale
2	Metal waste	151.3	MT/A	Sale
3	Chalk	7750	MT/M	By sale / used as a raw material in -house Biola Plant
4	Ammonia Synthesis catalyst (normal. Pre-reduced)	149.5	MT/A	Land fill
5	Catalyst used in Methylamines	1.8	MT/A	landfill
6	Spent ion exchange resin (From water treatment plant)	8	MT/A	landfill
7	Molecular sieves (Used for services)	0.6	MT/A	landfill
8	Activated carbon (Used for in water Purification)	10	MT/A	Landfill

(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	4500.00 CMD
(ii) Water gets Polluted &	
Pollutants are Biodegradable	9000.00 CMD
(iii) Water gets Polluted, Pollutants	
are not Biodegradable & Toxic	0.00 CMD

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

16000.00CMD

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:

Industry shall provide dust collector of sufficient capacity to control the emissions.

#### **B.** 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) investigation 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.
С.	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
1.	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
6.	Standards for Stack Emissions:
0.	(i) SPM/TPM Not to exceed 150.0 mg/Nm <sup>3</sup>
	X V
	(ii) Urea (PM emission) Not to exceed 150.0 mg/Nm <sup>3</sup>
	of 2 kg/Tone of product
	(iii) SO2 (boiler) Not to exceed 3 T/Day.
	(iv) SO2 (S. acid plant) Not to exceed 4 Kg/T of conc. 100% acid
	Produced.
	(v) Acid Mist Not to exceed 70 mg/Nm <sup>3</sup>
	(vi) Fluorine Not to exceed 25 mg/Nm <sup>3</sup>
	(vii) Nitric Acid (NO2) Not to exceed 3 Kg per Tone of Nitric Acid
	Produced
	(viii) Ammonia Not to exceed 7 Kg per Tone of Ammonia
	produced
(1)	The applicant shall observe the following fuel pattern:-
(1)	The applicant shall observe the following fuer pattern."
BUT IS NOT THE OWNER.	

Sr. No.	Type Of Fuel	Quantity	UOM
1	Diesel	2938.3	MT/M
2	Natural Gas	22000	MT/M

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

Sr. No.	Chimney Attached To	Height in Mtrs.	
1	Cold Vent stack (ST-1), Front end Process	58.50	
2	Dust Scrubber Stack-3, DRA- Suphala	28.50	

1

3	Dust Scrubber Stack-4, DRB- Suphala	28.50
4	Primary Reformer- Ammonia-V	40.50
5	New Dust Scrubber Stack-5, Coolers- Suphala	30.00
6	Fumes Scrubber Stack-6, Reaction- Suphala	30.00
7	Flue gas Stack (ST-3), Primary reformer(01.23FI)	43.50
8	Flue gas Stack (ST-4), Start-up heater(H-501)	30.00
9	Hot Flare (ST-5), Back End Process	34.20
10	Hot Flare (ST-6), Ammonia starage facility	30.00
11	Front End-X-001 Ammonia-V	56.50
12	Ball mill vent stack, Vent fan-2- ANP	40.00
13	Rear EndX-002 Ammonia-V	56.50
14	Steam Super Heater-F202 Ammonia-V	30.98
15	Syn Gas Heater -F501Ammonia-V	30.00
16	Feed Gas Heater - F103 Ammonia-V	22.00
17	Ammonia vent-ME619- Urea	100.00
18	Ammonia vent ME620- Urea	100.00
19	Ammonia Vent ME621- Urea	100.00
20	Fine Urea dust- prilling tower	100.00
21	DG Set-690 KVA- Urea	10.00
22	Brink Mist eliminator-SAP	55
23	Dissolver Main Stack, Dissolving section blower-ANP	62.00
24	Bag Filter- No.1-PAP	35
25	Fumes Scrubber No.2-PAP	35
26	DG Set- 600 KVA- PAP	11.5
27	Reformer: Convection section- ST-1 Methanol	35
28	Plant vent header-ST-2 Methanol	56.6
29	Vent header in Methylamine plant	12
30	Common Boiler Exhaust Chimney- NSGP	80
31	Tail gas vent stack-1, Main Stack- MPNA	65
32	Tail gas vent stack-1, Main Stack-1, Main Stack- HPNA	40
33	DG set-1- 320 KVA-NAG	15
34	Flue gas Stack (ST-2), Auxiliary Boiler (H-701)	30.00
35	DG set-2-312 KVA-NAG	15
36	Neutralization Tower-SNN Plant	20
37	Concentrated Nitric Acid plant- ST-1	28
38	Carbonation Tower- ST-1 ABC	17.5
39	Dryer-ST-2- ABC	40
40	Calciner- S-1-Rapid wall plant	30
41	Dryer- S-2- Rapid wall plant	30
42	Cutting Machine-S-3- Rapid wall plant	10
43	CN Reactor Stack, CN Reactor Blower-ANP	30.00
4: <b>3</b> 4:4	Tail gas scrubber Stack, Granulation section exhausters-ANP	54.00
4.5	DG set in Granulation section—ANP-160 KVA	11.00
4.6	Dust Scrubber Stack-1, RA-Suphala	28.50

(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.
- (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 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
	5.1 Used /spent oil	100	MT/yr.	Sale to autho. reprocessor
2	18.1 Spent catalyst Chromium , Cu & Zinc compound B8 – Vanadium B2,B6&B5- Cobalt,Nickel,& Molbdenum	91.62 175.47 37.27 127.31	MT/yr MT/yr MT/yr MT/yr	"Sale to autho. reprocessor OR Disposed by CHWTSDF.
3	34.3 Chemical sludge From w.w. treatment.	4900	MT/yr	Reuse in process./sale autho. Reprocessor.
	17.1 Sulphur containing residue	700	MT/yr	Reuse in process / CHWTSDF

# (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) Rules, 2008.

#### 8. 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 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.
- 9. This is issued pursuant to the decision of Consent Appraisal Committee meeting dtd. 07/12/2011.
  - 10. The industry shall not take commercial production of gypsum board till obtaining clarification/permission under MMR Notification.
  - 11. This consent is issued in accordance with MOEF, Govt. Of India circular dated the December 14, 2006 that the amendments in EIA Notificationpollution dated 14<sup>th</sup> September, 2006 clarification regarding EIA Clearance for Change In Product Mix. And industry vide letter No. TS/ENV/Consent/MPCB/2011, dtd.17<sup>th</sup> November 2011 has submitted that the production of various products is within the consented limits, and there is no increase in pollution load.
  - 12. This consent is issued with an amalgamation of three consent which were granted by the Board vide consent No. (i) BO/RO-MU/PCI-I/MU-0647-06/R/CC-38, dtd. 17/01/2007, (ii) MPCB/ROM/MU-1861-10/CC/CO-58, dtd. 30/March/2011, and (iii) BO/RO-MU/PCI-I/MU-0679-07/E/CC-117, dtd. 23/03/2007, which were valid up to 31.10.2011, 01.08.2011 and up to commissioning of the unit respectively.
  - 13. The Capital investment of the industry is Rs. 1496.26/- Crs.

(Milind Mhaiskar, IAS) Member Secretary

#### To,

M/s. Rashtriya Chemicals and Fertilizers Ltd. Trombay Unit, Mahul Village Road, Chembur, Mumbai-400074

Copy to:

Regional Officer, MPCB, Mumbai
 Sub-Regional Officer, MPCB, Mumbai
 compliance of consent conditions.

3) Chief Accounts Officer, MPCB, Mumbai ' Received Consent fee of –

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On	
1	74,81,400/-	857444	15 Apr 2011	SBI Bank	
2	75,81,200/-	090621	01Nov.2011	SBI Bank	