



**ANDHRA PRADESH POLLUTION CONTROL BOARD**  
PARYAVARAN BHAVAN, A-3, INDUSTRIAL ESTATE,  
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**RED CATEGORY**  
**RENEWAL OF CONSENT ORDER & AUTHORIZATION ORDER**  
**BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE**

**Consent Order No : APPCB/VSP/KKD/10300/HO/CFO/2014- 602**

**Date : 28.11.2014**

(Consent Order for Existing/New or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and amendments thereof, Operation of the plant under section 21 of the Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Renewal of Authorisation under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundary, Movement) Rules, 2008 & Amendments thereof.

CONSENT is hereby granted under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21 of Air (Prevention & Control of Pollution) Act 1981 and Authorisation under the provisions of HW (MH & TM) Rules, 2008 (hereinafter referred to as 'the Acts', 'the Rules') and the rules and orders made thereunder to:

**M/s. Nagarjuna Fertilizers and Chemicals Ltd.,**  
**Nagarjuna Road, Kakinada,**  
**East Godavari District - 533 003**

**E-mail: pcmohap@nagarjunagroup.com**

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

**i) Out lets for discharge of effluents:**

| Outlet No. | Outlet Description                                   | Max Dally Discharge KLD | Point of Disposal             |
|------------|--|-------------------------|-------------------------------|
| 1.         | Process and Washings after Treatment                 | 1089                    | Onland for Plantation         |
| 2.         | Cooling Bleed Off / Boiler Blow Down after Treatment | 2746                    |                               |
| 3.         | Domestic Effluents after treatment in STP.           | 118                     |                               |
| 4.         | Scrubber bleed off                                   | 5                       | Reused in granulator section. |

**ii) Emissions from chimneys:**

| Chimney No. | Description of Chimney  | Quantity of Emissions in m3/hr |
|-------------|---|--------------------------------|
| Plant - I   |   |                                |
| 1.          | Stack Attached to Feed stock pre-heater                       | 9514                           |
| 2.          | Stack Attached to Primary Reformer                            | 1,51,946                       |
| 3.          | Stack Attached to 2 x 100 TPH Gas Fired Boilers               | 1,02,900                       |
| 4.          | Stack Attached to 7.5 MW Gas Turbine - A                      | 1,30,000                       |
| 5.          | Stack Attached to 7.5 MW Gas Turbine - B                      | 1,25,000                       |
| 6.          | Stack Attached to Urea Prill Tower                            | 6,83,000                       |
| 7.          | Stack Attached to Start-up preheater for synthesis converter  | --                             |
| 8.          | Stack Attached to Flare stack for Reformer Gas (Front End)    | --                             |
| 9.          | Stack Attached to Flare stack for Syn. Gas (Ammonia Back end) | --                             |

|     |   |                        |
|-----|---|------------------------|
| 10. | Stack Attached to 1.5 MW D.G. Set   | --                     |
|     | Plant – II  |                        |
| 11. | Stack Attached to Naptha Pre Heater   | 2624                   |
| 12. | Stack Attached to Feed Stock Preheater  | 13,500                 |
| 13. | Stack Attached to Primary Reformer  | 1,45,161               |
| 14. | Stack Attached to 21 MW Gas Turbine – C   | 2,20,000               |
| 15. | Stack Attached to Urea Prill tower  | 6,83,000               |
| 16. | Stack Attached to Pre-heater for synthesis converter.   | --                     |
| 17. | Stack Attached to Flare stack for Reformer Gas (Front End)  | --                     |
| 18. | Stack Attached to Flare stack for Syn. Gas (Ammonia Back end)   | --                     |
| 19. | Stack Attached to 1.5 MW D.G. Set   | --                     |
| 20. | Stack Attached to CDR Plant (New)   | --                     |
| 21. | Attached to De-dusting & scrubbing section consisting of Granulator, dryer, cooler, screen, coating drum & product bagging. | 100 m <sup>3</sup> /hr |

**i) HAZARDOUS WASTE AUTHORISATION (FORM – II) [See Rule 5 (4)]:**

M/s. Nagarjuna Fertilizers and Chemicals Ltd., Kakinada, East Godavari District., is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

**• HAZARDOUS WASTES WITH DISPOSAL OPTION:**

| S.No | Name of the Hazardous waste    | Stream             | Quantity of Hazardous waste | Disposal Option.   |
|------|--------------------------------|--------------------|-----------------------------|--|
| 1.   | Spent carbon                   | 18.2 of Schedule-I | 15.87 TPA                   | Shall be sent for incineration / Cement industries.  |
| 2.   | Sludge / Slurry from CDR plant | 18.3 of Schedule-I | 24 M <sup>3</sup> / annum   | Shall be sent to TSDF, Parawada, Visakhapatnam District for incineration (or) sent to authorised reprocessors / recyclers. |

**• HAZARDOUS WASTES WITH RECYCLING OPTION:**

| S.No | Name of the Hazardous waste   | Stream             | Quantity of Hazardous waste | Disposal Option.  |
|------|---|--------------------|-----------------------------|---|
| 1.   | Spent catalyst  | 18.1 of Schedule-I | 90 TPA                      | Shall be sent to authorised Re – processors / Recyclers.              |
| 2.   | Spent Lt catalyst   | 18.1 of Schedule-I |                             |   |
| 3.   | Used Oils   | 5.1 of Schedule-I  | 40 TPA                      |   |
| 4.   | Detoxified Containers & Container Liners of HW & Hazardous chemicals. | 33.3 of Schedule-I | 50 Nos/month                | After complete detoxification, shall be disposed to outside agencies. |

This consent order is valid to manufacture the following products along with quantities indicated only:

| S.No.              | Products  | Quantity |
|--------------------|---|----------|
| 1                  | Customized Fertilizer                               | 400 TPD  |
| 2                  | Ammonia   | 2600 TPD |
| 3                  | Urea  | 4560 TPD |
| <b>By Products</b> |   |          |
| 1                  | CO <sub>2</sub> from CO <sub>2</sub> Recovery Plant | 450 TPD  |

This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorisation shall be valid for a period ending with the 31<sup>st</sup> day of March, 2017.

Sd/-  
MEMBER SECRETARY

To  
M/s. Nagarjuna Fertilizers and Chemicals Ltd.,  
(Customized Fertilizer Plant),  
Nagarjuna Road, Kakinada,  
East Godavari District.

//T.C.F.B.O//

*Kelasa*  
3/12/14

✱ JOINT CHIEF ENVIRONMENTAL ENGINEER  
UNIT HEAD - IV

**SCHEDULE - A**

1. The applicant shall make applications for renewal of Consent (under Water and Air Acts) and Authorisation under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorisation of the Board.
2. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.
3. The industry may explore the possibility of tapping the solar energy for their energy requirements.
4. All other conditions stipulated in the Schedule - A of the earlier combined CFO & HWA order No: APPCB/VSP/KKD/322/HO/CFO/2012-4088, dated 06.03.2012 remains same. The industry shall ensure consistent compliance of each condition of Schedule-A.

**SCHEDULE - B**

1. The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned below.

| Outlet | Parameter                                | Limiting Standards<br>(in mg/l except for pH) |
|--------|--|---|
| 1 & 2  | pH                                       | 6.50 – 8.00                                   |
|        | Total Suspended Solids (at 103 – 105° C) | 100   |
|        | Ammonical Nitrogen                       | 50  |
|        | Total Kjeldahl Nitrogen (TKN)            | 100   |
|        | Free Ammonical Nitrogen                  | 4   |
|        | Nitrate Nitrogen                         | 10  |
|        | Cyanide as CN                            | 0.20  |
|        | Vanadium as V                            | 0.20  |
|        | Arsenic as As                            | 0.20  |
|        | Hex. Chromium*                           | 0.10  |
|        | Total Chromium*                          | 2   |
|        | Oil and Grease                           | 10  |

\* to be complied with at the outlet of chromium removal unit.

2. The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

| S.No | Purpose  | Quantity in KLD |
|------|--|-----------------|
| 1.   | Process & Washings   | 5004            |
| 2.   | Boiler Feed, Cooling (Makeup)  | 17428           |
| 3.   | Gardening / Irrigation / Misc & Domestic   | 2648            |
| 4.   | Mixing the raw material in expansion Plant including Scrubbing section in process. | 35              |
|      | <b>Total</b>   | <b>25115</b>    |

3. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The Industry shall remit water cess as per the assessment orders as and when Issued by Board.
4. The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

| Chimney No. | Parameter          | Emission Standards                                      |
|-------------|--------------------|---|
| 3 to 5 & 14 | Particulate matter | 50 mg /Nm <sup>3</sup>                                  |
| 6 & 15      | Particulate matter | 50 mg /Nm <sup>3</sup> OR 0.5 Kg / Ton of Urea produced |
| 20          | Particulate matter | 100 mg /Nm <sup>3</sup>                                 |
| 21          | Particulate matter | 100 mg /Nm <sup>3</sup>                                 |

5. The industry shall comply with emission limits for DG sets upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the Environment (Protection) Amendment Rules, 2003 and G.S.R.448 (E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets more than 800 KW shall comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.
6. The industry shall comply with ambient air quality standards of PM<sub>10</sub> (Particulate Matter size less than 10 µm) - 100 µg/ m<sup>3</sup>; PM<sub>2.5</sub> (Particulate Matter size less than 2.5 µm) - 60 µg/ m<sup>3</sup>; SO<sub>2</sub> - 80 µg/ m<sup>3</sup>; NO<sub>x</sub> - 80 µg/ m<sup>3</sup>, outside the factory premises at the periphery of the industry.

Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009

**Noise Levels:** Day time (6 AM to 10 PM) - 75 dB (A)  
Night time (10 PM to 6 AM) - 70 dB (A).

7. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE & CFO of the Board.
8. The industry shall utilize total quantity of treated effluents on land within their premises. They shall not discharge any waste water outside their premises under any circumstances.
9. The industry shall maintain daily records for quantity of waste water generation, treatment and disposal, Stack monitoring & Ambient air quality monitoring. They shall submit monthly reports to the RO-Kakinada.
10. The industry shall connect all 5 CAAQMs to APPCB website within 15 days and submit the data to RO, Kakinada every month.
11. The industry shall use Natural gas as feed stock and stop usage of Naptha in the expansion plant.
12. The industry shall monitor regularly Purge Gas recovery Unit (PGRU) used for recovery of Ammonia and Hydrogen recycle. In case of PGRU trip, the gases after ammonia absorption shall be burn in Auxiliary boilers. Industry shall maintain Ammonia sensors and maintain records.
13. The industry shall take measures for better dispersion of CO<sub>2</sub> & NO<sub>x</sub> and Urea dust emission levels.
14. The industry shall comply with the conditions of compliance as per CFE order dated 01.07.2009.
15. The industry shall comply the conditions of compliance as per EC order dated 15.02.2008. The industry shall install and maintain online stack analysers to all the stacks.
16. The industry shall regularly monitor fugitive emissions in the work zone area, product, raw material storage area etc.,
17. The industry shall maintain low NOx burners to the main stack.
18. All the raw materials shall be stored in closed sheds and adequate dust containment/ suppression measures shall be maintained to control fugitive emissions. The industry shall not cause any air pollution / dust nuisance in the surroundings.
19. The industry shall maintain good housekeeping.
20. The industry shall take all measures to meet the standards prescribed by the Board.
21. The industry shall maintain the greenbelt in 789 Acres.
22. The industry shall comply with Hon'ble Supreme Court directions in WP No. 5357/1985.
23. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments.
24. The conditions stipulated are without prejudice to the rights and contentions of this Board in any Hon'ble Court of Law.

**SCHEDULE - C**

*[ see rule 5(4) ]*

**[ CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES ]**

1. The industry shall give top priority for waste minimization and cleaner production practices.
2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and amendments thereof.
3. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal.

4. The industry shall not dispose Waste oils to the traders and the same shall be disposed to the authorized Reprocessors/ Recyclers.
5. The industry shall dispose Used Lead Acid Batteries to the manufacturers / dealers on buyback basis.
6. The industry shall take necessary practical steps for prevention of oil spillages and carry over of oil from the premises.
7. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to Board Office and concerned Regional Office.
8. The industry shall maintain good house keeping & maintain proper records for Hazardous Wastes stated in Authorisation.
9. The industry shall maintain proper records for Hazardous Wastes stated in Authorisation in FORM-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form- 4 as per Rule 22(2) of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008 and amendments thereof.
10. The industry shall dispose of e-waste to the authorised recyclers only.
11. The hazardous wastes having potential for reprocessing / recycling shall only be disposed to authorised agencies i.e., actual users or reprocessors but not to vendors.
12. The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

Sd/-  
MEMBER SECRETARY

To  
M/s. Nagarjuna Fertilizers and Chemicals Ltd.,  
(Customized Fertilizer Plant),  
Nagarjuna Road, Kakinada,  
East Godavari District.

//T.C.F.B.O//

*Kulas*  
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\* JOINT CHIEF ENVIRONMENTAL ENGINEER  
UNIT HEAD - IV