

#### ANDHRA PRADESH POLLUTION CONTROL BOARD

D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamalavari Street, Kasturibaipet, Vijayawada - 520010 Website: www.appcb.ap.nic.in

# RED CATEGORY CONSENT & AUTHORIZATION ORDER BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

# Consent Order No: APPCB/VJA/NLR/10491/CFO/HO/2017- 328 Date: 20.12.2017

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 & Amendments thereof and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

M/s. Bhagiratha Chemicals & Industries Ltd., (after product mix) Cheruvukommupalem(V), Ongole(M), Prakasam District – 523 272, A.P.

E-mail: info@bhagirad.com, vnarayana.m@bhagirad.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:

The Consent Order No: APPCB/VJA/NLR/10491/CFO/HO/2015-434, dated 21.04.2015 issued to the industry, having validity upto 28.02.2018, stands cancelled.

#### (i) Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge	Point of Disposal
1	LTDS process effluents	57.12 KLD	<ul> <li>Shall be stripped off for organics recovery followed by evaporation MEE.</li> <li>Condensate from MEE shall be routed to biological treatment plant followed by RO</li> <li>MEE residues to Batch evaporator</li> <li>Treated effluents to cooling tower make up. Residue from Batch evaporator to Rotary kiln.</li> <li>Solids to disposal.</li> <li>Stripper condensate to distillate for organics</li> </ul>
	Walling Services		separation followed by disposal to cement plants for co-processing/ to TSDF for incineration
ED Industria	HTDS process effluents	50.58 KLD	<ul> <li>Effluents to Batch evaporator for evaporation.</li> <li>Batch evaporation sludge to Rotary kiln.</li> <li>Solids to dispose.</li> <li>Condensate to ETP followed by RO.</li> <li>Treated effluents to cooling tower make up.</li> </ul>

3	Low TDS from non- process (Boiler Blow down - 16.45 KLD + cooling tower blow down - 43.5 KLD)	59.95 KLD	<ul> <li>Effluents to MEE for forced evaporation.</li> <li>MEE condensate to Boiler feed water.</li> <li>MEE sludge to Batch evaporator followed by Rotary kiln.</li> <li>Solids for disposal.</li> </ul>
4	Domestic	21.00	Septic tank followed by soak pit.

# ii) Emissions from chimneys:

Chimney No.	Description of Chimney
1	Stack attached to 1x 12 TPH Coal fired Boiler
2	Stack attached to 1 x 8 TPH Coal Fired Boiler
3	Stack attached to 1.2 TPH Rotary Kiln
4	D.G. Sets 3 x 500 KVA & 1 x 250 KVA

# iii) Hazardous Waste Authorisation (Form - II) [See Rule 6 (2)]:

M/s. Bhagiratha Chemicals & Industries Ltd., Prakasam 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 Hazardous Waste	Stream	Quantity	Method of disposal
1.	Inorganic solid waste		14.364 TPD	To be sent to TSDF for secured land fill.
2.	Process organic residue	29.1	1.516 TPD	To TSDF for incineration / cement industries for co- processing
3.	ETP Sludge	35.3	25 Kg/Day	To co-processing units / TSDF

### Hazardous Wastes With Recycling Option:

S. No	Name of Hazardous Waste	Stream	Quantity	Method of disposal
1.	Waste oil & Grease	5.2	1.4 LPD	To be sent to authorized agencies

This consent order is valid for the following products\* along with quantities indicated only:

\* The industry shall produce one product from each combination from Group -A (5 Nos of products) and one pesticide formulation from Group - B any point of time

S. N	Name of the Products* and By-products	No. of stages	Quantity
Group - A	icides:	- Carlotte and	
Combination	Chlorpyriphos Technical (or)	12	6.7 TPD
-I	Methyl Chlorpyriphos Technical (or)	12	5.0 TPD
	Azoxystorbin (or)	24	0.5 TPD
	4-amino-2,5-	10	0.5 TPD
	dimethyoxypyrimidine (4-ADMP)		
	Total -1 (Any one product)		
Combination	Triclopyr Technical (or)	7	2.5 TPD
-П	Fluroxypyr Technical (or)	10	1.5 TPD
	R (+)-2-(4-Hydroxyphenoxy)	11	0.5 TPD
	Propionic Acid (HPPA) (or)		
	Diafenthouron (or)	10	1.0 TPD
	2-amino-5.7-dimethoxy [1,2,4]	6	0.5 TPD
	triazolo [1,5-a] pyrimidin (ADTP)		
	Total -II (Any one product)		
Combination	Clodinafop-proprgyl (or)	11	1.0 TPD
-111	Cloquintocet-Mexyl	8	0.5 TPD
	Total -III (Any one product)		
Combination	Fipronil (or)	12	1.0 TPD
-IV	2,6-Dichloroniline (or)	10	1.0 TPD
	Sulfosulfuron	22	0.4 TPD
	Total -IV (Any one product)		
Combination	Imidacloprid Technical	5	2.0 TPD
-V	Thiamethoxam	6	0.5 TPD
	Total -V (Any one product)		
Group - B	Emulsifiable Formulations	Q	uantity
1	Chlorpyriphos formulation	5.	0 KLD
2	Chlorpyriphos Methyl Formulation	5.0 KLD	
3	Triclopyr Formulation	5.0 KLD	
4	Fluroxypyr Formulation	5.0 KLD	
5	Imidacloprid Formulation	5.0 KLD	
6	Clodinafop Propargyl Formulation	5.0 KLD	
7	Fipronil Formulation	5.0 KLD	
	Wettable Powder		
8	Clodinafop – 15% WP	5.0 TPD	
9	Imidacloprid – 70% WG	5.0 TPD	
10	Fipronil – 80% WG	5.0 TPD	
11	Thiamethoxam – 25% WG	5	.0 TPD

	Suspension Concentrates	
12	Fipronil – 5% SC	5.0 TPD
13	Buprofrzin – 25% SC	5.0 TPD

\* The industry shall produce one product from each combination from Group -A (5 Nos of products) and one pesticide formulation from Group - B any point of time.

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 Authorization shall be valid for a period ending with the 28<sup>th</sup> February, 2023.

Sd/-MEMBER SECRETARY

M/s. Bhagiratha Chemicals & Industries Ltd., Cheruvukommupalem(V), Ongole(M), Prakasam District – 523 272, A.P.

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

Senior Environmental Engineer

(UH: IV)

#### SCHEDULE-A

- Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
- The industry shall carryout analysis of wastewater discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
- 3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
- 4. The industry shall put up two sign main gate indicating the products, hazardous waste quantities and prominent place in the factory premises. boards (6x4 ft. each) at publicly visible places at the effluent discharge standards, air emission standards, validity of CFO and exhibit the CFO order at a prominent place in the factory premises.
- 5. Not withstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.

- 6. 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.
- 7. The applicant shall submit Environment statement in Form V before 30<sup>th</sup> September every year as per Rule No.14 of E (P) Rules, 1986 & amendments thereof.
- 8. The applicant shall make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized shall not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
- 9. 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 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.

# SCHEDULE-B

#### Water Pollution:

 The source of water being Ground water. The following is the permitted water consumption:

S. No	Purpose	Quantity
1.	Process & Washings	55.24 KLD
2.	Boiler Feed	132.54 KLD
3.	Industrial Cooling (Makeup)	108.25 KLD
4.	Domestic	21.0 KLD
	Total	317.03 KLD

Separate meters with necessary pipe-line shall be maintained for assessing the quantity of water used for each of the purposes mentioned above for Cess assessment purpose.

- The industry shall provide containers detoxification facility. Container & Container liners shall be detoxified at the specified covered platform with dyke walls and the wash wastewater shall be routed to low TDS collection tank.
- All the units of the ZLD system shall be maintained impervious to prevent ground water
   Pollution. The units of ZLD system shall be constructed above the ground level.
   Effluents shall not be discharged on land or into any water bodies or aquifers under any circumstances.
- 4. The industry shall improve house-keeping near MEE and ATFD area.

- 5. The industry shall submit ground water quality trends and report the compliance to RO, Nellore. The industry shall regularly monitor the ground water quality at upstream and downstream of the unit, ETP area and greenbelt area. The consolidated records shell be submitted to R.O., Nellore for every three months.
- 6. Rainwater shall not be allowed to mix with either trade or domestic effluents. Industry shall maintain storm water drains properly.

#### Air Pollution:

The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

Chimney No.	Parameter	<b>Emission Standards</b>
1 to 3	Particulate Matter	115 mg/Nm3

8. The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10μm) - 100 μg/ m3; PM2.5 (Particulate Matter size less than 2.5 μm) - 60 μg/ m3; SO2 - 80 μg/ m3; NOx - 80 μg/m3, 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)

- 9. The industry shall comply with emission limits for DG sets of capacity 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 of capacity 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.
- 10. The industry shall provide effective sprinkler system to control fugitive emissions at coal stock yard within one month and report compliance to the RO: Nellore.
- 11. The industry shall implement adequate measures to control all fugitive emissions from the plant.
- 12. The proponent shall not use or generate odour causing substances or Mercaptans and cause odour nuisance in the surroundings.
- 13. The industry shall maintain online monitoring system for VOCs and shall be connected to Board website.
- 14. The industry shall provide multi-stage scrubbers to the process vents to control the process emissions. The industry shall provide online pH measuring facility with auto recording system to the scrubbers provided to treat the process emissions.
- 15. The evaporation losses in solvents shall be controlled by taking suitable measures, which include:
  - a. Chilled brine circulation to effectively reduce the solvent losses into the atmosphere.
  - b. Transfer of solvents by using pumps and closed conveyance instead of manual handling.
  - c. Closed centrifuges be used due to which solvent losses are reduced drastically.
  - d. The reactor vents connected with primary & secondary condensers to catch the solvent vapours.

e. All the solvent storage tanks are connected with vent condensers to prevent solvent vapours.

#### General:

- 16. The industry shall handover the Original Consent Order dated 21.04.2015 to the RO: Vijayawada after receipt of this CFO order (after product mix).
- 17. The industry shall maintain flow meters preferably Electro Magnetic flow meters with totalisers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order.
- 18. The drums containing chemicals / solvents shall be stored under a roof on elevated platform with a provision to collect leakages / spillages in the collection pit.
- 19. The industry install online continuous effluent and emission monitoring systems and connect monitoring system to APPCB/CPCB websites as per CPCB directions dated 05.02.2014. The online monitoring system shall be calibrated periodically as per equipment suppliers manual / CPCB guidelines.
- 20. The industry shall complete the connectivity of the online monitoring systems with the Board website at the earliest and report compliance to the RO: Nellore.
- 21. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
  - a. Daily production details (ER-1 Central Excise Returns).
  - b. Quantity of Effluents generated, treated, recycled/reused and disposed in ZLD.
  - c. Log Books for pollution control systems.
  - d. Characteristics of ambient air, effluents and emissions.
  - e. Hazardous/non hazardous solid waste generated and disposed.
  - f. Inspection book.
  - g. Manifest copies of effluents / hazardous waste.
- 22. The industry shall dispose solid waste (NON HAZARDOUS) as follows

S. No	Name of the Solid Waste	Quantity	Disposal
1.	Boiler ash	13.5 TPD	To Brick Manufacturers

- 23. The industry shall commence production activities in Block No.3 after obtaining revocation of prohibitory orders from Factory Department and report compliance to the RO: Nellore.
- 24. The industry shall submit mock required under the Manufacture, 1989.
  drill report carried out at least once in six months, as required under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- 25. The industry shall complete the connectivity of the online monitoring systems with the Board website at the earliest and report compliance to the RO: Nellore.
- 26. The industry shall develop green belt in all vacant areas.
- 27. The industry shall submit the information regarding usage of Ozone Depleting Substance once in six months to the Regional Office and Zonal Office of the Board.
- 28. The industry shall comply with the Task Force directions issued from time to time
- 29. The industry shall develop green belt in all the vacant places. In future, excess green belt over and above 33 % of total area can be utilized for industrial activity as per requirement of industry.

- 30. The industry shall install online monitoring systems and connect monitoring system to APPCB/CPCB websites as per CPCB directions dated 05.02.2014 & 02.03.2015 and guidelines issued regarding online monitoring systems from time to time.
- 31. The industry shall submit a copy of policy of Public Liability Insurance (PLI) duly indicating the amount contributed towards Environmental Relief Fund (ERF) to the RO once in six months.
- 32. The industry shall comply with standards and directions issued by CPCB / MoEF & CC as and when notifications are issued.
- 33. The industry shall submit compliance report on the conditions mentioned in the consent order every six months i.e., on 1<sup>st</sup> of January and July of every year to the Regional Office/ Zonal Office.

# SCHEDULE - C

[See rule 6 (2)]

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

- All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous wastes should be followed.
- The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
- 3. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
- 4. The industry shall maintain 7 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
- 5. The industry shall maintain proper records for Hazardous and Other 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 20 (2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

Sd/-MEMBER SECRETARY

To

M/s. Bhagiratha Chemicals & Industries Ltd., Cheruvukommupalem(V), Ongole(M), Prakasam District – 523 272, A.P.

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

Senior Environmental Engineer

(UH: IV)