



CONSENT ORDER FOR ESTABLISHMENT

Order No. 434 /APPCB/CFE/RO-VSP/HO/2017

Dt: 22.07.2019

Sub: APPCB – CFE - **M/s. Porus Laboratories Private Limited., Unit-VI, Plot No. 2A, APSEZ, APIIC, Moturupalem (V), Rambilli (M), Visakhapatnam District** - Consent for Establishment (CFE) of the Board for **expansion** under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 - Issued - Reg.

- Ref: 1) CFE order dt. 22.12.2017.
2) CFE expansion orders dt. 03.12.2018, 12.03.2019 and 08.05.2019.
3) Industry's CFE (Expn.) application received through AP Single Desk System on 24.06.2019.
4) R.O's inspection report dt. 02.07.2019.
5) CFE Committee meeting held on 18.07.2019.
6) Industry Ir. dt. 18.07.2019.

1. In the reference 3rd cited, an application was submitted to the Board seeking Consent for Establishment (CFE) for **expansion** to produce the products with installed capacities as mentioned below, without any additional investment.

As per CFE expansion order dt. 08.05.2019:

S. No.	Name of the Product	Capacity (kg/day)
1.	p-Phenolphthalein bisphenol (or) 2-Phenyl-3,3-bis (4-hydroxy phenyl) phthalimide (PPPBP)	7666.7
2.	4-Nitro-N-methyl phthalimide (4-NPI)	13333.3
3.	1,3-Cyclohexadiene	33.3
4.	Cupreidine	16.7
5.	2-(1-Chlorocyclopropyl)-2-[(2- chlorophenyl) methyl]-oxirane	666.7
6.	Polyterpene	33.3
7.	Sulfonated Polymer	333.3
8.	Un-Hydrogenated Styrenic Block Copolymer (USBC)	333.3
9.	Hydrogenated Styrenic Block Copolymer (HSBC)	333.3
10.	TOFA Plasticizer	333.3
11.	Capped 0.09 IV Bifunctional PPO (SA-9000)	3333.3
12.	R&D products	10
	Total	26427.0

By-Products:

S. No.	Name of the By- Product	Capacity kg/day	By product from
1	Spent Sulfuric Acid	278511	4-Nitro-N-methyl phthalimide (4-NPI)
	Total	278511	

Proposed for CFE (Expansion):

S. No.	Name of the Product	Capacity (kg/day)	No. of Stages	Name of the Starting Raw Materials	Quantity (kg/day)
1.	p-Phenolphthalein bisphenol (or) 2-Phenyl-3,3-bis (4-hydroxy phenyl) phthalimide (PPPBP)	7666.7	2	Phthalic anhydride	4035.1
2.	4-Nitro-N-methyl phthalimide (4-NPI)	13333.3	2	Phthalic anhydride	12444.5
3.	1,3-Cyclohexadiene	33.3	3	Cyclohexanol	155.0
4.	Cupreidine	16.7	1	Quinidine	19.05
5.	2-(1-Chlorocyclopropyl)-2-[(2-chlorophenyl) methyl]-oxirane	666.7	5	2-Acetyl Butyrolactone	911.1
6.	Polyterpene	33.3	1	Monomer	64.0
7.	Sulfonated Polymer	333.3	1	Polymer	333.3
8.	Un-Hydrogenated Styrenic Block Copolymer (USBC)	333.3	1	Styrenic Block Copolymer	350.9
9.	Hydrogenated Styrenic Block Copolymer (HSBC)	333.3	1	Styrenic Block Copolymer	350.9
10.	TOFA Plasticizer	333.3	1	Tall Oil Fatty Acid	303.3
11.	Capped 0.09 IV Bifunctional PPO (SA-9000)	1666.7	1	1,5-Bis-(2,6-di methyl-4-hydroxyphenyl)-penta-(2,6-dimethyl-1,4-phenyleneoxide)	1666.7
12.	Tetramethyl bisphenol acetone (TMBPA Powder)	3333.3	1	1,5-Bis-(2,6-di methyl-4-hydroxyphenyl)-penta-(2,6-dimethyl-1,4-phenyleneoxide)	11666.7
13.	Diethylphosphonic acid (DEPA)	1100.0	1	Acetone	769.2
	Diethylphosphonic acid (DEPA) [Alternate Process]	1100.0	1	Sodium Hypophosphite Monohydrate	1018.6
				Hypophosphorous acid	1217.6
14.	2-Hydroxyproyl diethyl phosphinate (E 17-194T)	666.7	1	Diethylphosphonic acid	582.7
15.	R&D products	10			
	Total	39860			

By Products :

S. No.	Name of the Product	Capacity in Kg/Day	By product from
1	Spent Sulfuric Acid	278511	4-Nitro-N-methyl phthalimide (4-NPI)
	Total	278511	

2. As per the application, the above activity is to be located in the existing premises at Plot No. 2A, APSEZ, APIIC, Moturupalem (V), Rambilli (M), Visakhapatnam District in an area of 40446.0 Sq. m (4.045 Ha).
3. The above site was inspected by the Asst. Environmental Engineer - II, Regional Office: Visakhapatnam, A.P Pollution Control Board on 01.07.2019 and observed that the site is surrounded by

North : Road
South : Plot No. 18
East : Plot No. 28
West : Plot No. 2
4. The Board, after careful scrutiny of the application, verification report of Regional Officer and recommendations of the CFE Committee, hereby issues **CONSENT FOR ESTABLISHMENT FOR EXPANSION** to the project under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to manufacture the products as mentioned at para (1) only.**
5. This Consent order issued is subject to the conditions mentioned in the Annexure.
6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.
7. **This order is valid for a period of 7 years from the date of issue.**

Encl: Annexure

MEMBER SECRETARY

To

**M/s. Porus Laboratories Private Limited., Unit-VI, (expn)
Plot No. 402 & 403, 4th Floor, Kavuri Hills,
Hyderabad, Telangana.
apsrinivas@poruslabs.com,**

Copy to: 1. The JCEE, Z.O: Visakhapatnam for information and necessary action.
2. The EE, R.O: Visakhapatnam for information and necessary action.

Annexure

1. The proponent shall obtain Consent for Operation (CFO) from APPCB, as required under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the trial runs.
2. The proponent shall ensure that separate energy meters are connected to Effluent Treatment Plant (ETP) and Air pollution Control equipments to record energy consumed. An alternative electric power source sufficient to operate all pollution control systems shall be provided.
3. The industry shall construct separate storm water drains. No effluents shall be discharged in to the storm water drains.

Water:

4. The source of water is APIIC and the maximum permitted water consumption is as following:

Sl. No.	Purpose	Consented quantity as per CFE (Expansion) Order dt. 08.05.2019	Quantity after expansion (KLD)
1.	Process	362.6	538.2
2.	Washings (Reactor, Containers and floor moping)	20.0	20.0
3.	DM Plant regeneration	10.0	10.0
4.	Softener Plant regeneration	10.0	10.0
5.	Q.C & R&D	5.0	5.0
6.	Scrubber	12.0	12.0
7.	Boiler	100.0	100.0
8.	Cooling Towers	50.0	50.0
9.	Domestic	10.0	10.0
10.	Gardening	20.0	20.0
		599.6	775.2

5. The maximum waste water generation shall not exceed the following:

SI No	Source	Consented quantity as per CFE (Expansion) Order dt. 08.05.2019			Quantity after expansion (KLD)		
		HTDS	LTDS	Total	HTDS	LTDS	Total
1.	Process	160.6	---	160.6	167.2	---	167.2
2.	Washings (Reactor, Containers and floor moping)	---	20.0	20.0	---	20.0	20.0
3.	Boiler	---	12.5	12.5	---	12.5	12.5
4.	Cooling Towers	---	12.5	12.5	---	12.5	12.5

5.	DM Plant regeneration	---	10.0	10.0	---	10.0	10.0
6.	Softener Plant regeneration	---	10.0	10.0	---	10.0	10.0
7.	Q.C & R&D	---	5.0	5.0	---	5.0	5.0
8.	Scrubber	12.0	---	12.0	12.0	---	12.0
9.	Domestic	---	8.0	8.0	---	8.0	8.0
10.	Gardening	---	---	---	---	---	---
	Total	172.6	78.0	250.6	179.2	78.0	257.2

Treatment & disposal:

Source of effluent	Treatment	Mode of final disposal
HTDS effluents- Process, scrubber	Equalization cum neutralization tank	To M/s. AETL (CETP, Atchutapuram).
LTDS effluents – Process washings, floor washings, cooling tower blow down, boiler and domestic	Equalization cum neutralization tank	To M/s. AETL (CETP, Atchutapuram).
Domestic effluents	---	Over flow of septic tank shall be sent to M/s. AETL along with LTDS effluent.

*** The Board while issuing CFE expansion order dt. 08.05.2019 stipulated a condition that the industry shall send effluents to CETP, JNPC, Parwada upto 28.06.2019 only, as per the notice dt. 29.03.2019 issued by the Board. The industry vide letter dt. 18.07.2019 informed that they will follow the directions issued by the Board.**

6. Effluents shall not be discharged on land or into any water bodies or aquifers under any circumstances.
7. The industry shall provide magnetic flow meters with totalisers at the outlet of the unit.
8. The industry shall properly operate and maintain online real time monitoring system along with web camera facilities and shall ensure that it is connected to APPCB / CPCB websites as per CPCB directions.
9. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas. All pipe valves, sewers, drains shall be leak proof.

Air:

10. The industry shall comply with the following for controlling air pollution after expansion:

Sl. No	Details of Stack	Stack 1	Stack 2	Stack 3	Stack 4	Stacks 5 to 7
a)	Attached to	Boiler	Boiler	Thermic fluid heater	Thermic fluid heater	D.G. Sets
b)	Capacity	1 x 10.0 TPH	1 x 2.0 TPH	3.0 Lakh kilo calories	1.0 Lakh kilo calories	2 X 1000 KVA & 1 X 500 KVA
c)	Fuel	Coal	Furnace oil	LDO	LDO	Diesel
d)	Stack height above ground (m.)	30.0 m	30 m	8 m	8 m	10 m each
e)	Air Pollution Control Equipment	Multi cyclone separator followed by Bag filter	---	---	---	Acoustic enclosures with silencers

11. A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.
12. The industry shall properly operate and maintain the monitoring system to all the stacks / vents in the plant. Regular monitoring shall be carried out and report shall be submitted to the Regional officer.
13. The industry shall properly operate and maintain multi-stage scrubbers to the process vents to control the process emissions. The industry shall ensure that online pH measuring facility with auto recording system is connected to the scrubbers.
14. The industry shall properly operate and maintain VOC monitoring system with auto recording facility.
15. The industry shall implement adequate measures to control all fugitive emissions from the plant.
16. The proponent shall ensure compliance of the National Ambient Air quality standards notified by MoEF, GoI vide notification No. GSR. 826 (E), dated. 16.11.2009 during construction and regular operational phase of the project at the periphery.

The generator shall be installed in a closed area with a silencer and suitable noise absorption systems. The ambient noise level shall not exceed 75 dB(A) during day time and 70 dB(A) during night time.

17. The proponent shall not use or generate odour causing substances or Mercaptans and cause odour nuisance in the surroundings.

18. The industry shall send the used / spent solvents to the recyclers (or) process them at their own solvent recovery facility within the premises.
19. The evaporation losses in solvents shall be controlled by taking the following measures:
- Chilled brine circulation shall be carried out to effectively reduce the solvent losses into the atmosphere.
 - Transfer of solvents shall be done by using pumps instead of manual handling.
 - Closed centrifuges shall be used to reduce solvent losses.
 - All the solvent storage tanks shall be connected with vent condensers to prevent solvent vapours.
 - The reactor vents shall be connected with primary & secondary condensers to prevent escaping of solvent vapour emissions into atmosphere.

Solid / Hazardous Waste:

20. The industry shall comply with the following for disposal of Solid waste:

S. No.	Name of the waste	Quantity as per CFE (Expansion) Order dt. 08.05.2019	Quantity Applied as per application	Mode of final disposal
1.	Used Oil / Waste Lubrication Oil	400 LPM	400 LPM	To authorized Re-processors / Recyclers / to the Cement industries for co-processing in the kiln
2.	Detoxified Containers & Container Liners	1650 No's/Month	2100 No's/Month	To outside agencies, after complete detoxification for re-use/ recycle.
3.	Glass Bottles / Scrap	75 kg/month	75 kg/month	
4.	HDPE Bags and Polythene Bags	5500 nos/month	6000 nos/month	
5.	Spent Acid	278 TPD	--	To authorized agencies
6.	Used Lead Acid Batteries	26 No's/Annum	26 No's/Annum	To dealers on buy back system
7.	Spent Solvents	100 KLD	136 KLD	Recovery within the premises / to authorized agency for recovery.
8.	Mixed Spent Solvents	35.0 TPD	145.0 TPD	To authorized recovery units / Authorized cement plant for co-processing.
9.	Spent Salts	10.8 TPD	11.0 TPD	To TSDF, Parawada for secured land filling.
10.	Insulation Waste	50kg/Anum	50kg/Anum	To TSDF, Parawada / Cement Industries
11.	Process Organic Residues and Distillation Bottom Residue	8.9 TPD	17.51 TPD	To the authorized Cement industries for co-processing in the kiln (or) TSDF, Parawada for incineration

12.	Spent Carbon	3.72 TPD	3.72	
13.	Inorganic Residue	2.43 TPD	3.11	To TSDF, Parawada for secured land filling.
14.	ETP Sludge	1.0 TPD	1.0 TPD	
15.	Thermocol Waste	100 Kg/Annum	100 Kg/Annum	To TSDF / Cement Industry / Authorized recyclers
16.	PPFRP Waste	40 kg/Annum	40 kg/Annum	To TSDF / Authorized recyclers / Cement Industry
17.	Boiler Ash	17.2 TPD	17.2 TPD	To Brick Manufacturers.

21. The proponent shall place the chemical drums and / or any drums in a shed provided with concrete platform only. The Platform shall be provided with sufficient dyke wall and effluent collection system. 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.
22. The following rules and regulations notified by the MoEF&CC, Gol shall be implemented.
- Regulation of Persistent Organic Pollutants Rules, 2018.
 - Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
 - Plastic Waste Management Rules, 2016.
 - Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
 - Fly Ash Notification, 2016.
 - Batteries (Management & Handling) Rules, 2010.
 - E-Waste (Management) Rules, 2016.
 - Construction and Demolition waste Management Rules, 2016.
 - Solid Waste Management Rules, 2016.
 - The Public Liability Insurance Act, 1991 and its amendments thereof.

Other Conditions:

23. **The EE, RO: Visakhapatnam reported that Spent Sulphuric Acid is not generated. The industry vide letter dt. 18.07.2019 informed that they have provided a tank of capacity 500 KL and they are in process of providing the tanks for remaining capacity to store spent sulphuric acid generated in 3 days.**
24. **The industry shall dispose spent sulphuric acid to Gypsum manufacturing units as committed vide Ir.dt. 04.05.2019 i.e., i) M/s. Sri Rajeswari Chemicals Pvt Ltd, Gingurthy, Tandoor, Vikarabad, Telangana and to ii) M/s. R.S. Mineral Works, Bugganipalle, Betamcherla, Kurnool, Andhra Pradesh with proper manifest system and shall submit the records to the concerned Regional Officer once in every 3 months.**

25. Existing green belt shall not be disturbed due to the proposed expansion. Thick green belt shall be developed and maintained all along the boundary & vacant spaces with tall growing trees with good canopy and it shall not be less than 22% of the total area.
26. 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.
27. Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order attracts action under the provisions of relevant pollution control Acts.
28. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec. 27(2) of Water (Prevention and Control of Pollution) Act, 1974 and under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to revoke the order, to review any or all the conditions imposed herein and to make such modifications as deemed fit and stipulate any additional conditions.
29. 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 Water (Prevention and Control of Pollution)Act,1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

MEMBER SECRETARY

To

**M/s. Porus Laboratories Private Limited., Unit-VI, (expn.)
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