



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

CONSENT ORDER FOR ESTABLISHMENT AND OPERATION

Order No. 214 /APPCB/CFE/RO-VSP/HO/2014

Dt.13.11.2018.

Sub: **APPCB - CFE - M/s. Alkali Metals Ltd., Plot No. 36, 37 & 38, JN Pharmacy, Parawada, Visakhapatnam** – Consent for Establishment and Operation of the Board for **Change of Product Mix** under Sec.25/26 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. 11.07.2017.
2) Industry's application received through APOCMMS on 15.10.2018.
3) R.O's inspection report dt. 26.10.2018.
4) CFE Committee meeting held on 05.11.2018.

1. In the reference 2nd cited, an application was submitted to the Board seeking Consent for Establishment (CFE) and Consent for Operation (CFO) for **Change of Product Mix** to produce the following with installed capacities as mentioned below with no additional investment.

As per CFE (CPM) dated 11.07.2017:

Sl.No.	Product Name	Quantity (Kg/day)
1.	2-Amino Pyridine	768.00
2.	2,6-Diamino Pyridine	768.00
3.	2-Amino-4-Methyl Pyridine	768.00
4.	2-Amino-6-Methyl Pyridine	768.00
5.	3-Amino Pyridine	166.67.
6.	2-Amino-5-Bromopyridine	66.67
7.	2,3-Dichloro Pyridine	166.67
8.	2-Chloro-6-Methoxypyridine	83.33
9.	2-Chloro-6-Methoxy-3-Nitropyridine	33.33
10.	2-Nitro-5-Bromopyridine	33.33
11.	2,3,5-Trichloropyridine	166.67
12.	Phenyl Pyridyl Acetonitrile	600.00
13.	Phenyl Pyridyl Acetamide	600.00
14.	Di-isopyramide	33.33
15.	Phenyl Piperidyl acetamide (D,L-T&E)	400.00
16.	Phenyl Piperidyl acetamide threo	150.00
17.	Ritalinic Acid	90.00
18.	7-Azaindole	333.00
19.	2,3-Dihydro-7-azaindole	333.00
20.	5-Bromo-7 azaindole	133.00
21.	Benzocaine	950.00
22.	Losartan Potassium	67.00
23.	Loperamide HCl	67.00
24.	Fluconazole	67.00

25.	Phenylephrine HCl	67.00
26.	Rabeprazole Sodium	100.00
27.	Metfarmin HCl	3,360.00
28.	5-Methyltetrazole	33.33
	Total	11,172.33

Proposed for Change of Product mix:

Sl. No.		Qty (Kg/ Day)	No of stages	Starting raw materials	Qty. of SRM Kg/day
1	2-Amino Pyridine	768.00	1	Pyridine	691.2
2	2,6-Diamino Pyridine	768.00	1	Pyridine	640.00
3	2-Amino-4-Methyl Pyridine	768.00	1	Gamapicoline	682.67
4	2-Amino-6-Methyl Pyridine	768.00	1	Alphapicoline	682.67
5	3-Amino Pyridine	166.67	1	Nicotinamide	238.10
6	2-Amino-5-Bromopyridine	66.67	1	2-Aminopyridine	55.56
7	2,3-Dichloro Pyridine	166.67	1	Nicotinamide	166.67
8	2-Chloro-6-Methoxypyridine	83.33	1	2,6-Dichloropyridine	118.05
9	2-Chloro-6-Methoxy-3-Nitropyridine	33.33	1	2-Chloro-6-Methoxypyridine	74.99
10	2-Nitro-5-Bromopyridine	33.33	1	2-Amino-5-Bromopyridine	55.55
11	2,3,5-Trichloropyridine	166.67	1	2-Aminopyridine	88.89
12	Phenyl Pyridyl Acetonitrile	600.00	1	2-Chloropyridine	500.00
13	Phenyl Pyridyl Acetamide	600.00	1	Phenyl Pyridyl Acetonitrile	666.67
14	Di-isopyramide	33.33	2	Phenylpyridylacetone	20.00
15	Phenyl Piperidyl acetamide (D,L-T&E)	400.00	1	Phenyl pyridyl acetamide	426.67
16	Phenyl Piperidyl acetamide threo	150.00	2	Phenyl Pyridyl Acetonitrile	166.67
17	Ritalinic Acid	90.00	3	Phenyl Piperidyl Acetamide (D,L - Threo)	96.43
18	7-Azaindole	333.33	3	2-Amino-3-Methylpyridine	333.33
19	2,3-Dihydro-7-azaindole	333.33	1	7 - Azaindole	416.66
20	5-Bromo-7 azaindole	133.33	2	Stage-4(2,3-Dihydro-7-Azaindole)	106.66
21	Benzocaine	950.00	1	Ethyl nitro benzoate	1250
22	Losartan Potassium	66.67	5	2-Cyano-4-Methyl biphenyl (OTBN)	40.00
23	Loperamide HCl	66.67	5	4-Bromo-2,2 -diphenyl Butyronitrile	66.67
24	Fluconazole	66.67	4	1,3 Difluoro Benzene	33.34
25	Phenylephrine HCl	66.67	6	3-Hydroxy Acetophenone	66.67
26	Rabeprazole Sodium	100.00	7	2,3-Lutidine	46.00
27	Metfarmin HCl	3,361.11	1	Dicyandiamide	1882.22
28	5-Methyltetrazole	33.33	1	Acetonitrile	37.88

29	2-(Diethylamino)-6-methylpyridine	33.33	1	2-Amino-6-Methylpyridine	34.72
30	2,5-Dibromo-3-Methylpyridine	16.67	1	2-Amino-5-Bromo-3-Methylpyridine	23.56
31	2,5-Dibromo-6-Methylpyridine	16.67	1	2-Amino-5-Bromo-3-Methylpyridine	23.56
32	2,6-Dibromopyridine	66.67	1	2,6-Dichloropyridine	55.56
33	2-Amino-3-methylpyridine	166.67	1	Betapicoline	377.37
34	2-Amino-5-methylpyridine	66.67	1	Betapicoline	230.78
35	2-Amino-5-bromo-3-methylpyridine	25	1	2-Aminopyridine	11.87
36	2-Amino-5-bromo-6-methylpyridine	25	1	2-Amino-6-Methylpyridine	11.52
37	2-Amino-5-Chloropyridine	66.67	1	2-Aminopyridine	111.12
38	2-Methoxy-5-aminopyridine	16.67	1	2-Methoxy-5-Nitropyridine	23.96
39	2-Methoxypyridine	33.33	1	2-Chloropyridine	43.29
40	2-Methoxy-5-nitropyridine	33.33	1	2-Methoxypyridine	28.73
41	2-Nitro-5-Chloropyridine	33.33	1	2-Amino-5-Chloropyridine	52.12
42	3,5-Dibromopyridine	66.67	1	Pyridine	190.49
43	5-Phenyltetrazole	166.67	1	Benzonitrile	145.84
	Total (Any 8 products on campaign basis)	8583.11			

- As per the application, the above activity is to be located within the existing plant premises located at **Plot No. 36, 37 & 38, JN Pharmacy, Parawada, Visakhapatnam**
- The above site was inspected by the Asst. Environmental Engineer-I, Regional office, Visakhapatnam, A.P Pollution Control Board on 24.10.2018 and observed that the site is surrounded by

North : Road followed by M/s. KRS Chemicals
South : Vacant Plot
East : Road followed by M/s. Mylan Injectables
West : Vacant Plots No.37 & 36 of Alkali Metals followed by M/s. Corey organics.
- The Board, after careful scrutiny of the application, verification report of Regional Officer and recommendations of CFE Committee hereby issues **CONSENT FOR ESTABLISHMENT AND CONSENT FOR OPERATION FOR CHANGE OF PRODUCT MIX** to the unit 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.**
- This Consent Order now issued is subject to the conditions mentioned in 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 upto 31.12.2022 (i.e. validity of existing CFO).**

Encl: Annexure.

MEMBER SECRETARY

To

**M/s. Alkali Metals Ltd.,
Plot No. 36, 37 & 38, JN Pharmacity,
Parawada, Visakhapatnam.
alkalivsp@gmail.com,
gmprodn@alkalimetals.com**

Copy to: 1. The JCEE, Z.O: Visakhapatnam for information and necessary action.
2. The E.E., R.O: Visakhapatnam for information and necessary action.
3. The JCEE, Unit-IV, HO, Vijayawada for information and necessary action.

Annexure

1. The applicant shall provide separate energy meters for 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.
2. The industry shall construct separate storm water drains and provide rain water harvesting structures. No effluents shall be discharged in to the storm water drains.

Water:

3. The source of water is JN Pharmacy, Parawada. The maximum permitted water consumption after change of product mix is as following:

SI.No.	Purpose	Qty. as per CFE (CPM) dated 11.07.2017 (KLD)	After change of product mix (KLD)
1.	Process	55.00	30.70
2.	Washing		5.00
3.	Boiler make up	25.00	25.00
4.	Softener regeneration water	10.00	10.00
5.	Cooling make up	30.00	30.00
6.	DM Plant	2.00	2.00
7.	Pilot Plant (R & D)	2.00	2.00
8.	Scrubber system	2.00	2.00
9.	Domestic	4.00	4.00
10.	Gardening / Irrigation	10.00	10.00
	Total	140.00	120.70

4. The maximum waste water generation shall not exceed the following after Change of Product Mix:

SI. No.	Source	Qty. As per CFE (CPM) dated 11.07.2017 (KLD)			After change of product mix (KLD)		
		HTDS	LTDS	Total	HTDS	LTDS	Total
1.	Process	53.50	----	53.50	48.09	----	48.09
2.	Washings				5.00	---	5.00
3.	Boiler blow down	---	4.0	4.0	---	4.0	4.0
4.	Softener regeneration water	---	10.0	10.0	---	10.0	10.0
5.	Cooling make up	---	6.0	6.0	---	6.0	6.0
6.	DM Plant	---	2.0	2.0	---	2.0	2.0
7.	Pilot Plant (R & D)	---	2.0	2.0	---	2.0	2.0
8.	Scrubber system	---	2.0	2.0	---	2.0	2.0
9.	Domestic	---	4.0	4.0	---	4.0	4.0
	Total	53.50	30.00	83.50	53.09	30.00	83.09

Treatment & Disposal:

Source	Treatment	Mode of final disposal
HTDS	Pretreatment (Neutralization)	To M/s. Ramky Pharmacy for forced evaporation.
LTDS	Pretreatment (Neutralization)	To CETP of M/s. Ramky Pharmacy for further treatment and disposal
Domestic waste water	---	The overflow of the Septic tank shall be sent to the CETP for further treatment.

5. The Effluent Treatment Plant (ETP) shall be operated & maintained properly. All the units of the ETP shall be impervious to prevent ground water pollution.
6. Effluents shall not be discharged on land or into any water bodies or aquifers under any circumstances.
7. The industry shall install online real time monitoring system along with web camera facilities as per the directions of CPCB. The industry shall connect them to APPCB / CPCB websites as per CPCB directions.
8. 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.
9. Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below.
 - a) Industrial cooling, boiler feed.
 - b) Domestic purposes.
 - c) Processing, whereby water gets polluted and pollutants are easily bio-degradable.
 - d) Processing, whereby water gets polluted and the pollutants are not easily bio-degradable.

Air:

10. The proponent shall comply with the following after Change of Product Mix:

Sl. No	Details of Stack	Stack 1	Stack 2	Stack 3
a)	Attached to	Coal fired boiler	Thermic Fluid Heater	DG Sets
b)	Capacity	1 X 3 TPH	1 X 4 K. Cal & 1 X 6 K. Cal	1 X 625 KVA & 1 X 125 KVA
c)	Fuel	Coal 20 TPA	Diesel	HSD
d)	Stack height	32 m (Common)		8 m
e)	Details of Air Pollution Control Equipment	Mechanical Dust collector & Bag filter	---	Acoustic enclosures

11. There shall not be installation of any additional Boiler / D.G. set / Incinerator / Thermic Fluid heater/ Furnace / Kiln in change of product mix proposal. The existing air pollution control equipment shall be operated effectively to ensure compliance of stipulated emission standards:
12. The evaporation losses in solvents shall be controlled by taking the following measures:
 - i) Chilled brine circulation shall be carried out to effectively reduce the solvent losses into the atmosphere.
 - ii) Transfer of solvents shall be done by using pumps instead of manual handling.
 - iii) Closed centrifuges shall be used to reduce solvent losses.
 - iv) The reactor vents shall be connected with primary & secondary condensers to catch the solvent vapours.
 - v) All the solvent storage tanks shall be connected with vent condensers to prevent solvent vapours.
13. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.

Solid / Hazardous waste:

14. The proponent shall comply with the following after change of product mix:

S. No.	Type of waste	As per CFE order dt. 11.07.2017	After change of product mix	Mode of disposal
1.	Distillation Bottom Residue	1333.79 Kg/day	1136.41 Kg/day	To TSDF for incineration / cement industries for co-incineration
2..	Spent Carbon	10.00 Kg/day	10.00 Kg/day	
3.	Inorganic solid waste	541.65 Kg/day	1202.94 Kg/day	
4.	ETP Sludge	10 Kg/day	10 Kg/day	To TSDF for secured land filling.
5.	Used oil sludge	150 LPA	150 LPA	
6.	Detoxified containers & container liners.	100 Nos./month	100 Nos./month	To authorized recyclers
7.	Spent Solvents	---	6.23 KLD	Shall be disposed to outside parties after complete detoxification
8.	Mixed spent solvents	---	2.05 KLD	Shall be recycled within the premises / Disposed APPCB Authorized recyclers.
9.	Batteries	4 Nos/ year	4 Nos/year	Shall be recycled within the premises / Disposed APPCB Authorized recyclers.
10.	Boiler Ash	4 TPD	4 TPD	Shall be disposed to dealers on buy back basis.
				To Brick manufacturing units

15. The proponent shall place the chemical drums and / any drums in the concrete platform only. The Platform shall be provided with sufficient dyke wall and effluent collection system.
16. Container & Container liners shall be detoxified at the specified covered platform with dyke walls and the wash wastewater shall be routed to effluent collection tank.
17. The following rules and regulations notified by the MoEF&CC, Govt shall be implemented.
 - a) Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
 - b) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
 - c) Batteries (Management & Handling) Rules, 2010.
 - d) E-Waste (Management) Rules, 2016.
 - e) Construction and Demolition waste Management Rules, 2016.

Other Conditions:

18. Thick green belt shall be developed and maintained all along the boundary and vacant spaces with tall growing trees with good canopy and it shall not be less than 33% of the total area.
19. The industry shall obtain PLI policy for handling of Hazardous Chemicals.
20. The proponent shall isolate the storage of highly flammable chemicals, solvents & other raw materials from the rest of facilities in the plant premises.
21. The proponent shall ensure that there shall not be any change in the process technology, source of raw material and scope of working without prior approval from the Board.
22. The proponent shall comply with all the directions issued by the Board from time to time.
23. 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.
24. 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.
25. 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.

26. 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. Alkali Metals Ltd.,
Plot No. 36, 37 & 38, JN Pharmacy,
Parawada, Visakhapatnam.
alkalivsp@gmail.com,
gmprodn@alkalimetals.com**