



CONSENT ORDER FOR ESTABLISHMENT

Order No. 249 /APPCB/CFE/RO-KNL /HO/2017

Dt. 27.03.2017

Sub: APPCB – CFE - **M/s. Agrisol (India) Pvt Ltd, Sy. No. 163, 164 & 165, Udumulapadu (V), Dhone (M), Kurnool District** - Consent for Establishment of the Board 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) EC order dt. 12.07.2016 issued by MoEF&CC, Gol, New Delhi.
2) Industry's CFE application received through Single Desk System on 23.02.2017.
3) R.O's inspection report dt. 02.03.2017 and mail dt. 25.03.2017.

1. In the reference 2nd cited, an application was submitted to the Board seeking Consent for Establishment (CFE) to produce the following products with installed capacities as mentioned below, with a project cost of Rs. 30.0 crores.

Sl. No.	Name of the Products	Capacity (kg/day)	No. of Stages	Name of the starting Raw Material	Quantity (Kg/day)
1.	Acephate	4000	1	O, O-Dimethyl phosphoramidothioate	3995
2.	Cartap Hydrochloride	4000 (Phase I)	1	Monosultap	6745
3.	Clodinafop Propargyl	1000 (Phase I)	1	Chloral	500
4.	Difenoconazole	1000	1	4-Chlorophenol	500
5.	Diafenthiuron	2000 (Phase I)	1	2,6-diisopropyl aniline	980
6.	Emamectin Benzoate	500	1	Avermectin	715.86
7.	Ethephon	3000	1	Bis (2-chloroethyl) 2 chloroo ethyl phosphonate	5828
8.	Ethiprole	1000	1	1-(2,6-dichloro-4-(trifluoromethyl)phenyl)-4-thiocyanato-1h-pyrazole	867.25
9.	Fipronil	1000	1	2,6-dichloro-4-(trichloromethyl) aniline	600
10.	Flonicamid	1000	1	4-trifluoromethyl nicotinic acid	895
11.	Foramsulfuron	1000	1	4-formamido-N, N-dimethyl-2-sulfamoylbenzamide	678
12.	Glufosinate	1000	1	(2-bromoethyl) (methyl) phosphinic acid	1140
13.	Glyphosate	4000 (Phase I)	1	N-(phosponomethyl) iminodiacetic acid	6075
14.	Imidacloprid	2000 (Phase I)	1	2-chloro-5-chloromethyl pyridine(CCMP)	1656
15.	Imazethapyr	1000	1	Chloromethyl Acetate	452
16.	Iprobenfos (Kitazin)	1000	1	Diisoproyl phosphoro chloridate	717.49
17.	Mesosulfuron	1000	1	Methyl 4-(mesylamino)-2-sulfomyl benzoate	707
18.	Metribuzin	1000	1	3,3-dimethyl dutyric acid	651
19.	Nitenpyram	1000	1	1,1,2-richloroethane	755
20.	Penoxsulam	1000	1	2-fluoro-6-trifluoromethyl aniline	421
21.	Picoxystrobin	1000	1	3-isochromanone	493.33
22.	Pretilachlor	1000	1	2,6 Diethylaniline (DEA)	575.13

Validity unknown

Digitally Signed By P. S. Prasad (Member Secretary)

Date : 27-Mar-2017 13:44:27 IST

23	Prothioconazole	1000	1	Dimethyl Sulfide	206.67
24	Pyraclostrobin	1000	1	4-Chlorophenyl hydrazine hydrochloride	524
25	Spirotetramat	1000	1	2-(2,5-dimethylphenyl)acetic acid	572
26	Sulfosulfuron	1000	1	2-amino-4,6-dimethoxy pyrimidine	396.03
27	Thiocyclam	1000	1	Bisultap	133
28	Thiomethaxam	4000 (Phase I)	1	5-methyl-4-nitroimino tetrahydro-1,3,5-oxadiazine with 2-chloro-5-chloromethyl thiazole	2485
Total Phase I (3 Products on Campaign Basis)		12,000 kg/day			
Total Phase II (3 Products on Campaign Basis)		9,000 kg/day			
Total Phase I & II (6 Products on Campaign Basis)		21,000 kg/day			

Note: The industry wide email dated 02.03.2017 has informed that they will be manufacturing products mentioned at Serial No. 2,3,5,13,14 & 28 in Phase I & proposes to manufacture all other products in Phase II of their project.

List of By Products:			
S.No.	Products	By Products	Quantity of Generation
1.	Acephate	Ammonium Acetate	1430.8 kg/day
2.	Cartap Hydrochloride	Sodium Sulphite	3682.7 kg/day
3.	Clodinafop Propargyl	Potassium Chloride	639.5 kg/day
4.	Diafenthiuron	Calcium Chloride	764.0 kg/day
5.	Flonicamid	Sodium Sulphite	529.3 kg/day
6.	Glufosinate	Ammonium Sulphate	730.0 kg/day
7.	Metribuzin	Dimethyl Sulfate	523.2 kg/day
8.	Thiocyclam	Sodium Sulphite	743.1 kg/day
9.	Thiomethaxam	Potassium Chloride	1022.0 kg/day

- As per the application, the above activity is to be located at Sy. No. 163, 164 & 165, Udumalapadu (V), Dhone (M), Kurnool District in an area of 33.0 Acres.
- The above site was inspected by the Environmental Engineer & Asst. Environmental Engineer, Regional Office, Kurnool, A.P Pollution Control Board on 27.02.2017 and observed that the site is surrounded by
 - North** : Approach Road followed by Dry Agricultural lands
 - South** : Dry Agricultural lands
 - East** : Dry Agricultural lands
 - West** : Dry Agricultural lands
- The Board, after careful scrutiny of the application, verification report of Regional Officer and recommendations of the CFE Committee, hereby issues **CONSENT FOR ESTABLISHMENT** to your activity 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 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 period of 7 years from the date of issue.**

Encl: Annexure

MEMBER SECRETARY

To

**M/s. Agrisol (India) Pvt Ltd,
H.No.10-2-289/87, 101 Fortune Heights,
Shantinagar, Masab Tank,
Hyderabad – 500025
agrisolindiapvtltd@gmail.com**

Copy to: 1. The JCEE, Z.O., Kurnool for information and necessary action.
2. The EE, R.O., Kurnool 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 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.
3. 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:

1. The source of water is Bore well and the maximum permitted water consumption is as following:

S. No.	Purpose	CONSUMPTION IN (KLD)			
		Fresh Water		Recycled Water	
		Phase I	Phase II	Phase I	Phase II
1.	Industrial cooling, boiler feed.	60.0	70.0	65.0	55.0
2.	Domestic and Gardening purposes.	18.0	10.0	7.0	8.5
3.	Processing, whereby water gets polluted and pollutants are easily bio- degradable.	----	----	----	----
4.	Processing, whereby water gets polluted and the pollutants are not easily bio-degradable.	50.8	40.7	----	----
	Sub total	128.8	120.7	72.0	63.5
	Gross total	249.5 KLD		135.5 KLD	

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

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

Sl. No.	Source	HTDS effluent (KLD)			LTDS effluent (KLD)		
		Phase - I	Phase - II	Total	Phase - I	Phase - II	Total
1.	Process	36.9	30.8	67.7	---	---	---
2.	Reactor & Floor Washings	5.0	3.0	8.0	---	---	---
3.	Boiler blow down	---	---	---	2.0	2.0	4.0
4.	Cooling towers blow down	---	---	---	12.5	12.5	25.0
5.	Scrubbing system	3.0	2.0	5.0	---	---	---
6.	DM plant regeneration	10.0	10.0	20.0	---	---	---
7.	Domestic	---	---	---	7.0	8.5	15.5
	Total	54.9	45.8	100.7	21.5	23.0	44.5

Treatment & disposal:

Source of effluent	Treatment	Mode of final disposal
High TDS Effluents (having TDS & COD >15,000 mg/ ltr) from Process, washings, Scrubber, RO/ DM rejects from pre-treatment of raw water. (54.9 KLD in Phase -I & 45.8 KLD in Phase-II)	Treatment system consists of Equalization, Neutralization, Settling tank, Stripper; Multiple Effect Evaporator (MEE); and Agitated Thin Film Dryer (ATFD).	<p>The stripper condensate shall be disposed to Cement Industries for Co-Processing.</p> <p>The stripper bottom residue shall be treated in MEE.</p> <p>MEE concentrate to ATFD. ATFD salts to TSDF, Parawada.</p> <p>The MEE and ATFD condensate shall be mixed with low TDS effluents and treated in Biological ETP followed by RO system.</p> <p>The RO rejects to MEE System.</p> <p>RO Permeate shall be reused in cooling tower make up.</p>
Low TDS effluents (having TDS & COD <15,000 mg/ ltr) from Boiler blow down, and Cooling tower blow downs. (14.5 KLD in Phase -I & 14.5 KLD in Phase-II)	Biological ETP consists of equalization, neutralization, primary sedimentation, aeration tank, clarifier. RO Plant – I & RO Plant – II .	<p>The treated waste water is further treated in RO system.</p> <p>The RO permeate shall be reused for cooling tower makeup.</p> <p>RO rejects shall be sent to the MEE system for evaporation.</p>
Domestic effluents (7 KLD in Phase I and 8.5 KLD in Phase II)	<p>The industry shall provide 2 No. of Sewage treatment plants (STP) of capacity 10 KLD in each phase.</p> <p>The STP consists of Bar Screen Chamber, Grit Chamber, Equalization tank, Fluidized Aerobic bio reactor (FAB), pre Filtration Tank, Pressure Sand filter, activated carbon filter, sludge filter press.</p>	Treated sewage shall be used for on land gardening with the premises.

S.No	Facility Description	Capacity KLD	
		Phase – I	Phase – II
1	Stripper	55	40
2	Multiple Effect Evaporator	95	80
3	Agitated Thin Film Dryer	10	8
4	Biological Treatment Plant	100	85
5	Reverse Osmosis Plant – I	100	80
6	Reverse Osmosis Plant – II	50	30
7	Sewage treatment plants	10	10

- The ZLD system consisting of Stripper, MEE, ATFD system with condenser and Biological ETP, RO system shall be installed and commissioned. All the units of the ZLD system shall be impervious to prevent ground water pollution. The units of ZLD system shall be constructed above the ground level.

Effluents shall not be discharged into any water bodies or aquifers under any circumstances. They shall be no discharge into stream flowing at a distance of 50 m from the site.

4. The industry shall provide magnetic flow meters with totalisers at the inlet and outlet of Stripper, MEE ETP and RO plants.
5. 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.
6. In the manufacture of Cartap HCL, about 13.8 KLD of aqueous layer containing sodium cyanide of concentration 24,500 mg/ltr is generated. The industry shall treat this aqueous layer with chlorine gas at high pH in the presence of sodium hydroxide. After completion of the reaction the water is to be evaporated and condensed. It is to be reused in stage-II of next batch. The resultant residue (Sodium Chloride) shall be collected and lifted to TSDF, Parawada for secured land filing.

Air:

7. The Air pollution Control equipment shall be installed along with the commissioning of the activity and shall comply with the following for controlling air pollution.

Sl. No.	Details of Stack	Phase I		Phase II	
		Stack 1	Stack 2	Stack 3	Stack 4
a)	Attached to:	boiler	DG Set's	boiler	DG Sets
b)	Capacity	8.0 TPH	3x1000 KVA	8.0 TPH	3x1000 KVA
c)	Fuel :	Coal	---	Coal	---
d)	Stack height above ground (m)	40 m	10 m	40 m	10 m
e)	Air Pollution Control Equipment:	Bag Filter	Silencer with acoustic enclosure	Bag Filter	Silencer with acoustic enclosure

8. 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.
9. 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.
10. The industry shall provide VOC monitoring system with auto recording facility.
11. The industry shall implement adequate measures to control all fugitive emissions from the plant.
12. 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.

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

14. The industry shall send the used / spent solvents to the recyclers (or) process them at their own solvent recovery facility within the premises.
15. 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) All the solvent storage tanks shall be connected with vent condensers to prevent solvent vapours.
 - v) The reactor vents shall be connected with primary & secondary condensers to prevent escaping of solvent vapour emissions into atmosphere.
16. The emissions containing Bromine gases shall be routed through water scrubber, caustic scrubber provided in series. The vent of the caustic scrubber shall be dipped into dilute caustic soda lye for effective removal of Bromine in the emissions. Two stage Caustic scrubbers shall be provided to control acid emissions.

Solid Waste:

17. The industry shall comply with the following for disposal of Solid wastes:

S. No	Source of Solid Waste	Quantity			Method of Disposal
		Phase I	Phase II	Total	
a)	Process Organic Residue	5.90	2.70	8.60	to TSDF/Cement Industries for co processing
b)	Solvent Residue	2.00	1.50	3.50	
c)	Evaporation Salts	5.76	2.80	8.56	to TSDF, Parawada for secured landfill.
d)	ETP Sludge	0.35	0.21	0.56	
e)	Stripper Distillate	1.13	0.70	1.73	to Cement Industries for Co-incineration
f)	Spent Solvents	60 KLD	40 KLD	100 KLD	Recovered within the plant premises.
g)	Mixed Solvents	7.2 KLD	5.3 KLD	12.5 KLD	to authorized recovery units/Cement plants for co-incineration
h)	Waste oil	0.23	0.23	0.46 Kl/month	to Authorized Recyclers / Reprocessors
i)	Used batteries	15	15	30 No./Annum	Sold to Battery Manufacturers / dealers on buy back basis.

Non- Hazardous solid waste

a)	Ash from Boiler	10.8	10.8	21.6	Sold to Brick manufactures
b)	Detoxified containers	1200	800	2000 No./Annum	After complete detoxification, sold to Authorized agencies.

18. 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.

19. The following rules and regulations notified by the MoE&F, GoI 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:

20. Green belt shall be developed all along the boundary & vacant spaces with tall growing trees with good canopy and it shall not be less than 33% of the total area.
21. Concealing the factual data or submission of false information/ fabricated data and failure to comply with any of the conditions mentioned in this order and attract action under the provisions of relevant pollution control Acts.
22. Notwithstanding anything contained in this conditional 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 in the order, review any or all the conditions imposed herein and to make such alternation as deemed fit and stipulate any additional conditions or revoke the order in the interest of environment protection.
23. Any person aggrieved with this order 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 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

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