Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
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Dated : 06th March, 2017

To,

The Executive Director
M/s Deccan Fine Chemicals (India) Pvt. Ltd.
8-2-293/82/A/74A, Road No. 9,
Jubilee Hills, Hyderabad-500033
Andhra Pradesh

Sub: Proposed expansion of Agrochemicals , Fine Chemicals, Biotech based organic chemicals, establishment, of Pharmaceutical unit, coal based Co-generation Plants, Chloralkali unit and Desalination plant along with inlet and outlet pipeline at Kesavaram Village, Venkatanagaram Post, Payakaraopeta Mandal , Visakhapatnam District, Andhra Pradesh by M/s Deccan Fine Chemicals (India) Pvt. Ltd. – Environmental Clearance and CRZ Clearance - reg.

Ref.: Your online proposal no. IA/AP/IND2/59907/2015 dated 22nd October, 2016.

Sir,

This has reference to your online proposal no IA/AP/IND2/59907/2015 dated 22nd October, 2016 along with project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report along with Public Hearing Report regarding above mentioned project.

2.0 The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for Proposed expansion of Agrochemicals , Fine Chemicals, Biotech based organic chemicals, establishment, of Pharmaceutical unit, coal based Co-generation plants and Chloralkali unit at Kesavaram village, Venkatanagaram Post, Payakaraopeta Mandal, Visakhapatnam District, Andhra Pradesh by M/s Deccan Fine Chemicals (India) Pvt. Ltd. Existing land area is 40 Acres. Additional 190 Acre land will be required under proposed expansion, out of which 76 Acre area will be developed as green belt. Capital Cost of project is ₹1200 crore. Cost earmarked for EMP is ₹ 97.47 Crore and recurring cost per annum is ₹ 15 crores. Following are the list of existing and proposed products:

S. No.	Description	Unit	Capacity			
			Permitted	Proposed expansion		Total After Expansion
				Phase I	Phase II	
1	Agro & Fine chemicals	TPD	26.25	43.75	70.00	140.00
2	Active Pharma Ingredients (API)	TPD	---	10	10	20
3	Co-generation Power Plant	MW	---	1x 12 1x 25	2X25	87
4	Chlor-Alkali		---			
A	Caustic (100%)	TPD	---	---	200	200
B	Chlorine	TPD	---	---	177.2	177.2
C	Hydrogen	TPD	---	---	5.14	5.14
D	HCl (33%)	TPD			280	280
E	Sodium Hypo Chloride	TPD			40	40

Manufacturing Capacity – Before and After Expansion
(Agro and Fine Chemicals)

S. No.	Name of the Product	Capacity TPD		
		Permitted	After Expansion	
			Phase I*	Phase II
1	2- Cumaranone	2.12	2.12	4.24
2	Alaninester	0.91	1.27	1.27
3	Amicarbazone	2.12	3.18	3.18
4	Buprofezine	0.61	1.27	0.85
5	Clethodium	2.42	5.09	3.39
6	Daimuron	0.91	1.27	0.85
7	DEMBB (2,6-Diethyl-4-methyl-Bromobenzene)	0.15	---	---
8	Difenconazole	0.76	4.24	8.48
9	Fenbuconazole	0.30	1.70	1.70
10	Flucarbazone	0.30	1.27	1.27
11	Flumetralin	0.45	1.70	2.12
12	Folpet	0.61	1.70	1.70
13	Methoxy A A	0.61	2.12	2.55
14	Metobromuron	0.38	1.70	1.70
15	Myclobutanil	0.76	2.12	2.12
16	N,N-dimethyl-4-nitro-2-sulfanoyl benzamide	0.15	---	---
17	Para Benzoquinone	1.82	4.24	4.24

18	Pretillachlor	2.12	3.18	3.18
19	Prodiamine	1.52	3.18	4.24
20	Propiconazole	0.55	2.97	5.94
21	Pyraflufin ethyl (ET-751)	0.18	0.64	
22	Pyridate	0.61	1.70	1.70
23	Sulfentrazone	0.61	10.61	--
24	Tacsifun	1.21	2.12	1.27
25	Tebufenozide	0.15	4.24	8.48
26	Tricyclazole	1.52	4.24	4.24
27	Vulkalent –E	2.42	2.12	1.27
	Total	**26.25**	**70**	**70**

List of By-Products – Before and After Expansion (Agro and Fine Chemicals)

Name of the Product	**Stage**	**Name of the By-Product**	**Capacity (TPD)**		
			Permitted	**After Expansion**	
				Phase I	**Phase II**
Pyraflufin Ethyl (ET-751)	V	Sodium Bisulphate (30%)	16.4	57.40	----
	II	Sodium Bisulphite (30%)	---	0.67	----
Tacsifun	I	Sodium Bisulphite (30%)	---	3.40	2.04
Sulfentrazone	IV	Spent Acid containing Sulfuric acid (60%)	---	168	---
From Scrubber	HCl Solution (20%)		14.20	37.67	21.24

Manufacturing Capacity – API's

S.No	**Name of the Product**	**Capacity (TPD)**	
		Phase I	**Phase II**
1	Atorvastatin Calcium	2.0	2.0
2	Candesartan Cilexetil	1.0	1.0
3	Cinitapride Tartrate	0.5	0.5
4	Clopidogrel Bisulphate	1.0	1.0
5	Ketorolac Trimethamine	0.5	0.5
6	Levocetirizine Dihydrochloride	0.5	0.5
7	Terbinafine Hydrochloride	1.0	1.0
8	Valsartan	1.0	1.0
9	Vardenafil HCl Trihydrate	1.0	1.0
10	Voriconazole	0.5	0.5
11	Zafirlukast	0.5	0.5
12	Ziprasidone Hydrochloride	0.5	0.5
	Total	**10.0**	**10.0**

List of By-Products – API's

Name of the Product	Stage	Name of the By-Product	Capacity (TPD)	
			Phase I	Phase II
Candesartan Cilexetil	IV	Tert-Butyl Carbonchloridate	0.51	0.51
	V	Stannic Chloride	0.83	0.83
	VI	Tributyl Tinchloride	0.92	0.92
	IX	Trityl Chloride	0.46	0.46
Clopidogrel Bisulphate	VIII	Camphor Sulfonic Acid	0.55	0.55
Valsartan	V	Tributyltin Chloride	0.93	0.93
From Scrubbers	HCl Solution (20%)		12.3	12.3

3.0 The total power requirement will be met from co-generation power plants of 1 x 12 MW and 3 x 25 MW capacity and back up DG sets of capacity 20 x 2500 KVA (Phase I: 10 x 2500 KVA and Phase II: 10X 2500 KVA) proposed in addition to existing 2 x 2000 KVA and 4 x 1000 KVA. Coal will be used as fuel for proposed 3 x 160 TPH, 1 x 80 TPH, 2 x 75 TPH boilers, 10 x 3 Million K.Cal/hr thermic fluid heater and existing 1 x 20 TPH coal fired boiler and 1 x 1.5 Million K.Cal/hr. Consumption of coal is 108 MT/hr. The sources of air pollution from the plant are from proposed coal fired boilers, thermic fluid heaters and standby DG sets. The utilities are provided with provided with stack height based on CPCB formulae, in addition to Electrostatic precipitators and Bag filters proposed air pollution control equipment. Gaseous emissions from process are Ammonia, Hydrogen Bromide, Hydrogen Chloride, Hydrogen Sulfide, Sulfur Dioxide, Sulfur Trioxide, Carbon Dioxide, Nitrogen, Oxygen and Hydrogen. Ammonia, Hydrogen chloride, Mercaptans, Hydrogen Sulfide, Sulfur Dioxide and Sulfur Trioxide gases will be sent to scrubbers in series. Hydrogen bromide gas will be sent to scrubbers and the resultant effluent is sent to bromine recovery plant. Scrubber will be provided to Chlor-alkali plant. Tail gas vents will be connected to a Venturi scrubber and the lean acid formed will be used for absorption of Hydrogen chloride gas in absorber.

The total fresh water requirement will be 24.37 MLD (Phase I: 10.07 MLD and Phase II: 14.30 MLD). The required water to be drawn from proposed desalination plant using sea water through pipeline as input with a capacity of 33.567 MLD for Phase I and 47.677 MLD for Phase II. Andhra Pradesh Coastal Zone Management Authority vide letter no. 004/CZMA/2016 dated 17.10.2016 recommended to the MoEF&CC for grant of CRZ clearance in terms of provisions under paragraph 3. (v) and 4 (ii) (d) of CRZ Notification, 2011. The SCZMA has recommended that the corridor proposed for the pipeline is traversing through CRZ area which is classified as CRZ-III and CRZ-I (B), CRZ-IV (A) and CRZ-IV (B). Effluents will be segregated as low TDS and high TDS stream. High COD/TDS stream in a stripper followed by multiple effect evaporator (MEE), and agitated thin film dryer (ATFD). The distillate from stripper is sent to cement plants for co-incineration, while the condensate from MEE

and ATFD is mixed with low TDS/COD effluents to be treated in biological system. Treated effluent will be discharged to the sea through pipeline. Total quantity of treated effluent discharged into the Sea through marine outfall facilities will be 11,749 KLD (Phase I: 5,592 KLD and Phase II: 6,157 KLD) and quantity of RO Rejects from desalination plants discharged to the Sea through marine outfall facilities will be 56,874 KLD (Phase I: 23,497 KLD and Phase II: 33,377 KLD).

The salts from ATFD will be sent to TSDF for disposal .The stripper distillate, process residue and solvent residue will sent to cement plants for co-incineration based on acceptability. The evaporation salts and ETP sludge will be sent to TSDF. Waste oil and used batteries from the DG sets will be sent to authorized recyclers.

4.0 Public Hearing/Public Consultation meeting was conducted by the Andhra Pradesh Pollution Control Board on 15th July, 2016.

5.0 All Pesticide Manufacturing unit are listed at S.N. 5(b), all synthetic organic chemical manufacturing unit are listed at S. N. 5(f) and all Chlor Alkali Industry located outside the notified industrial estate are listed at at S.N. 4(d) under category 'A' and appraised at central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 16th and 17th meetings held during 8th-9th December, 2016 and 26th-29th December, 2016 respectively. Project Proponent and the EIA Consultant namely M/s TEAM Labs and Consultants, have presented EIA/EMP report as per the TOR. EAC has found the EIA/EMP Report to be satisfactory and in full consonance with the presented TORs. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

i. Electrostatic precipitators and Bag filters and the stack of adequate height shall be provided to Coal fired boilers and Thermic fluid heaters.

ii. Gaseous emissions from process are Ammonia, Hydrogen Bromide, Hydrogen Chloride, Hydrogen Sulfide, Sulfur Dioxide, Sulfur Trioxide, Carbon Dioxide, Nitrogen, Oxygen and Hydrogen. Ammonia, Hydrogen chloride, Mercaptans, Hydrogen Sulfide, Sulfur Dioxide and Sulfur Trioxide gases shall be sent to scrubbers in series. Hydrogen bromide gas shall be sent to scrubbers and the resultant effluent shall sent to bromine recovery plant.

iii. Scrubber shall be provided to Chlor-alkali plant. Tail gas vents shall be connected to a Venturi scrubber and the lean acid formed will be used for absorption of Hydrogen chloride gas in absorber.

iv. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB.

v. Odour management plan shall be implemented.

vi. Total fresh water requirement from sea shall not exceed 33.567 MLD for Phase I and 47.677 MLD for Phase II and prior permission shall be obtained from the concerned authority.

vii. Effluents shall be segregated as low TDS and high TDS stream. High COD/TDS stream in a stripper followed by multiple effect evaporator (MEE), and agitated thin film dryer (ATFD). The condensate from stripper is sent to cement plants for co-incineration, while the condensate from MEE and ATFD is mixed with low TDS/COD effluents to be treated in biological system. After treatment waste water will be discharged to the sea through pipeline.

viii. All the Solvent storage tanks shall be provided with breather valves to minimize breathing and evaporation losses.

ix. The salts from ATFD will be sent to TSDF for disposal .The stripper distillate, process residue and solvent residue will sent to cement plants for co-incineration based on acceptability. The evaporation salts and ETP sludge will be sent to TSDF. Waste oil and used batteries from the DG sets will be sent to authorized recyclers.

x. The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from SPCB shall be obtained for disposal of solid/hazardous waste in the TSDF. Measures shall be taken for fire-fighting facilities in case of emergency.

xi. Fly ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.

xii. Solvent management shall be as follows :

- Reactor shall be connected to chilled brine condenser system
- Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
- The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery
- Solvents shall be stored in a separate space specified with all safety measures.
- Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- Entire plant where solvents are used shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.

xiii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

xiv. All the issues raised during the Public Hearing/consultation meeting held on 15th July, 2016 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.

xv. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESR) based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

xvi. As proposed, green belt of 76 Acre shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, in downward direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation.

xvii. Isolation of production of Pharma and agro product must be ensured under consultation with certified experts.

xviii. The proposed constructions shall conform to the norms prescribed in CRZ Notification issued by the Ministry of Environment and Forests, Government of India S. O. No.19 (E), dated 06-01-2011.

xix. No activity on ground shall be undertaken without obtaining Environmental Clearance from the Ministry of Environment and Forests, Government of India as per S. O. No.19 (E), dated 06-01-2011.

xx. The industry shall submit half yearly monitoring report to the APPCB on the status of terrestrial and marine environment.

xxi. The effluent samples collected from the guard pond before marine outfall should be checked periodically for all parameters and compare the results with the standards fixed by the Central Pollution Control Board/A. P. Pollution Control Board.

xxii. The project proponent may consider to entrust the work of analyzing the sea water including seabed samples collected at marine discharge point to the agencies that possess the equipment for carrying out such tests to ascertain the quality of effluent discharged into the sea. The monitoring and evaluation of the quality of effluent based on physico-chemical and biological studies would be carried out periodically.

xxiii. The toxicity of the effluent before release need to conform to bioassay test prescribed by the Central Pollution Control Board (CPCB) and further the toxicity of the effluent released into the sea is to be measured at 30-32 ppt i.e. ambient environmental conditions. There shall not be any mortality to juvenile fish.

xxiv. The efficiency of diffuser should be monitored regularly to ensure proper dilution of effluents. The industry shall discharge effluent at a distance of (-) 10 M below CD irrespective of quantum of effluent generated by the industry, to achieve higher rate of dilution. The toxicity of the effluent released into the sea is to be measured by adopting the end salinity observed at the discharge point.

xxv. The industry shall submit a Detailed Report on the physical nature of sea bed including slope of the corridor for its suitability of pipeline after carrying out detailed engineering investigation.

xxvi. The industry shall undertake afforestation of lands along the coast using suitable local species to serve as shelter belt and wind breaks to ensure protection of interior areas.

xxvii. There shall be no disturbance to the free flow water into the creeks and suitable measures to avert formation of shoals at the mouth of the Pampa river.

xxviii. There shall be no discharge of untreated sewage or solid waste generated during construction and subsequent operation stage.

xxix. Collection of sand or any other sub-strata material is prohibited and there shall be no disturbance to the sand humps in any manner.

xxx. Full cooperation shall be extended to all inspecting authorities/organizations such as APPCB, MoEF&CC, CPCB and local Environment Protection Organizations.

xxxi. Collection of sand or any other sub-strata material is prohibited and there shall be no disturbance to the sand humps in any manner.

xxxii. Full cooperation shall be extended to all inspecting authorities/organizations such as APPCB, MoEF&CC, CPCB and local Environment Protection Organizations.

xxxiii. Captive Power Plant will follow all prescribed norms laid down by the MoEF&CC/CPCB.

B. GENERAL CONDITIONS:

i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In *case* of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the SPCB and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

v. The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.

vi. During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.

vii. Usage of Personnel Protection Equipments by all employees/ workers shall be ensured.

viii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

ix. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.

x. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.

xi. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

xii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

xiii. The company shall earmark sufficient funds for recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

xiv. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.

xv. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the State Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

xvi. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Offices of MoEF by e-mail.

xvii. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

xviii. The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

9.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

10.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention &. Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

6.3.2017

(Yogendra Pal Singh)
Scientist 'D'

Copy to:-

1. The Principal Secretary, Department of Environment, Forest, Science & Technology, Government of Andhra Pradesh, Hyderabad, A.P.
2. The Chief Conservator of Forests, Regional Office (Southern Zone, Bangalore) Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Banglore-560034.
3. The Chairman, Central Pollution Control Board Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Andhra Pradesh Pollution Control Board, Paryavaran Bhawan, A-III, Industrial Estate, Sanath Nagar, Hyderabad, A.P.
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi.
6. Guard File/Monitoring File/Record File.

6.3.2017

(Yogendra Pal Singh)
Scientist 'D'