Government of Maharashtra

No.: SEAC 2010/ CR.656 /TC-2
Environment department,
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai 400 032
Date: 11th May, 2011

To,
M/s. Deepak Fertilizers and Petrochemicals Corporation Ltd.
Plot K-1, MIDC, Industrial Area,
Taloja, A.V. 410208,
District: Raigad,
P.B. 26
Maharashtra

Subject: Gas-based power project (2X5.2MW and 1X 7.5MW) at their manufacturing facility at MIDC, Taloja by M/s. Deepak Fertilizers and Petrochemicals Corporation Ltd. - Environmental clearance regarding.

Sir,

This has reference to your communication dated 27th April, 2010 on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee, Maharashtra in its 40th meeting and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 34th meeting held on 28th February, 2011.

2. It is noted that the proposal is for grant of Environmental Clearance for Gas-based power project (2X5.2MW and 1X 7.5MW) at their manufacturing facility at MIDC, Taloja by M/s. Deepak Fertilizers and Petrochemicals Corporation Ltd. SEAC considered the project under screening category 1 (d) as per EIA Notification 2006. Project proponent has submitted EIA Report.

Project information from documents submitted by you & considered by SEAC & SEIAA is summarized as below-

Name of the Project: Gas-based power project (2X5.2MW and 1X 7.5MW) at M/s. Deepak Fertilizers and Petrochemicals Corporation Ltd.

Project Proponent: M/s. Deepak Fertilizers and Petrochemicals Corporation Ltd.

Location of the project: Gas-based power project of 2X5.2MW at K7- K8 plot and 1X 7.5MW at K1 – K5 plot of MIDC, Taloja

Type of Project: Power project

Estimated cost of the project: ₹ 79 Crores

Capacity: 2X5.2MW and 1X 7.5MW

Type of Fuel	2X5.2MW Quantity	1X 7.5MW Quantity
Natural gas	41.739 Million SM3	8.4 Million SM3
Naphtha	-	2050 MT/day
Furnace oil (If NG not available)	75 KL/day	52.5 MT/day
Diesel	7.87 KL/day	2000 lit/day

Water requirement: Source: MIDC
For 2 X 5.2MW: 4150 CMD
For 1X 7.5MW: 17,481 CMD
Effluent generated: 3878.28 CMD
Capacity of ETP : 4000 CMD
Treated Effluent will be routed to CETP, Taloja for further treatment

Total Solid waste generation:
Non Hazardous waste:

- Canteen waste: 85 kg/day
- Paper waste: 20 kg/day
- Damaged bags: 150 nos./month
- Metal scrap: 50 MT/Annum
- ETP Sludge: 28 kg/day
- Clean empty carboys/container : 660 nos./year
- De- NOx catalyst : 10 MT/6yrs.
- Pt-RH Catalyst : 100 kg/year

Hazardous waste:

- Spent Catalyst : 48.34 MT/y
- Spent oil: 92. 61 KL/Y
- Silica gel: 60 MT in 2 years.
- Oil soaked cotton waste: 3.5 MT/yr.
- Chemical containing residues from decontamination & disposal: 2 MT/yr.
- Lead acid batteries: 34 nos./yr.
- Ni Cd batteries : 400nos./once in 5 years.
- Dry cell batteries : 300nos./once in 5 years.
- Discarded drums /liners : 970 nos/yr.
- used oil filters : 25 nos./yr
- pt RH Catalyst : 100 kg/year.
- De-Nox catalyst: 10 MT/6 yrs.

Disposal :

- Taloja Hazardous waste management treatment facility.
- Disposal to registered party.

Project technical details :

	K1 – K5	K7- K8
Generation capacity	7.52 MW x 1 unit	5.2 MW x 2 units
Steam generation	11.5 TPH	9 TPH each
Natural gas consumption	0.048 MMScm per day	0.086 MMScm per day
DM water consumption	43 m3/hr	63 m3/hr
Flue gas temperature	100^0 C	160^0 C
Make	TURBOMACH Switzerland	TURBOMACH Switzerland
HRSG	Thermax	ME - Energy

Total investment	39 Cr	40 Cr

Environmental consideration:

7.52 MW x 1 unit			
	Liquid effluent	**Gaseous emission**	**Other waste**
Category	Blow down from water	Flue gas	Used oil
Quantity	3 m3/hr	95613 kg/hr	2 lit/day
		Ar: 0.87% Co_2: 2.97% H_20: 9.44 % N_2: 72.94% O_2: 13.77% NOx < 100 ppm Sox Nil	
Disposition	Recycled to cooling	Release through stack Ht 30 mt	Sale to register party

5.2 MW x 2 units			
	Liquid effluent	**Gaseous emission**	**Other waste**
Category	Blow down from water	Flue gas	• Used oil
Quantity	6 m3/hr	71875 kg/hr	2 lit/day
		Ar: 0.87% Co_2: 2.97% H_20: 9.44 % N_2: 72.94% O_2: 13.77% NOx < 100 ppm Sox Nil	
Disposition	Recycled to cooling	Release through stack Ht 30 mt	Sale to register party

Emission from combustion of fossil fuels from stationary and mobile source:

- About 95613 Kg / hr of exhaust gases from 7.5 MW GT (K1-K5 plot) and 143750 Kg/hr from 2 no GT's 5.2 MW each (K7-K8 plot) shall vent to atmosphere which will contain about 2.5% (vol %) CO_2 and less than 100 ppm NOx.

Air pollution control measures:

- NOx. analyzer in WNA stack – 4 nos.
- continuous ambient air monitoring instruments (SPM, NOx, Sox, NH3) – 3 stations
- V- notch for measuring ETP treated effluent.
- Stacks for boilers & HRSG
- Bag house for SPM controller
- Gas turbine with inbuilt technology for NOx reduction
- Cyclone column scrubbers in AN solution plant.

Green Belt development: 5 hectares of land will be developed as green belt.

Noise pollution measures: all designed are equipped for 85 dB

Environmental Management Plan

Sr. No.	Description	Capital Cost (₹)		Recurring Cost per annum(₹)	
		Plot K1-K5	Plot K7-K8	Plot K1-K5	Plot K7-K8
1	Air Pollution Control Measures	~ 16.2 Crore	~ 19.5 Crore	11 lac	16 lac
2	Noise Pollution Control Measures	~1.0 Crore	~1.5 Crore	1 Crore	1.5 Crore
4	Water Pollution Control measure	5.0 lac	8.0 lac	0.5 lac	1.0 lac

Other Measures :

Activity	Investment		Advantages
	Plot K1-K5	Plot K7-K8	
Green patch in the vicinity of proposed power plant (Garden etc.)	5 lac	8 lac	Improvement in ambience of the premises
Plantation (Inside & outside plant premises & in the vicinity villages)	15lac	10 lac	Air Pollution Control measure & Social cause
Environment awareness hordings	5 lac	5 lac	Awareness improvement programme.

3. The proposal has been considered by SEIAA in its 34th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions.

(i) Project proponent should confirm that, there is no increase in waste water and air pollutants discharged into environment due to proposed expansion.

(ii) This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with request to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any. This environmental clearance issued with respect to the environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.

(iii) "Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.

(iv) No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.

(v) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.

(vi) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.

(vii) Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.

(viii) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.

(ix) Arrangement shall be made that effluent and storm water do not get mixed.

(x) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.

(xi) Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.

(xii) Proper House keeping programmes shall be implemented.

(xiii) The overall noise levels in and around the plant are 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 confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.

(xiv) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.

(xv) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.

(xvi) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.

(xvii) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.

(xviii) The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.

(xix) The company shall undertake following Waste Minimization Measures :

a. Metering of quantities of active ingredients to minimize waste.
b. Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
c. Maximizing Recoveries.
d. Use of automated material transfer system to minimize spillage.
e. Use of "Closed Feed" system into batch reactors.

(xx) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.

(xxi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

(xxii) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.

(xxiii) Separate silos will be provided for collecting and storing bottom ash and fly ash.

(xxiv) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department

(xxv) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://envis.maharashtra.gov.in

(xxvi) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.

(xxvii) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

(xxviii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(xxix) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC 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 SPCB.

(xxx) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

(xxxi) The environmental clearance is being issued without prejudice to the court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him.

4. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

5. **Validity of Environment Clearance**: The environmental clearance accorded shall be valid for a period of 5 years to start of production operations.

6. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the

adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

7. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

8. Any appeal against this environmental clearance shall lie with the National Environmental Appellate Authority, if preferred, within 30days as prescribed under Section 11 of the National Environmental Appellate Act, 1997.

(Valsa R Nair Singh)
Secretary,Environment
department & MS, SEIAA

Copy to:

1. Shri. Ashok Basak, IAS (Retd.), Chairman, SEIAA, 502, Charleville, 'A' Road, Churchgate, Mumbai- 400 020, Maharashtra.
2. Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEAC, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerla.
3. The Secretary, Energy department, Govt. of Maharashtra, Mantralaya, Mumbai - 400032., Maharashtra
4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
6. Regional Office, MPCB, Raigad.
7. Collector, Raigad.
8. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
9. Director(TC-1), Dy. Secretary(TC-2),Scientist-1,Environment department
10. Select file (TC-3).