

# **Model Letter for Environmental Clearance - Industrial Project**

**GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT & FORESTS  
PARYAVARAN BHAWAN, C.G.O. COMPLEX  
LODHI ROAD, NEW DELHI-110003**

No. ....

Dated .....

Subject :- Modernisation-cum-Expansion of Panki Fertiliser Plant at Kanpur by M/s Duncans Industries Ltd. Env. Clearance.

Sir,

This has reference to letter of 25th July, 1996 and subsequent letters of 7th August, 1996, 25th October, 1996 and 30th June, 1997 regarding your application for modernisation and capacity augmentation of the existing Panki Fertiliser Plant at Kanpur. The MOE&F has carefully examined your application. It is observed that on modernisation the capacities of ammonia and urea plants will be enhanced from 1245 TPD to 1560 TPD and 2046 TPD to 2730, TPD respectively.. It is also noted that on modernisation the existing coal based captive power plant (12.5 MW) will be discontinued and a new 70.0 MW co-generation Captive Power Plant (GTG and HRSG)based on Naphtha as fuel will be installed. Further, NOC from the U.P State Pollution Control Board has been obtained for the above proposal.

2. The Ministry of Environment & Forests hereby accord environmental clearance subject to strict compliance of the terms and conditions mentioned below:-

1. The project authorities must adhere to the stipulations made by the U.P. Pollution Control Board and the State Government.
2. No expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
3. The particulate matter and gaseous emissions (SO, NO<sub>x</sub>, NH and HC) from various processes/units/storages should conform to the standards prescribed by the concerned authorities from time to time. Urea dust from the prilling tower should not exceed 50 mg/nm or 0.5 kg/tonne of product. At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and should not be restarted until the control measures are rectified to achieve the desired efficiency.
4. Ambient air quality monitoring stations should be set up in the down wind direction as well as where maximum ground level concentration of SPM, SOM NO<sub>x</sub>, NH and HC are anticipated in consultation with the State Pollution Control Board.

The air quality monitoring stations should be selected on the basis of mathematical modelling to represent short-term ground level concentration, human settlements, sensitive targets, etc.

Port holes and sampling facilities should be provided for the stacks as per the Central Pollution Control Board guidelines. Stack emissions should be monitored in consultation with the State Pollution Control Board.

Data on ambient air quality and stack emissions should be submitted to this Ministry once in six months and the State Pollution Control Board once in three months.

5. Ammonia gas leakage from storages and loading points should be efficiently controlled or collected and scrubbed or may be sent to incinerator for flaring in consultation with SPCB.
6. Adequate precautions for handling ammonia vapours in case of emergency situation arising due to closure of the plant should be taken.
7. Fugitive emission should be controlled, regularly monitored and data recorded. Automatic monitors for ammonia should be provided at appropriate planes in the plant.
8. Low NO<sub>x</sub> burners should be used to limit NO<sub>x</sub> emissions.
9. The total water requirement should be maintained at 3.7 MGD. Any additional water requirement should be met through various water conservation schemes as indicated in the EMP.
10. Industry should provide separate outlets for storm water, waste waters and process effluents. Waste waters from the raw water treatment plant, D.M. Plant, Cooling tower the boiler blow down floor washing spillages and canteen wastes should not be allowed to mix up with the ammonia and urea plant effluents. The contaminated effluent from ammonia plant should be subject to solar evaporation in the scientifically designed solar evaporation pond. The contaminated effluent from urea plant should be stripped in the hydrolyser and stored in a holding pond and reused/recycled for use as BFW/CW
11. Oil bearing waste water should be treated for removal of oily matter before discharge and oil traps should be properly maintained so that the effluent conforms to the prescribed standards.
12. Final effluent quality should conform to the MINAS. The treated waste water should be recycled and used for irrigation to the extent feasible.
13. Guard ponds of sufficient holding capacity should be provided to cope up with the effluent discharge during the process disturbances. The contributing units should be immediately shut down and should not be restarted without bringing the system back to normalcy
14. The solar evaporation pond, guard ponds and holding ponds should be provided with impervious lining and stability of the ponds with respect to leakages/cracks and other factors should be ensured.
15. The ground water quality around the solar evaporation, guard ponds, holding ponds, landfill site and areas irrigation with treated effluent should be monitored on a regular bases. The monitored data should be submitted to the Ministry (Regional Office, Lucknow) once in six months and to the SPCB and State Ground Water Board once in three months.
16. Adequate number of influent and effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters. Routine toxicity test of effluent with fish should also be regularly done. Monitored data in the form of a report should be submitted to this Ministry (Regional Office, Lucknow) once in six months and the State Pollution Control Board once in three months.
17. The industry should provide a purge gas recovery unit for removing ammonia, H<sub>2</sub> and CH<sub>4</sub> instead of burning in the primary reformer.

18. The hazardous wastes should be handled as per the Hazardous Waste (Management & handling) Rules, 1989 of the Environment (Protection) Act, 1986, Permission of State Pollution Control Board must be obtained for its management and disposal.
  19. Handling, manufacture, storage and transportation of hazardous chemicals should be in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994.
  20. Adequate measures for the control of noise should be taken so as to keep the noise levels below 85 dB in the work environment. Persons working near the noisy machines like ammonia plant, urea plant, TG, Compressor room, etc. should be provided with well designed ear muffs/plugs.
  21. Non-chromate system should be used in all the cooling towers. As zinc is also being to be used with non-chromate dosing, its level in blow-down and sludge should be kept below the prescribed standards.
  22. Suitable alarm system and standard procedure for transmitting the information on the occurrence of an accident to the proper focal point should be established. Steps should also be taken to ensure access to information on weather conditions prevailing at that time and weather forecast. Wind socks at appropriate locations should be provided.
  23. Graphs/nomograms indicating spatial distribution of concentrations of toxic gas during day and night under different stability classes and wind conditions so as to help the designated Emergency Offices/Team to organise rescue operations in case of accidental release of toxic gases/vapours.
  24. Efforts should be made to increase green belt all around the fertilizer complex and the township. Native plant species should be selected for this purpose in consultation with the local DFO. A green belt development plan to cover at least 25% area maybe submitted for approval within 3 months.
  25. The project authorities should set up laboratory facilities for collection and analysis of samples under supervision of competent technical personnel, who will directly report to the Chief Executive.
  26. A separate environmental management cell with suitably qualified people to carry out various functions should be set up under the control of a senior Executive who will report directly to the head of the organisation.
  27. Periodical medical check up of the workers should be done and records maintained.
  28. The funds earmarked for the environmental protection measures should be kept in separate account and should not be diverted for other purposes and year wise expenditure should be reported to this Ministry and to the State Pollution Control Board under the rules prescribed for environmental audit.
3. The Ministry reserve the right to revoke the clearance if implementation of any of the condition stipulated by this ministry or any other competent authorities is not satisfactory. Six monthly status report on project vis-a-vis implementation of environmental measures should be submitted to Ministry and its Regional Office, Lucknow/CPCB/ the SPCB.
  4. The Ministry reserves the right to stipulate additional conditions or alter the existing conditions if found necessary. These will be fully implemented by the project authorities in a time bound manner.
  5. The above conditions will be implemented under the provisions of the Water (Prevention and Control) of Pollution Act, 1974, the Air (Prevention and Control) of Pollution Act, 1981, Environment (Protection) Act, 1986 and the Public (Liability) Act, 1991 along with their amendments.

**Additional Director/Joint Director**

To

The Chairman & Managing Director  
Duncan Industries Ltd.  
Himalaya House (Ist Floor)  
23, Kasturba Gandhi Marg  
NEW DELHI-110001

Copy to:

1. The Secretary, Ministry of Chemicals and Fertilisers, Dept.. of Chemicals & Petro Chemicals.]
2. Chairman Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi.
3. Chairman, Uttar Pradesh State Pollution Control, Pragati Kendra, IIIrd Floor, Kapoorthala Commercial Complex, Aliganj, Lucknow-226020.
4. Chief Conservator of Forests, Regional Office (/cz), B-1/72, Sector K Aliganj, Lucknow-226020.
5. Director (Regional Office Cell), Ministry of Environment and Forests, Lodhi Road, New Delhi.
6. Secretary, State Dept.. of Environment & Forests, Govt. of Utter Pradesh. Lucknow.
7. Adviser (H) EI Section, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
8. Additional Director(Monitoring Cell), Min. of Eo/, &Forests, Paryavaran Bhavan, New Delhi.
9. Guard File
10. Record File
11. Monitoring File.

**Additional Director/Joint Director**