

**F. No. J-11011/339/2007- IA II (I)**  
**Government of India**  
**Ministry of Environment and Forests**  
**(I.A. Division)**

**Paryavaran Bhawan**  
**CGO Complex, Lodhi Road**  
**New Delhi – 110 003**

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**Dated 17<sup>th</sup> July 2007**

To,

**M/s The Andhra Petrochemicals Limited**  
Venkatarayapuram(Tanuku)  
West Godavari  
Andhra Pradesh – 534 215

**Email: [info.tnk@theandrasugars.com](mailto:info.tnk@theandrasugars.com)**

**Sub: Modernisation of Petrochemical Plant at Industrial Area of the Exim Park of Visakhapatnam Port Trust, Vishakhapatnam, Andhra Pradesh by M/s The Andhra Petrochemicals Limited- Environmental Clearance reg.**

Sir,

This has reference to your communication No. Nil dated 12<sup>th</sup> March 2007 on the above-mentioned project.

2. The Ministry of Environment and Forests has examined your application. It is noted that the proposal is for environmental clearance for expansion, optimization and maximization of Oxo Alcohol Plant. The raw materials like Propylene and Naphtha will be sourced from HPCL refinery. Total capacity of the unit after expansion will be 84000 TPA (55200 TPA of 2-Ethyl Hexanol, 26000 of Normal Butanol & 2800 TPA of Iso Butanol). The company is in possession of 30.35 ha of land area which is a Vishakapatnam Port Trust Land reserved for industries. The Technology is provided by M/s Davy Process Technology Ltd, London (DPT). Water requirement of 5430 m<sup>3</sup>/d will be met from the Mindi reservoir and the ground water. Fresh water requirement of the plant for the enhanced production is 730 m<sup>3</sup>/d of which 360 m<sup>3</sup>/d will be sourced from the Mindi Reservoir and 370 m<sup>3</sup>/d from the ground water. The ETP sludge generation would be reduced from 15 kg/d to 10 kg/d and will be disposed off in the TSDF. Oxo residue will increase from 5.5-7.5 TPD to 7.5-12.5 TPD which will be used as fuel for internal consumption. The spent catalyst generation will remain same i.e 30 -50 TPA and will be sold to the recyclers. Spent rhodium catalyst generation during 12-18 months would 1500 to 2000 kg and will be recovered and recycled at re-processor facility. The proposal has been appraised as per para 7(ii) of the EIA Notification 2006. Cost of the project is Rs. 250 Crores.

3. The project has been considered in accordance with the para 2.2 {2.2.1(i) (a)} interim operational guidelines of the Ministry issued on 13<sup>th</sup> October 2006 by the Ministry of Environment and Forests under Para 12 of the EIA Notification 2006.

4. Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to the compliance of the following Specific and General Conditions:

**A. SPECIFIC CONDITIONS:**

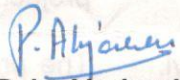
- i. The gaseous emissions (SO<sub>2</sub>, NO<sub>x</sub>, CO & HC) from the various process units shall conform to the standards prescribed under Environment (Protection) Rules, 1986 or norms stipulated by the SPCB whichever is more stringent. At no time, the emission level shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii. Ambient air quality monitoring stations, (SPM, SO<sub>2</sub> and NO<sub>x</sub>) shall be set up in the petrochemical unit in consultation with SPCB, based on occurrence of maximum ground level concentration and down-wind direction of wind. The monitoring network must be decided based on modeling exercise to represent short term GLCs. Data on VOC shall be monitored and submitted to the SPCB / Ministry's Regional Office.
- iii. The company shall install online monitors for VOC measurements.
- iv. Measures shall be taken for installation of Un-interrupted Power Supply System and DG sets shall not be operated to reduce SO<sub>2</sub> and NO<sub>x</sub> emission. LSHS shall be substituted with Low Sulphur Oxo residue the SO<sub>2</sub> emission from the LP Boiler. Waste gases from the process streams shall be used for steam generation.
- v. Emissions from the boiler and from the process units shall be controlled by stacks of adequate height. The hydrocarbons shall be flared. Vents from the low pressure storage tanks shall be connected to LP flare through LP flare piping network for flaring the gases. The company shall undertake measures for control of fugitive emissions. Toxic gas detection system shall be installed.
- vi. As reflected in the EIA/EMP report, there shall be no additional generation of effluent due to the proposed expansion. The effluent generation would remain same i.e 3524 m<sup>3</sup>/d as in the existing unit. Effluent from the alcohol unit shall be stripped to reduce the organic load. The effluent after treatment and conforming to the prescribed standards shall be discharge into the sea through the common effluent canal. The domestic effluent shall be treated in the septic tank followed by soak pit.
- vii. All the standards /Norms stipulated under Environment (Protection) Act, 1986/CPCB should be met. In addition all new standards/norms that would be notified in future for petrochemical units shall be applicable for the proposed expansion unit.

- viii. Project authority shall undertake rainwater harvesting measures to recharge the ground water and also to minimise the water drawl from the reservoir and ground water.
- ix. Green belt shall be raised in 11.78 ha of the plant area to mitigate the fugitive emissions from the plant. Selection of plant species shall be as per the Central Pollution Control Board guidelines.
- x. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- xi. The company shall comply with the recommendations made in the EIA/EMP/Disaster management plan.

**B. GENERAL CONDITIONS:**

- i. The project authorities must strictly adhere to the stipulations made by the Andhra Pradesh Pollution Control Board and the State Government.
- ii. No further expansion or modernization in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. At no time, the emissions shall 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 desired efficiency has been achieved.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- v. The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the project.
- vi. 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 Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.
- vii. The project authorities will provide adequate funds both recurring and non-recurring 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 provided should not be diverted for any other purposes.

- viii. The stipulated conditions will be monitored by the Regional Office of this Ministry at Bangalore/Central Pollution Control Board/State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly.
- ix. 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 State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. This should 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 should be forwarded to the Regional office.
- x. 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 commencing the land development work.
4. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
5. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.
6. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

  
(Dr. P. L. Ahujarai)  
Director

Copy to:-

1. The Secretary, State Deptt. of Environment, Government of Andhra Pradesh, Mantralaya, Hyderabad.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Andhra Pradesh State Pollution Control Board, 2<sup>nd</sup> Floor, HUDA Complex, Maitrivaram, S.R.Nagar, Hyderabad- 500 038.
4. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wing, 17<sup>th</sup> Main Road, Koramangala, Bangalore-560034.
5. JS(CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.- 110003.

6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
7. Guard file.
8. Record file.
9. Monitoring file.

(Dr. P. L. Ahujarai)  
Director