## STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY E-115. Nehru Colony, Haridwar Road, Dehradun (Uttarakhand)

Ref.: EC-9/2009/157 November 3, 2009 REGD./AD

To.

M/S Polyplex Corporation Limited Bannakhera Road Village Vikrampur U.S Nagar

Sub.: Manufacturing and processing of PET Chips 57600MT/year at Bannakhera Road, Village Vikrampur, US Nagar by M/S Polyplex Corporation Ltd., for Environmental Clearance, reg.

Kindly refer to your application no. nil dated 14.01.2009 seeking environmental clearance under the Environmental Impact Assessment Notification, 2006.

The State Level Expert Appraisal Committee (SEAC) has examined the proposal. It is noted that the proposal is for manufacturing and processing of PET Chips – 57600MT/annum at Bannakhera Road, Village Vikrampur, U.S Nagar. The proposed manufacturing processes are Drying, Feeding, Extrusion, Stretching, Winding, Melting, Esterification, Poly-condensation and Casting. The total project cost of unit is Rs. 59.0 Crores. Total area of the unit is 21.488 acres including green belt area. The unit has proposed to employee 200 man power. The water requirement of the unit is 221538.46 KL per year, which will be sourced from bore well. The wastewater generated from the process is proposed to be treated through appropriate capacity Effluent Treatment Plant, while domestic wastewater will be treated through Sewage treatment plant. Treated water is proposed to be used for plantation and other project related activities. No effluent is proposed to be discharge from the plant premises. The sludge dependent from Effluent Treatment Plant at the tune of 8861.5Kg/year will be burned in incinerator as per MSW Rules. The unit has proposed to install thermic fluid heater, which will be based on FO/Rice Husk/HSD fired with cyclonic dust collecter and 14 M stack height, and DG set of 1250 KVA capacity which will be used during power failure.

- 2. The project activity is listed in 5 (f) of schedule of the Environment Impact Assessment Notification 2006. The project activity categorized under screening category-B. The SEAC has examined the proposal and information submitted by the project authority and found that the project is located in notified industrial area of Uttarakhand. Based on the nature and location specificity of the project, the committee has decided to consider the project activities in B-1 category. The unit has submitted rapid EIA and EMP. The committee has exempted the case for public hearing/ consultation procedure.
- 3. Based on the information submitted by project proponent and the recommendation of the State Level Expert Appraisal Committee, the State Environment Impact Assessment Authority (SEIAA) hereby accords "Environment Clearance" subject to compliance of the following conditions.

## A. SPECIFIC CONDITIONS

- 1. Water requirement shall not exceed 221538.46 KL per year, which shall be sourced from the bore well. Wastewater generation from the process at the rate of 55384.615 KL/year shall be treated through adequate capacity of effluent treatment plant (ETP). The treated water shall then be taken to pucca HDPE lined lagoons from where it shall be utilized for gardening and green belt development. No wastewater shall be discharged outside the plant boundary and 'Zero Discharge' shall be strictly adhered to.
- The ETP sludge shall be dried in sludge drying beds and shall be kept in HDPE Lined RCC pits and finally transported to authorized dealer for final disposal The unit has to obtained authorization under Hazardous Waste Management rule from the UEPPCB.
- 3. Regular monitoring of HC and VOC shall be carried out in solvent storage areas at all vents, in work zone area and in the ambient air at probable locations in and around the plant.
- 4. One third of the total area of the project shall be developed as green belt with suitable species of plants

as per the CPCB guidelines.

- The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000 and Hazardous Waste (Management and Handling) Rules, 1989, as amended from time to time. Authorization from the UEPPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes. All Transportation of Hazardous Chemicals shall be as per the MV Act, 1989.
- 6. The unit shall obtain permission from the Central Ground Water Board for extraction of groundwater.

## B. GENERAL CONDITIONS

- The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board (UEPPCB).
- 2. No further expansion or modifications shall be carried out without prior approval of the Competent Authority. In case of deviations or alterations in the project proposal from those submitted to this authority for clearance, a fresh reference shall be made to the authority to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- 3. At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
- 4. The gaseous emissions (SOx, NOx, CO, VOC and HC) and particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- 5. The locations of ambient air quality monitoring stations shall be reviewed in consultation with the State Pollution Control Board (UEPPCB) and additional stations shall be installed, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated.
- 6. The stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents.
- All liquid raw materials shall be stored in storage tanks and drums. Closed handling systems for chemicals and solvents will be provided. Magnetic seals shall be provided for pumps/agitators for reactors for reduction of fugitive emissions. Solvent traps shall be installed wherever necessary. Reactor generating solvent vapors will be connected to condensers with receivers.
- All venting equipment shall have vapor recovery system. All the pumps and other equipments where there is a likelihood of HC leakages shall be provided with Leak Detection and Repair (LDAR) system and LEL indicators and Hydrocarbon detectors. Provision for immediate isolation of such equipment, in case of a leakage shall also be made. The company shall provide a well defined Leak Detection and Repair (LDAR) program for quantification and control of fugitive emissions. The detectors sensitivity shall be in ppm levels.
- The company shall undertake following waste minimization measures.
  - ► Metering and control of quantities of active ingredients to minimize waste.
  - ➤ Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - ▶Use of automated filling to minimize spillage.
  - ➤ Use of "Close Feed" system into batch reactors.
- > Venting equipment through vapour recovery system.

Use of high pressure hoses for equipment cleaning to reduce wastewater generation.

- 10 Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by the State Pollution Control Board (UEPPCB)/Central Pollution Control Board. Dust / powder from the formulation process shall be collected by dust extractor.
- 11 The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000 and Hazardous Waste (Management and Handling) Rules, 1989, as amended from time to time. Authorization from the UEPPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes. All Transportation of Hazardous Chemicals shall be as per the MV ACT, 1989.
- 12. 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 dB(A) (day time) and 70 dB(A) (night time).
- 13. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.
- 14. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Preemployment and routine periodical medical examinations for all employees shall be undertaken on: regular basis.
- 15. The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).
- 16. The Company shall harvest surface as well as rainwater from the rooftops of the buildings proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.
- 17. The project authority shall also comply with all the environmental protection measures and safeguards proposed in the EIA/EMP report. All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.
- The company will undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. CSR activities will be undertaken by involving local villages and administration.
- 19. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- 20. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- 1. The stipulated conditions will be enforce, inter alia under the provisions of the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, Hazardous Waste(Management & Handling) Rules 2003/2008 and the Manufacture, Use & Import of Hazardous Chemical Rules 1989 and the Public Liability Insurance Act 1991, along with their amendment and rules.
- The Authority may revoke/suspend the Environment Clearance if implementation of any of the condition is not satisfactory. The authority also reserves the right to stipulate additional condition(s), if found necessary. The Project authority in a time bound manner will implement these conditions.
- The authority reserved the right to stipulate additional condition(s) if found necessary. The company in the time bound manner shall implement these conditions.
- This Environment Clearance is valid for five year from the date of issue of Environment Clearance or

- commissioning of project, whichever is earlier. The project authority shall inform to the authority as well as SPCB, the date of start of the project and its completion.
- 25 The implementation of the project vis-a-vis environmental act upon shall be monitored by the team of the authority. A six monthly compliance status report shall be submitted to authority and shall be posted on the website of the company.
- 26. The Project authority shall inform the public that the project has been accorded the environment clearance by the authority and copies of the clearance letter are available with the SPCB may also be seen at website of the State Board. This shall be advertise within seven days from the date of issue of clearance letter, at least in two local news paper 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 SEIAA and SPCB.

(Dr. Ajay Gairola) Member Secretary

Copy to followings for kind information please:

1. Secretary, Environment and Forests, Govt of Uttarakhand, Dehradun.

- 2. Chairman, State Level Environment Impact Assessment Authority, Govt. of Uttarakhand, Dehradun,
- 3. Chairman, State Level Expert Appraisal Committee, Uffarakhand,
- 4. Principal Chief Conservator of Foreste, Uttatakhand, 87, Rajpur Road, Dehradun, Uttarakhand.

5:Director, IA Division, Ministry of Environment & Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi - 110003.

Member Secretary