



By speed post

भारत सरकार

पर्यावरण एवं वन मंत्रालय

Government of India  
Ministry of Environment & Forests  
(IA Division)

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Dated: March 20, 2009

F. No. J-11011/337/2008-IA-II (I)

To

M/s Transpek Industry Ltd.  
6<sup>th</sup> Floor, Marble Arch,  
Opposite Vanijya Bhawan, Race Course  
Vadodara-390007  
Gujrat

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**Sub : Expansion of acid chloride chemicals (400 MTPM to 13,00 MTPM) and setting up of ether amine 100% (50 MTPM), Friedel Craft Chemicals (100 MTPM) and SACL products 4-(2-Chloro ethyl sulphonyl) butyryl chloride (25 MTPM) at Ekalbara Village, Padra Taluk, Dist Vadodara, Gujarat by M/s Transpek Industry Limited – Environmental Clearance reg.**

Sir,

This has reference to your letter no. TIL/EKT/MoEF/EC/231/2008-09 dated December 2, 2008 along with Environmental Impact Assessment Report seeking environmental clearance for the above project under the Environment Impact Assessment Notification, 2006.

2.0 The Ministry of Environment and Forests has examined the proposal and noted that the proposal is for environmental clearance for expansion of acid chloride chemicals (400 MTPM to 13,00 MTPM) and setting up of ether amine 100% (50 MTPM), Friedel Craft Chemicals (100 MTPM) and SACL products 4-(2-Chloro ethyl sulphonyl) butyryl chloride (25 MTPM) at Ekalbara Village, Padra Taluk, Dist Vadodara, Gujarat by M/s Transpek Industry Limited. (Unit: II). Total Plot area of the plant is 434019 m<sup>2</sup>. Out of this area requirement for proposed expansion will be 5205 m<sup>2</sup>. Greenbelt will be developed in 80% of total plot area. The cost of Project is Rs. 16.0 Crores. Capital and recurring cost earmarked for environmental protection measures are Rs. 283 Lakhs and Rs. 418.31 Lakhs/Annum. The details of existing and proposed product and production capacity are as given below:

Sl. No.	Products	Existing Production (MT/Month)	Proposed Maximum production (MT/Month)
1.	Chloro Acetyl Chloride/Acid chloride	400	900
2.	Hydrochloric acid	213	-
3.	Sodium bisulphate or Sodium sulphite	667 or 1176	-

Sl. No.	Products	Existing Production (MT/Month)	Proposed Maximum production (MT/Month)
4.	Sulphur dioxide	1490	-
5.	Sulphur dichloride	105	-
6.	Thionyl chloride	2500	-
7.	Oleum	2100	-
8.	Sulphur trioxide	1050	-
9.	Sulphuric acid	931	-
10.	Sulphur monochloride	500	-
11.	Poly aluminum chloride	60	-
12.	Chloro sulphonic acid	2500	-
13.	2 Amino 2 Ethoxy Diethyl sulphide (SAMBA-3)	30	-
14.	Ether Amine (100%)	-	50
15.	Friedel Craft Chemicals	-	100
16.	4-(2-chloro ethyl sulfonyl)butyryl chloride	-	25
	<b>TOTAL</b>	<b>13055</b>	<b>1075</b>

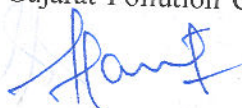
3.0 For control of air pollution tail gases of SO<sub>2</sub> and partial vacuum system gases scrubbed in Caustic Soda scrubber, in which sodium bisulphite (30%) is produced which is sold out. HCl gas is generated as a part of reaction process, which is further reacted with SO<sub>3</sub>, to produce Chlorosulphonic Acid as a value added product and SO<sub>2</sub> gas is recovered will be used for thionyl chloride manufacturing. Water consumption for existing production is 108 KLD and after proposed expansion total water requirement will be 242 KLD. Source of water will be tube wells at site. The unit is not located in critical zone for ground water withdrawal specified by CGWA. Effluent generation will increase from 37.8 KLD to 105.9 KLD after proposed expansion. Total effluent generated from the proposed expansion will be treated in an existing ETP (capacity of 500 KLD) having primary & secondary treatment facility. The treated effluent will be sent to ECPL through pipeline, operated by M/s ECPL, Dhanora.

4.0 The project activity is listed at S.N. 5(f) under Category 'A' the proposal was considered and appraised at central level in 91<sup>st</sup> meeting of the Expert Appraisal Committee (Industry) held during 9<sup>th</sup> - 11<sup>th</sup> February, 2009. The public hearing was exempted as per para 7(ii) of EIA Notification, 2006.

5.0 Based on the information submitted by the Project Authorities, the Ministry of Environment and Forests hereby accords the environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to compliance of the following specific and general conditions:

**A SPECIFIC CONDITIONS:**

- i) The project authorities shall treat the wastewater up the discharge standards as notified in EPA or prescribed by the Gujarat Pollution Control Board whichever is stringent.





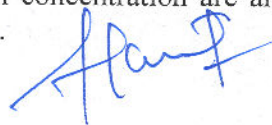
- ii) The water requirement and waste water generation shall not exceed 242.0 KLD and 105.9 KLD respectively.
- iii) The company shall install two stage scrubbers for control process emissions. The scrubbed solutions shall be used in the process or sold to actual users. The company shall keep the record of disposal of all such by products and shall submit to the Ministry's Regional Office at Bhopal.
- iv) The company shall provide the monitoring arrangement with stacks/vents and regular monitoring shall be carried out and reports submitted to the SPCB, CPCB and Ministry's Regional Office at Bhopal.
- v) The project authorities shall provide the chilled water in secondary condenser for condensation of the VOCs like methanol etc . The project authority shall ensure that the solvent recovery shall not be less than 95%.
- vi) 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 Gujarat PCB.
- vii) Solvent management shall be as follows :
- A. Reactor shall be connected to chilled brine condenser system.
  - B. Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
  - C. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery
  - D. Solvents shall be stored in a separate space specified with all safety measures.
  - E. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
  - F. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
- viii) For control of fugitive emission and VOCs following steps shall be followed :
- A. Closed handling system shall be provided for chemicals.
  - B. Reflux condenser shall be provided over reactors.
  - C. Solvent handling pump shall be provided with mechanical seals to prevent leakages.
  - D. System of leak detection and repair of pump/pipeline based on preventive maintenance.
  - E. Solvent shall be taken from underground storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.
- ix) The process emissions and particulate matter from various 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(s) 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.
- x) The empty containers and bags shall be sold to GPCB registered dealers. Sodium Chloride and incineration ash shall be sent to TSDF. The company shall maintain the valid membership of the TSDF.
  - xi) During transfer of materials, spillages shall be avoided and gullies and drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
  - xii) As proposed, the project authorities shall develop greenbelt in 80% of project area as per the guidelines of CPCB to mitigate the effect of fugitive emission.
  - xiii) Adequate financial provision shall be made in the budget of the project for implementation of the above suggested environmental safeguards. Fund so earmarked shall not be diverted for any other purposes.
  - xiv) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
  - xv) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
  - xvi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

#### GENERAL CONDITIONS

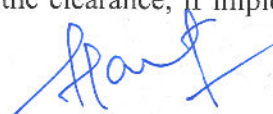
- i. The project authorities shall strictly adhere to the stipulations of the SPCB/state government or any statutory body.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations 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 project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended. Authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.
- iv. Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level concentration are anticipated in consultation with the State Pollution Control Board.





- v. For control of process emissions, stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided. The scrubbed water shall be sent to ETP for further treatment.
- vi. The company shall undertake following Waste Minimization measures :-
- Metering 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.
  - Maximizing recoveries
  - Use of automated material transfer system to minimize spillage.
  - Use of "Closed Feed" system into batch reactors.
- vii) 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 SPCB shall be obtained for collections/treatment/ storage/disposal of hazardous wastes.
- viii. 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 shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- ix. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.
- x. The project authorities shall provide rainwater harvesting system and ground water recharge.
- xi. The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional Office /SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies.
- xii. 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 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 Ministry's Regional Office.
- xiii. 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.

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



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


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

9.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, 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 alongwith their amendments and rules.

  
(H.S. Malviya)  
Joint Director

Copy to :-

1. The Secretary, Department of Environment and Forests, Govt. of Gujarat, Secretariat Gandhinagar-382010
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110032.
3. The Chairman, Gujarat State Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar-382010.
4. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), Ravishankar Nagar, Link Road-3, Bhopal- 462016, M.P.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
6. Guard file.
7. Record file

  
(H.S. Malviya)  
Joint Director