

# **TAMILNADU NEWSPRINT AND PAPERS LIMITED**

## **FINDINGS OF COMPREHENSIVE ENVIRONMENTAL IMPACT**

### **ASSESSMENT (CEIA) CARRIED OUT DURING JANUARY 2008**

TNPL plans to install a new paper machine (PM #3), having an installed capacity of 155,000 tpa, for the manufacture of surface sized printing and writing and on-machine light-weight coated papers along with its accessories , and also balancing the back end, viz. bagasse and hardwood pulping streets and the utilities, under a Mill Expansion Plan (MEP).

As part of Mill Development Plan, Comprehensive Environmental Impact Assessment (CEIA) was conducted by Sheshayee Paper and Boards- Project and Consultancy Division (SPB-PC), Chennai in association with Vimta Lab Limited, Hyderabad during September 2004-September 2005. The same CEIA has been updated using baseline field data monitored again during January 2008. The January 2008 data has been monitored as per TOR conditions of MoEF.

The existing baseline data as represented in updated CEIA including winter season 2008 data has been used for predicting the anticipated environmental impact on the surroundings after the proposed MEP. The key findings of the updated CEIA is given under:

#### **Construction Phase**

The construction activities of new installations will not necessitate any displacement of people, cutting of vegetation, etc., as the construction will be carried out within the existing mill premises. This phase does not involve major changes in the terrain.

#### **Operation Phase**

##### ***Air Environment***

The major pollutants from the mill after the proposed expansion are suspended particulate matter (SPM) and sulphur dioxide (SO<sub>2</sub>) from the new power boiler. The air dispersion modelling has been carried out for using meteorological data monitored at site, based on existing base line data.

The ambient air quality levels for SPM and SO<sub>2</sub> are well below the permissible limits, thus showing insignificant impact due to the expansion.

### ***Water Environment***

The additional water requirement for MEP will continue to be met from river Cauvery. The water drawal shall be within the Consented Quantity and hence, no permission for additional drawal of surface water is required.

The existing wastewater treatment plant is proposed to be augmented with the installation of additional primary and secondary clarifiers. The mill shall also consider installation of suitable filtration systems for recovery of fibre and to ensure effective recycling of water at paper machine itself.

Wastewater will continue to be treated, to conform to the statutory standards of state pollution control board and MoEF before discharging on land for irrigation.

The quality of water resources in the study area will not be adversely affected.

### ***Solid Waste***

The expected total fly ash generated from the coal-fired boilers is about 240 tonnes per day. Fly ash generated is being given to cement manufacturers. Part of the lime sludge, being disposed of as purge for non-process elements especially silica, is being given to cement manufacturers. The mill, as part of its commitment for Environmental upkeep, intends to install a mini-cement plant for reusing the fly ash along with excess lime sludge generated which need disposal. In post MEP operations also it is proposed to re-burn the lime sludge in the lime mud reburning kilns. The pith and chipper dust generated are being used as fuel in boilers. The WWTP sludge will be thickened through dewatering machines and the cake will be given to small cardboard manufacturers

The mill is installing a dedicated sludge dewatering machine for dewatering the sludge upto a dryness level of 50%. This sludge shall be fired in the boilers.

Hence, no adverse impacts due to solid waste generation are envisaged.

### ***Soil Environment***

An estimation of physico-chemical analysis of existing soil environment indicates no adverse impact on soil quality due to future activities of the mill.

### ***Noise Environment***

The baseline noise level ( $L_{eq}$ ) recorded is about 54.7 dB(A) and the predicted incremental noise level at the boundary due to the operation of MEP is likely to be <40 dB(A). Therefore, the noise due to operation of the project will not have any bearing on the baseline noise levels due to masking effect.

According to the Factories Act 1948 and Tamil Nadu Factory Rules 1950 Standards, the allowable noise level for the workers is 90 dB(A) for 8 hours' exposure a day. Therefore, adequate protective measures in the form of ear muffs/ear plugs to the workers working in high noise areas need to be provided. In addition, reduction in noise levels in the high noise machinery areas could be achieved by adoption of suitable preventive measures such as suitable building layout in which the equipment are to be located, adding sound barriers, use of enclosures with suitable absorption material etc. Further, in addition to the in-plant noise control measures, all the open areas within the plant premises and all along the plant boundary are to be provided with adequate greenbelt to diffuse the noise levels..

## **Socio-Economics**

The land required for the construction under the proposed project is already under the possession of TNPL. There will not be any resettlement and rehabilitation. Thus, there will not be any adverse socio-economic implications. The economic status of the area is likely to improve, as there will be direct/indirect employment generation during construction and operational phases.

## **Risk Assessment & Disaster Management**

The preliminary risk assessment of the plant has identified no hazardous events, which would project damaging energies outside of the plant boundary. Events identified for offsite facilities are estimated to occur at extremely low incident frequencies and/or not to significant levels of consequence. Management of hazardous event scenarios and risks in general can be adequately managed to acceptable levels.

## **Conclusions**

Growth and development, in harmony with the environment, has always been the approach of TNPL.

The conclusions of EIA are:

- The Mill Expansion Plan (MEP) is structured to be inline with the requirements of MoEF/CPCB/TNPCB.
- Community impacts will be beneficial, as the project will generate economic benefits for the locality.
- Continued improvement in wastewater treatment facilities coupled with high efficiency electrostatic precipitator results in minimising the impacts on environment.

With the effective implementation of the Environment Management Plan (EMP) during the planning, design, construction and operation phases, the expansion can proceed without any negative impact.