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FINDINGS OF
ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT
CARRIED OUT DURING FIRST QUARTER OF 2012

TNPL proposes to install printing & writing grade Deinking Plant using wastepaper and upgradation of captive cogeneration plant (hereinafter referred as `Project').

As per EIA Notification dated 14th September 2006, any new industrial establishment or expansion of production capacities or change of product requires Environmental Clearance (EC) to be obtained from Ministry of Environment and Forests (MoEF). The present EIA report is prepared, based on the Terms of Reference (ToR) issued by MoEF, vide letter No. F. No. J-11011/710/2007-IA II (I) dated on 14th February 2012. As per scope, EIA report is prepared in order to assess the environmental impacts due to the proposed project.

The findings of the EIA report is summarised as follows:

Impact during Construction Phase

The environmental impacts during the construction stage will be short term, temporary in nature and will be confined very close to project sites. The manpower required for these activities should preferably be employed from nearby villages.

Land Environment

No additional land is required for project, since the available space of around 6 acres in the mill will be used for proposed project. The proposed area for the project is already a developed area and is flat.

Hence, no major impact is envisaged on land use pattern of the proposed project site.

Impact on Soil

The construction activities will result in loss of vegetation cover, topsoil and earthen material to some extent in the plant area. However, it is proposed to use the soil and earthen material for green cover development and levelling of project site. Green cover will be developed in the proposed project site in phased manner from construction stage onwards.

Apart from localized construction impacts at the plant site, no adverse impacts on soil in the surrounding area are anticipated.

Impact on Air Quality

The main sources of emission during the construction period are the movement of equipment at site and dust emitted during the levelling, grading, earthwork, foundation works and exhaust emissions from vehicles and equipment deployed during the construction phase is also likely to result in marginal increase in the levels of SO_2, NOx, PM and CO. The impact will be for short duration and confined within the project boundary and is expected to be negligible outside the plant boundaries. The impact will, however, be reversible, marginal and temporary in nature. Proper maintenance of vehicles and construction equipment will help in controlling the gaseous emissions. Water sprinkling on roads and construction site will prevent fugitive dust.

Impact on Terrestrial Ecology

The initial construction works at the project site involves land clearance. During construction vegetation may be disturbed. Green cover will be developed phase wise during construction to improve the aesthetic value in the area and to screen out the fugitive dust generated during construction.

The removal of vegetation from the soil and loosening of the topsoil generally causes soil erosion. However, such impacts will be confined to the project expansion site and will be minimized through paving and water sprinkling.

There are not many existing matured trees in the site. However, green cover will be developed surrounding the plant facilities. The existing trees will be preserved to the extent possible. Thus, no major adverse impacts are envisaged on terrestrial ecology.

Socio-Economic Impacts

The proposed project will provide either direct or indirect job opportunities to the local population as far as possible.

Impact during Operation Phase

Impact on Soil

Most of the impacts of proposed project on soils are restricted to the construction phase, which will get stabilized during operational phase. The impact on the topsoil will be confined to the proposed project area.

Impact on Water Environment

In the plant, water is used mainly for Deinking plant, apart from cooling water requirement and domestic purposes. The mill has water drawl permission for 72,000 m3/day. The project will not require additional water and likely to come down about 1000 m^3/day due to installation of air cooled condenser in the place of water cooled

condenser. The total water requirement at present of the mill and colony met from river Cauvery.

The existing wastewater treatment plant is adequate for the proposed operation. Wastewater is/will be treated to conform to the statutory standards of state pollution control board and MoEF before discharging for irrigation.

The storm water in the project area will be collected through storm water drains and collected in the storm water reservoir. The stored storm water will be utilized in the plant operation resulting in conservation of fresh water.

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

Impact of Solid Waste Generation

The solid waste from the DIP-CCP is mainly fly ash and sludge. Fibre sludge generated from wastewater treatment plant are the other solid wastes.

The total ash expected from the plant will be about 150 (140+10) tonnes per day. This will be used for making cement at TNPL's mini cement mill. The WWTP sludge (waste pulp) and SFT sludge will be given to small paper mills to make low grade paperboards. The sludge generated from the DIP plant of 90 tpd (dry basis) will be used as a feed stock in the cement mill.

The sludge from sewage treatment plant will be dried and used as manure for green cover maintenance. Canteen/sanitary waste will be composted and used as manure for green cover development.

Noise Environment

The main noise generating sources from the proposed project will be DIP machine, pumps, compressors along with cooling tower and boilers. The noise levels at the source for these units will be in the range of 80-90 dB (A).

Impact on Aquatic Ecology

The treated wastewater, after conforming to the norms of Tamil Nadu State Pollution Control Board, will be discharged to Cauvery River. As the wastewater is given sufficient treatment to statutory levels, no impact of wastewater disposal is envisaged on the aquatic bodies.

Impact on Reserve/Protected Forest

In 10 km study area there is no forest area was observed.

Impact on Human Health

The impact from the air emissions is not expected to be significant since the stacks design and the atmospheric conditions are such that the ambient air quality at present as well as in future after the proposed facility comes up well within the prescribed ambient air quality limits set forth by CPCB.

Impact on Public Health and Safety

The discharge of waste materials (stack emission, wastewater and solid wastes), from process operations can have potential impact on public safety and health. The impact from the discharge of waste products is not expected to be significant since, the adverse impacts on ambient air, water and soil quality are predicted to be low.

It is predicted that the impacts on public safety will be very low, due to the effective safety system and safety management available in the plant.

Overall, the impact on public safety and health from the proposed project activities will be insignificant.

Conclusions

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

The conclusions of EIA are:

1. The DIP and upgradation of CCP is structured to be inline with the requirements of MoEF/CPCB/TNPCB;

2. Community impacts will be beneficial, as the project will generate significant economic benefits for the locality; and

3. Continued improvement in wastewater treatment facilities coupled with high energy electro static precipitator will result in minimising the impacts on the environment.

Hence, with the effective installation of Deinking Plant (DIP) and upgradation of Captive Cogeneration Plant during the planning, design, construction and operation phases, the proposed project can proceed without any negative impact.