

EXECUTIVE SUMMARY

1.0 INTRODUCTION

Tirupur, a small town, located in Coimbatore district, 50 kms east of Coimbatore and about 495 km south – west of Chennai, the capital of Tamil Nadu, is one of the well – known place in hosiery and knitwear manufacturer in international market. Tirupur is the seventh largest city in Tamil Nadu and is one of the fastest developing cities in the state. Tirupur is located at 11.1° N & 77.35° E. It has an average elevation of 295 metres (967 feet). The climatic condition in Tirupur is characterized by equatorial and tropical climate.

Tirupur is called the Knits Capital of India as it caters to famous brands and retailers from all over the world. It has a wide range of factories which export all types of Knits fabrics and supply garments for Kids, ladies, Men's garments – both underwears and tops. The city is known for its hosiery exports and provides employment for about 600,000 people.

As per the Tamil Nadu Pollution Control Board Specifications, the TDS level for Inland Surface Disposal has to be maintained below 2100mg/l. At present, the TDS level of Effluents discharged after the Treatment is higher than this limit. Therefore the Tamil Nadu Pollution Control Board has now directed the Industries to implement the Zero Liquid Discharge facilities to control the pollution. To comply with Tamil Nadu Pollution Control Board directions, the following units have proposed to set up a common effluent treatment plant based on Zero discharge concept so that the treated effluent would be recycled and reused. The units are located within 2 Km radial distances from the proposed common effluent treatment in an area of about 2 acres.

1. M/s. Anburam Knit Process,
5/1197, Poyampalayam Pirivu (West), P.N. Road,
Pitchampalayam Pudur, Tirupur – 641 603.
2. M/s. Karthikey Textile Mills,
S.F. No.318, Angeripalayam, Tirupur – 641 603.
3. M/s. P.K.P.Processors,
415/2, Angeripalayam, Tirupur – 641 603.
4. M/s. S.V.P. Knit Processors, (Proposed),
S.F.No.353/2B, Angeripalayam, Tirupur – 641 603.
5. M/s. P.K.P. Knit Finishers, (Proposed),
S.F.No.353, Angeripalayam, Tirupur – 641 603.
6. Murthi Dyers, (Proposed),
SF No.357, Angeripalayam, Tirupur – 641 603.
7. P.C.Dyeing Industry, (Proposed),
SF No.354-3D, Angeripalayam, Tirupur – 641 603.
8. Sakthi Knit Process, (Proposed),
SF No.319, Poyampalayam Pirivu (West)
P.N. Road, Pitchampalayam Pudur, Tirupur – 641 603.
9. M/s.Anburam Knit Process Unit – II,(Proposed),
SF No.318, Poyampalayam Pirivu (West)
P.N. Road, Pitchampalayam Pudur, Tirupur – 641 603.
10. Park Processing Mills, (Proposed),
SF No. 341/1A, Thottipalayam Village,



Angeripalayam, Tirupur – 641 603.

All the above units joined together and formed a company by name PARK Common Effluent Treatment Plant Pvt. Ltd., located at S.F. No 327, Poyampalayam Pirivu (West), Opp. Anburam Knit Process, P.N. Road, Pitchampalayam Pudur, Tirupur Taluk, Coimbatore District. All these units are Bleaching and Dyeing units, processing cotton fabrics. The Member units are spread to an area of about 2 km radius and located very close to each other and in the vicinity of the proposed common effluent treatment plant.

The PARK Common Effluent Treatment Plant has been incorporated under the companies Act, 1956 and registration number U09000TZ2006PTC012593.

2.0 MANUFACTURING PROCESS

- Scouring
- Bleaching
- Washing with caustic soda
- Neutralizing with acids
- Washing
- Dyeing Process
- Washing with soap/neutralizing with acetic acid/washing
- Fixing and finishing
- Drying
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Water requirement for the manufacturing process is about 4200 cubic meter which is drawn from Tiruppur water supply scheme. The total quantity of wastewater generated from the 10 Industries is about 4000 cubic meters per day.

The treatment scheme is selected based on the extensive trials carried out at the site. The zero discharge scheme consists of the following steps:

- Pretreatment
- Multi grade Filter
- Micro filtration
- Nano filtration
- Reverse Osmosis
- Evaporation in Mechanical vapor recompression
- Solar Evaporation.

The treated effluent will be reused in the process. Reject from the RO process is only the brine solution and will be taken back by the industries for reuse. The slurry from MVR will be evaporated in solar pans and dried, packed in polythene bags for disposal in the proposed TSDF.



3.4 BASE LINE ENVIRONMENT

Survey was carried out during May 2007 to Jul 2007 in an area within 10 km radius of from the proposed CETP, which we considered as project Impact area

- a. Meteorology: The Predominant wind directions during summer 2007 were from NW and WNW
- b. Ambient air quality: Ambient air quality in both core zone and buffer zone showed the SPM, RSPM, SO₂ and NO_x are well within the NAAQ standards specified for rural and residential area. Noise Levels monitored in core zone and buffer zones were found to be well within limits. Groundwater samples collected within study area revealed that there is no contamination to water and the quality of water is potable.
- c. Soil samples analysis indicates that fertility of the soil is moderate.
- d.. Socio economic status of the study area revealed that most of the people are working in agricultural and industrial sectors.

4.0 BIOLOGICAL ENVIRONMENT

Flora

The buffer zone of the proposed common effluent treatment plant consists of agricultural lands, waste lands, etc. the core zone is a sandy tract and does not support any major vegetation except thorny shrubs. The semi arid conditions with high temperature and poor rainfall influence the nature of flora.

- The core zone is devoid of vegetation. The buffer zone of the proposed site consists of agricultural lands, waste lands, etc.
- The semi arid conditions with high temperature and poor rainfall influence the nature of flora. In the buffer zone species like, Mango, Tamarind, Bamboo, Neem, Coconut, Lemon.
- The buffer zone is consisting of naturally occurring species as well as agricultural crops.
- The naturally occurring wild species grow in groups. The species diversity is not pronounced in the area.

Fauna

- The core zone does not contain any species except a few common birds like crow, sparrow etc and a few insects.
- In the buffer zone domestic animals like cows, buffaloes, dogs etc. are found. The core and buffer zones do not contain any wild animals like elephants, tigers etc.
- This area neither contains any biosphere, national parks, etc. nor does it not form a breeding ground for migrating fauna.
- There is no national marine park in Tirupur.

4.7 SOCIO ECONOMIC ENVIRONMENT



- The project is not going to cause any adverse impact on agriculture rather than the agricultural situation will improve due to increase in agricultural land by virtue of increased income of farmers from the secondary sources.
- The project is going to have positive effects like changing on social status and outlook of the individuals due to regular fixed income.
- Employment facilities and other amenities like medical facilities, banking facilities educational standard etc. will further intensified due to project expansion.

5.0 ENVIRONMENTAL MANAGEMENT PLAN

The proposed Unit will effect both positive and negative changes on the pre environmental and ecological status of the area. These changes or impacts, which could be beneficial or adverse, need adequate Environmental Management Plan, so that the adverse impacts are mitigated and the post-project environmental status is restored to as near original conditions as possible. By understanding the cause and effect and designing proper control measures, it is possible to bring the impacts within sustainable limits or sometimes to create even better environment than earlier. The EMP normally include monitoring of treated effluent quality, solid wastes disposal into TSDF, Green belt development, rain water harvesting, storm water collection and recharge into groundwater aquifer, medical facilities for employees, action plan for any emergency situation like fire, and other safety system in operation and maintenance of effluent treatment system.

6.0 CONCLUSIONS

Results of analysis of water, air and soil samples revealed that PARK CETP will have no impact on the existing water, air and land environment.

Location of the CETP complex in this region would bring about a marginal impact on Air environment due to release of Air pollutants, which is very much below the allowable limits. In plant control measures and updated technologies adopted at the process levels will ensure emission levels to be well within the limits prescribed by TNPCB. However social welfare will be enhanced due to economic prosperity, development of medical and educational infrastructure as well as improvement in levels of direct and indirect employment. In addition, the green belt development as part of the EMP, will improve the ecology and aesthetics in the plant site and neighborhood region. The location of the plant in the proposed site would bring about sustainable economic prosperity without adversely affecting the environmental quality and lead to better living standards of the residents of Erode and neighborhood.

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