

## Summary of the proposed expansions of Sugar and Distillery Units.

Shri Hiranyakeshi Sahakari Sakkare Karkhane Niyamit Sankeshwar proposes to expand its existing Sugar Factory capacity of 5000 TCD to 11,000 TCD and 54,000 liters of Batch fermentation Technology of Rectified Spirit Production per day to 84,000 Liters/day based on continuous fermentation technology and establishing 30 KLPD Ethanol/ENA Unit and 52 MW Co-generation Plant in two Phases. 52 MW capacity Co-generation project was implemented.

Environmental Clearance was accorded vid F.No.J-11011/54/2009-IA II(I) dated April-9<sup>th</sup>, 2009 for the expansion of the Sugar factory capacity from 5000 TCD to 11000 TCD and expansion of the Distillery capacity of 54000 liters/day to 84000 liters/day based on continuous fermentation and expansion of the Co-generation capacity from 41 MW to 52MW capacity. The industry could implement only expansion of the Co-generation capacity from 41MW to 52MW.

The power plant uses bagasses as fuel, which is available from its own sugar mill. It also utilizes imported coal during the off season. The quantity of Coal used is 480MT/day. The stack was erected as per the CPCB/KSPCB guidelines and the ash was disposed for composting and brick manufacturers. The entire power requirement for sugar distillery and Co-generation plants was met from the Co-generation plant and the excess power is exported to Grid.

Approximately 87.5MT/hr bagasse with 50% moisture is used as fuel for power generation. Water requirement for Co-generation Project is 1100Cum/day. For the Sugar Unit of 11000TCD the water requirement shall be 750 Cum/day. To minimize water consumption and waste water generation recirculation method of cooling water and condensate shall be adopted. The water requirement for the existing Distillery and after expansion shall be 1000Cum/day. The water requirement for Domestic purpose shall remain as 120 Cum/day. Thus the total requirement of water for Sugar, Cogeneration and Distillery shall be 2970 Cum/day. The Industry has permission to withdraw 150 million cu.ft(i.e.44,53,000 Cum) of water per annum and actually it is drawing 18 million cu.ft (i.e. 5,34,000 cum) of water for the existing Sugar factory, Cogeneration, Distillery and Domestic purpose. Thus there is no need of any additional permission of water for the expansion of the Co-generation, Sugar and Distillery reduced from the existing and the proposed expansion of 30KLPD to 300 Cum/day by concentration in multiple effect evaporators. The Ethanol/ENA plant shall not generate any effluent.

Environmental Management Plan for the project shall be prepared addressing pollution control systems and mitigatory measures for abatement of adverse impacts during construction and operation of the project. The post operational monitoring programme and institutional arrangements necessary for Environmental Management were included in the REIA report.

Detailed studies were carried out with regard to Air, Water, Soil and Noise within radius of ten kilometer of the proposed expansions. The socio-economic aspects and flora and fauna studies are also carried out. The data was included in the Rapid Environmental Impact Assessment Studies.

The above data can be used as the Baseline Data for the assessment of impact on the quality of environment of the proposed expansion of the Co-generation, Sugar and Distillery capacities.

The expansion of the Sugar & Distillery capacities would raise the economic status of people in the area and help the establishment of ancillary industries in small-scale sector.

Environmental Management Plan and Disaster Management shall be prepared for Sugar, Co-generation & Distillery units.

The daily quantity of effluent will be 750 m<sup>3</sup>/day for Sugar & 280 m<sup>3</sup>/day for Co-generation Unit, A full-fledged ETP is already in existence for this purpose.

In case of Distillery expansion the effluent shall be treated based on anaerobic digestion as primary treatment and "Concentration" and "Composting" as secondary treatment.

There will not be any separate colony and the existing facilities shall be used for Co-generation staff. The existing treatment plant facility for domestic waste shall be utilized (i.e. Septic tank followed by anaerobic filters). The treated effluent is being used for gardening/irrigation.

   
Managing Director