

## **Report on the commissioning of 650 kg/hr Gasifier system at Bethmangala, Kolar district**

Date of commissioning: 27<sup>th</sup> April 2005

Mode of operation: Flare

The 650 kg/hr gasifier system was commissioned in flare mode at 15.15 hrs on 27<sup>th</sup> April 2005 after offering prayers to Lord Ganesha. Prior to commissioning all the system elements were qualified for a leakage test. Instrumentation in the form of manometers and oxygen measuring system were connected at strategic locations on the system. The system was started by switching ON the water pumps, which provided sufficient suction to ignite the charge in the reactor. Ignition was performed using a LPG torch around 15.15 hrs and oxygen level in the gas was continuously monitored. In about 40 minutes, the oxygen level came down to less than 2%, indicating generation of combustible gas and also safe limit for igniting the gas in the flare. At about 16.20 hrs the gas was ignited in the flare. Further the system was operated till 18.00 hrs, where in the oxygen level came down to 0.1%. Waste wood was used as the feedstock and about 500 kg was consumed in about 2 hours of operation. Data related to this operation was recorded. At 18.00 hrs the system was shut-down.







