



### **Emami's Bio diesel Gets SGS Stamp, Bonds with Global best**

**Kolkata, January 2009:** The bio-diesel sample of Emami Biotech Ltd has now been adjudged as among the best in the world by the globally renowned SGS Group. The company has obtained a certification from SGS Singapore which has branded its bio-diesel sample as among the finest and pure of its kind produced globally. The certification is the seal for best quality product.

The SGS Singapore's stamp has come as a huge shot-in-the-arm for Emami Biotech which has come up with a state-of-the-art 300 tonne-per day bio-diesel production facility at Haldia, set up at a cost of Rs 150 crore. The trial run for production is also complete. Waiting for the right policies to be in place, the over Rs 20 billion Emami Group is spearheading the process of developing Haldia in West Bengal as India's bio-diesel hub through Emami Biotech.

An additional amount of Rs 100 crore has also been spent at the same facility for producing edible oil. The production residue of edible oil will be used for preparing bio-diesel.

The most significant aspect of Emami's bio-diesel sample is its hugely low sulphur content, far out-performing the industry standards. Against the BIS Limit of 50mg/kg and the EN (European Union standard) Limit of 10mg/kg, Emami's product has recorded a sulphur count of 0.83mg/kg. Besides the sulphur index, Emami's product also far out-performed the industry benchmarks in ash content, moisture content, total contaminations and carbon residue indicators.

The sample analysed by SGS Singapore shows an ash content of 0.007% mass against the maximum stipulation of 0.02% mass by both BIS and EN Limits. The moisture content is 380mg/kg compared to BIS and EN Limits of 500 each while the carbon residue is less than 0.01% mass against the BIS Limit of 0.05% mass. The product is also ahead of industry benchmarks relating to density (at 15 degrees C), viscosity (at 40 degrees C) and flash point.

Air pollutants primarily include nitrogen oxides, particles, carbon monoxide and hydrocarbons, having a damaging impact on human health, vegetation and even on animals. Vehicles are the worst polluters, specially the old ones. They tend to emit more pollution during the first few miles of the journey when the engine warms up. Use of bio-diesel can off-set these problems, bringing a significant change in the SPM (suspended particulate matter) and RPM (respirable particulate matter) or sulphur dioxide in air and making it fresh.

**It has been proved that blending 20% bio-diesel will lower the unburned hydrocarbons level by 30%, carbon monoxide by 20%, particulate matter by 22%, sulphates by 20% and nitrated PAHs (polycyclic aromatic hydrocarbons) by 50%.**

Diesel engines require no modification to have a 20% bio-diesel blend with normal diesel. The low emissions of bio-diesel make it an ideal fuel for heavily polluted cities. Moreover, as an alternative fuel, it also fulfils the environmental and energy security needs. The environment conscious people can run their private vehicles by adding as much as 40-80% bio-diesel.

The corporate and the industry at large need to be more pro-active and responsive in spreading the message of awareness on environmental pollution and its remedial measures. They must volunteer in using bio-diesel to set examples on how to minimise pollution and also save fossil fuel.

A significant amount of air and environmental pollution can be reduced by using 100% bio-diesel in gen-sets, which are a major air polluter. Besides, use of bio-diesel in construction equipment, earth-moving equipment, power-equipment and heavy engineering equipment will minimise the air pollution levels to a large extent.

The four major metros (Delhi, Mumbai, Kolkata and Chennai) along with Bangalore, Hyderabad, Ahmedabad, Pune, Surat, Kanpur and Agra will have to comply with both Euro III and Euro IV equivalent emission norms by 2010. The two and three wheelers need to conform to Bharat Stage III standards not later than 2010. For new vehicles, a drastic reduction in sulphur content and cetane will be required in the diesel produced by Indian refineries. Bio-diesel meets these important specifications. The higher flash point of bio-diesel is also an of great advantage especially from the storage point.

Emami's bio-diesel plant can also act as a catalyst in boosting the agricultural economy since the company plans to produce the product from jatropha cultivation as well as out of edible oil manufacturing residues that includes soya and rice bran oil.

The bulk of the production equipment has been supplied by Desmat Belstra, an Italian Belgian joint venture company.