

Bio diesel and Lead Replacement Petrol Standards Adopted

24th April 2008

Following the phasing out of leaded petrol in Zambia on 31st March 2008, and recognizing the potential for production of bio fuels, the Zambia Bureau of Standards (ZABS) has approved the standard for Biodiesel and Lead Replacement Petrol (LRP).

The new standards prescribe the quality of Biodiesel and LRP which should be sold on the Zambian market. The standard on biodiesel was developed in order for the ERB to regulate developments in the bio fuel industry and ensure that interests of all stakeholders are protected. Biodiesel is an important emerging form of alternative energy particularly against the backdrop of rising global petroleum prices.

The LRP standard is aimed at outlining specifications for Lead Replacement Petrol in order to provide the consumer with acceptable fuel quality and to enhance trade within the region. The phasing out of leaded petrol in Zambia has made it necessary to develop standards to regulate LRP as an alternative fuel for pre 1986 vehicles that are not designed to use unleaded Petrol. LRP is a type of petrol that has been introduced to cater for petrol propelled vehicles which used to run on Leaded Petrol, in line with the phase out of leaded petrol in Zambia.

Lead Replacement Petrol (LRP) is gasoline (petrol) with an additive that gives valve seat protection to those cars that may require it. In Zambia, Lead Replacement Petrol contains Manganese instead of Lead, and has lower health risks than Lead.

Research has revealed that Lead emitted into the Environment has harmful effects on human health. The use of Leaded Petrol contributes to the emission of Lead through exhaust fumes. Therefore, the need to have cleaner fuels, as has been the campaign worldwide, necessitated the formulation of this standard to replace the Leaded Petrol for motor vehicles standard.

Fifteen other energy related standards initiated by ERB have been adopted by the Zambia Bureau of Standards including a specification for construction standards for rural service stations. The standard on code of practice to run rural service stations has been developed in a bid to encourage the setting up of

service stations in deficit areas such as rural areas. Lead traces in petrol have been reduced to 0.013 g Pb/L in line with the phase out of leaded petrol.

The ERB developed and drafted the Standards in consultation with relevant stakeholders which included the Engineering Institute of Zambia (EIZ), Environmental Council of Zambia (ECZ), oil marketing companies and the Zambia Bureau of Standards (ZABS). The standards developed are as follows:

1. ZS 702:2006 – Automotive Biodiesel – Specification
2. ZS 706: 2007 - Denatured Fuel Ethanol For Blending With Gasolines
3. Standards on Biodiesel For Use As Automotive Spark-Ignition Engine Fuel – Specification
4. ZS 703: 2007 - Rural Filling Stations - Code Of Practice
5. ZS 704: 2007 - Transportation Pipeline Systems For Liquid Hydrocarbons – Code Of Practice
6. ZS 429:2007 - The Handling, Storage, And Distribution Of Liquefied Petroleum Gas In Domestic, Commercial, And Industrial Installations: Part 4: Transportation Of Lpg In Bulk By Road - Code Of Practice
7. ZS 667: 2005 - Quality And Transportation Of Coal – Specification
8. ZS 687-1: 2006 - Sampling Of Coal
9. ZS 687-2: 2006 - Sample Preparation Of Coal
10. ZS 686-1: 2006 - Determination Of Ash Content In Coal
11. ZS 686-2: 2006 - Determination Of Total Sulphur In Coal- Eschka Method
12. ZS 686-3: 2006 - Determination Of Volatile Matter Content In Coal
13. ZS 686-4: 2006 - Determination Of Inherent Moisture Content In Coal
14. ZS 686-5: 2006 - Determination Of Gross Calorific Value Of Coal
15. Revised ZS 371: Road Tank Vehicles For Petroleum-Based Flammable Liquids – Specification
16. Revised ZS 372: Operational Requirements For Road Tank Vehicles – Code Of Practice
17. Revised Unleaded Petrol Standards ZS 395:2000.
18. Lead Replacement Petrol (Gasoline) For Motor Vehicles – Specification

Interested members of the public and concerned parties are advised that copies of the above listed standards are available and can be accessed from Zambia Bureau of Standards offices at Lechwe House on Freedom Way in Lusaka.

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