



ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No.OP2/843(1)/2008-MED

Office of the VC&MD,
MSRD.HYDERABAD-624.

CIRCULAR No.02/ 2008-MED, Dt.04.02.2008

SUB: Alternate fuels: - Use of Bio-Diesel in APSRTC- Instructions issued – Reg.

Ref: P.O. no. 9C/072014 Dtd . 03-01-2008.

As a part of the initiative taken by the Government of Andhra Pradesh to promote use of Biodiesel as fuel for automobile applications, APSRTC has tried the product for few months in Dilsukhnagar Depot of City Region. Basing on the trial results a decision was taken to use the Bio-Diesel extensively in 12 Depots located in twin cities for a period of one year duly blending it with HSD Oil in 1:9 ratio. Accordingly purchase order was released on M/s Southern online Bio-Technologies Ltd., for a quantity of 28,98,465 Ltrs @ Rs 31.40 per Ltr.

Since it is a new product and has to be used by blending with the regular fuel i.e., HSD Oil, the following instructions are issued for the convenience of the field people.

1. **RECEIPT OF BIO-DIESEL:** Bio-Diesel will be supplied to the Depots in Barrels with 200ltrs quantity basing on the delivery schedule given by the Depot Manager. The Depot manager has to assess the requirement of the Bio-Diesel for blending the same with HSD Oil @ 10% and give the weekly requirement to the firm. The quantity indented shall be in multiples of 200 Ltrs so that the firm can supply through 200ltrs barrels.

The receipt of the Bio-diesel has to be recorded in a separate register and to be certified by the Garage Incharge, D.C. (Oils), and Security Head guard as done in the case of HSD Oil. The certified invoice has to be sent to the Dy CAO (SP&A) on monthly basis for payment along with MTD 29R. Since Bio-Diesel is not covered under Explosives license, stocking of the same in loose barrels is not a problem. However, care has to be taken to stock the barrels under the shade duly preventing spillage and away from fire prone areas.

2. **ACCOUNTAL OF BIO-DIESEL:** The quantity of the Bio-Diesel received has to be entered into the MTD 29R as is done for HSD Oil. However in place of the Oil company name, the name of the Bio-Diesel supplier (e.g.: SBT) has to be entered. Whenever the Book balance and the physical balances are verified, the quantity of Bio-Diesel available in loose barrels also has to be taken into account for arriving at the actual physical balance. In addition to the accounting in MTD 29R a manuscript Register also shall be maintained detailing the quantities received, quantity mixed and the quantity available in loose barrels.

3. **MIXING (BLENDING) OF BIO-DIESEL WITH HSD OIL:** It is decided to blend the Bio-Diesel @ 10 Ltrs for every 90 Ltrs of HSD Oil. In the initial stages the on hand ground tank physical stock of HSD Oil has to be taken into account and the Bio-Diesel equivalent to 10% of the physical stock has to be decanted into the ground tank. Subsequently, as and when the HSD Oil tanker is received, 10% of that quantity of Biodiesel has to be decanted into ground tank, prior to the decanting of the HSD Oil. Normally we receive 12000 Ltrs of HSD Oil and we may have to mix 1200 Ltrs (6 barrels) of Biodiesel into the ground tank. For decanting of Bio-Diesel M/s Southern online Bio-Technologies Ltd has agreed to provide one electrically operated dispensing pump for each Depot, where Bio-Diesel is being supplied.

4. **ENSURING THE QUALITY OF THE SUPPLIES:** It is essential to ascertain the quality of supplies at the Depot level by checking the density of the Bio-Diesel. The density of the Bio-Diesel shall be in the range from 0.860 to 0.900 at 15^o C Besides this it has to be ensured that the supplies have to be followed with self-certification by the firm with batch number and other production details. Further to this, as and when instructed by the Head office the samples of Bio-Diesel have to be collected in a bottle and forwarded to office of CME (O) for testing of the same at reputed laboratories.

Homogeneous mixing of the Bio-Diesel with the HSD Oil is one of the important pre requisite of this fuel. For ensuring the same, some little quantity (say 200 ml) of Bio-Diesel from the supplies has to be taken and mixed with another small quantity (say 200 ml) of HSD Oil in glass jar and kept at safe custody. If the mixture is homogeneous even after a period of 10 days then the supplies have to be treated as O.K., and otherwise the same has to be informed to CME (O) through a letter giving the details.

5. **FEED BACK ON OPERATIONS WITH BIO-DIESEL:** Bio-diesel is stated to be a better solvent than standard diesel, and it 'cleans' the engine, removing deposits in the fuel lines there by causing blockages in the fuel filters and fuel injectors. Hence it is suggested to check and change the filters, if any complaints on poor pick up or filter clogging is reported. It is also advised to have close watch on the performance of the vehicles operated with Bio-Diesel blending for fuel performance, Driver remarks through log sheets as well as reduction in tail pipe emissions. If any abnormalities are noticed the same has to be brought to the notice of CME (O) through a letter giving all the details.

All the Depot managers, where the Bio-Diesel is supplied, are advised to follow the above instructions and ensure uninterrupted supplies from the firm and implement the usage of Bio-Diesel in APSRTC buses without any hurdles.

The RMs/Dy CME,s of HCR ,SCR and RR are advised to personally monitor the implementation of use of Biodiesel in the Depots under their jurisdiction.

**VICE CHAIRMAN &
MANAGING DIRECTOR**

Copy to: Director (Vig. & Security), ED (E&IT), ED (O&MIS), ED (A &P), ED (T&C) and Secretary to Corporation, FA and CAO for information

Copy to: ED (GH&K) for information

Copy to: RMs of HYD, SCD and RR Regions for necessary action.

Copy to: CME (O), CE (IE&COM), CCOS & CA for information

Copy to: Dy.CME(C&B), Dy.CME (IEU), Dy.CME (P), Dy.CAO(SP&A)
COS(C) I, COS(C) II & CSTO for information.

Copy to: Dy.CMEs of HYD.SCD and RR Regions for necessary action.

Copy to: All DVMs of HC Zone for necessary action

Copy to: WM, COS & Dy.CAOs of GH Zone for information & necessary action

Copy to: All Depot Managers of Barkatpura, Musheerabad, Rajendranagar, Dilsukhnagar, Ibraheempatnam, Midhani, Hakimpet, Kushaiguda, Raniganj-I, Raniganj-II, BHEL and Hyderabad-II Depots for necessary action

Copy to: Manual Section/Head Office for filing