ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

Office of the VC & MD, Mushirabad, Hyderabad-20.

No:OP2/581(13)/2007-MED

CIRCULAR No: 19 / 2007-MED, Dt.17.09.2007

SUB: HSD KMPL – Measures to be taken for improvement of HSD KMPL – Reg

REF: 1). Cir No: 24/95-MED, Dt.22.09.1995

- 2). Cir No: 25/95-MED, Dt.18.10.1995
- 3). Cir No: 5/98-MED, Dt.07.02.1998
- 4). Cir No: 23/98-MED, Dt.14.09.1998
- 5). Cir No: 15/99-MED, Dt.06.05.1999
- 6). Cir No: 23/2001-MED, Dt, 24.08.2001
- 7). Cir No: 16/2002-MED, Dt.08.11.2002
- 8). Cir No: 21/2002-MED, Dt.26.12.2002
 9). Cir No: 34/2003-MED, Dt.21.11.2003
 - 112D, Dt.21.11 ****
- **1.00** The expenditure on HSD oil is the second highest operating cost after personnel cost. During the year 2006-07 the Corporation has spent about 1428.04 crores on HSD oil alone which constitutes 33.22 % of total cost. Any effort made in conserving the precious HSD oil reduces operating expenditure as well as saving in precious foreign exchange in a big way.
- **1.01** The HSD KMPL of the corporation of late has been showing negative trend for various reasons. Though adequate guidelines are available on technical, operational, managerial controls and motivational measures; the unit officers are not bestowing personal attention for improving the HSD KMPL. It is a known fact that the following aspects play a vital role in improving the HSD KMPL.
 - i) Identification and attention of low and negative trend vehicles.
 - ii) Identification and counselling/training/admonishing of low and negative trend drivers.
 - iii) Motivational & awareness campaigns like awards presentation and incentives for achieving targets.
- **1.02** During the inspection of the Depots it has been observed that adequate attention is not given for the above aspects. The identification of low KMPL vehicles is left to the discretion of the KMPL Mechanic which has been resulting in lack of prioritising and analytical approach. At some places the work of the KMPL Mechanic is not reviewed by DM/MF for effectiveness. The HSD KMPL Mechanic is diverted to other jobs like attending to top overhauls, enroute breakdowns etc.
- 1.03 Counselling of drivers is very important and cannot be carried out as a matter of routine. Identification of Drivers is also another important activity for focused and result oriented counselling. In view of criticality; this aspect cannot be redelegated to low cadre. Picking up wrong driver for counscelling and follow up pays negative dividends. Hence utmost care has to be taken in identifying the drivers of low KMPL. The SDI should not be used for any of the purpose other than the designated job.

1.04 In view of the above, it is here by instructed that the process of identification of vehicles for attention & Drivers for counselling and training by SDI/PJDI/ZSTCs has to be done collectively by the DM, MF, SDI and KMPL Mechanic. This has to be completed by 2nd of every month duly utilizing monthly reports generated on KMPL (Driver & Vehicle based). The DM/MF shall review the effectiveness of the work done by KMPL Mechanic and SDI for the previous month, besides identifying the Drivers & vehicles as above.

However, following guidelines are issued for identification of vehicles & Drivers

2.00 ATTENTION OF LOW AND NEGATIVE TREND VEHICLES

2.01 IDENTIFICATION OF MONTHLY LOW KMPL VEHICLES

- At least 10% of fleet or 10 vehicles, which ever is higher, have to be identified for attention
- If any vehicle is repeated in the low KMPL list for the month, even after attending in the previous month, the same can be deleted from the list of attention after ensuring that sincere efforts were made to identify the causes for low KMPL and the reasons are beyond control of the KMPL mechanic.
- It is already established that the KMPL depends on type & route on which the vehicle is operated. Thus, care shall be taken to identify the vehicles for attention covering all types of routes.
- The computer department is being requested for developing software to generate report on identification of low KMPL vehicles basing on the route wise targets. Till such time the identification process has to be done from the report **lowhsd.rpt** generated on 1st of every month through the existing module.
- The items to be attended for rectification of the vehicles are given at Annexure 'A' of the circular. The attention particulars for all the vehicles identified has to be recorded in a register as per this proforma. In the same register the summary of attention for the month has to be recorded separately for monitoring the improvement in the KMPL after attention in the prescribed format as at annexure-'B'. The percentage of vehicles showing improvement after attention indicates the effectiveness of the KMPL Mechanic.
- Vehicle back history Register is an important register, which can be effectively used for arriving at the reasons for such low KMPL. The entries in the register will indicate clearly how long the defects on the particular vehicle like self-starter not working, diesel leakages, air leakages, clutch and gear slippages existed unattended.

2.02 ATTENTION OF DAILY LOW KMPL VEHICLES

- Along with daily log sheet chalan the statement of 10 lowest KMPL vehicles for the day is generated. These vehicles have to be entered into the RG registers and attended during Sch.I Maintenance.
- The details of work done on the daily low KMPL vehicles have to be recorded in a separate register maintained as per the prescribed format at annexure- 'C'.

2.03 ATTENTION OF NEGATIVE TREND VEHICLES

- Though some vehicles register drop in KMPL when compared with previous month, generally they are neglected, as the KMPL of such vehicles normally be on high side. However, this will have considerable effect on HSD KMPL of the Depot. The high KMPL vehicles should continue to give high KMPL without a negative trend for showing improvement in the overall KMPL of the depot.
- It is normally seen that the negative trend is on account of simple reasons like self starter not working, clutch slippage, gear slip, diesel leakage and change in the route, air leakages etc.. If these minor items are attended in time, the negative trend vehicles will come back to their normal KMPL.
- Thus, all the vehicles showing negative trend as per the report **lowhsd.rpt** have to be attended by the KMPL Mechanic.
- Negative trend vehicles have to be attended during the first week of the month itself.
- If any vehicle is repeated in the low LMPL list, such vehicle may be deleted from the negative trend list after ascertaining the reasons for such negative trend.
- The identification and attention particulars of negative trend have to be recorded in a separate register as per the prescribed format at annexure 'D'.

3.00 IDENTIFICATION & ACTIONS ON LOW KMPL DRIVERS:

3.01 COUNSELLING OF DRIVERS

3.01 (i) MONTHLY LOW KMPL DRIVERS

a. <u>COUNSELLING BY DM</u>

- At least 20 low KMPL drivers basing on the report **lowdrv.rpt** (basing on route wise targets) have to be identified for counselling. Due weightage has to be given to the field drivers who operate on ghat and low KMPL routes.
- These Drivers have to be counselled by the DM himself by 10th of every month.
- A separate register shall be maintained for counselling of the Drivers as per the format enclosed at annexure-'E'
- At the end of the month the progress made by the Drivers after counselling has to be reviewed

b. TRAINING BY SDI

- The Drivers without showing improvement even after counselling during the previous month shall be taken up for training by SDI of the Depot.
- Besides the above the SDI has to train the other low KMPL Drivers identified through the report **drvsmry.rpt** and not taken up for counselling
- The SDI shall cover the training for at least 20 Drivers with low KMPL and 5 Drivers with accidents prone record during the month
- The details of training imparted by the SDI along with the KMPL at the end of the month by the concerned Driver shall be recorded in a register, maintained as per the format given at annexure-'F'.
- DM and MF shall closely monitor and review the work carried out by SDI.

c. TRAINING BY PJDI

- The Dy CME of the Region shall organize the training to Drivers by PJDI
- The Drivers of the Depot for PJDI training shall be identified basing on the yearly performance by DM/MF. The Drivers figuring with low KMPL for the entire year shall be selected for training.
- The PJDI shall also focus on training of Drivers operating long distance/TIMS/interstate services, which will have impact on the KMPL of the Depot.

d. TRAINING AT ZSTC

- The drivers who are still continuing in low KMPL even after training by SDI and PJDI have to be deputed to ZSTC for training.
- Low KMPL drivers should be sent to ZSTCs for training for "2nd and 3rd " time with out paying wages for the period of training if they fail to improve after attending 1st training.

3.01 (ii) COUNSELLING OF DAILY LOW KMPL DRIVERS

- Daily low KMPL Drivers shall be identified through the report generated along with chalan every day.
- The MF has to counsel these drivers on daily basis
- The proforma to be maintained for recording counselling of daily low KMPL Drivers is prescribed at annexure- 'G'. The register to be maintained allocating a page for each Driver. This will alert us on the Drivers bringing abnormally low KMPL repeatedly.

3.01 (iii) COUNSELLING OF NEGATIVE TREND DRIVERS

- We find that the performance of certain Drivers fall very drastically when compared to the previous month. Though the KMPL of such Drivers is above average and go unnoticed, this will have lot of impact on KMPL of the Depot. Thus, it is essential to counsel such Drivers (at least 20 Drivers per month) by the Depot Manager himself.
- The details of such counselling and the KMPL obtained by the Driver at the end of the month can be recorded in the same register maintained for counselling monthly low KMPL Drivers as at annexure-'E'.

3.01 (iv) ACTIONS ON CONTINUOUS LOW KMPL DRIVERS

Even after repeated counselling, training by SDIs, training by PJDIs and at ZSTCs, some of the Drivers do not improve their driving habits and continue to be low performers in respect of HSD KMPL. There is a need to identify and take up such Drivers separately by issuing advice letters initially followed by disciplinary actions duly following the formalities. While issuing the advising letters /charge sheets, the details of previous counselling, training particulars shall invariably be mentioned besides notifying the loss incurred due to low performance. - Hither to, the counselling of Drivers is recorded in a printed register (RTC220), which contains details of KMPL, Accidents, Damages (Body, Springs, Tyres etc.) of each Driver. This register is now be treated as a 'Master Register' and shall be used only to see the performance of the Driver at the time of counselling but not obtaining the signature of the Driver. Besides the above, this register can also be used for recording the dates of counselling by DM, training by SDI/PJDI/ZSTC etc. This register will also become basis for initiating disciplinary actions on the Drivers who obtain low KMPL continuously even after repeated counselling and training.

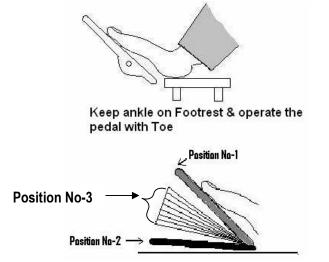
3.02 FIXING OF BENCH MARK KMPL FOR ROUTES

Every year during January (preferably during oil conservation fortnight), the route wise benchmark HSD KMPL may be arrived using good KMPL drivers and displayed at the dispensing pump as envisaged in the Circular no.23/MED.DT.24.08.2001.

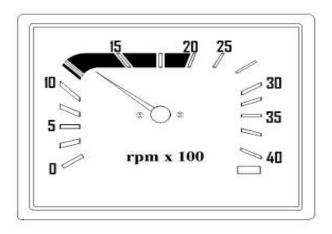
4.00 OPERATIONAL CONTROLS:

It is evident that the optimum HSD KMPL is obtained when the vehicle is operated at 2/3 rd of the maximum speed i.e. around 55 to 60 KMPH. The Drivers shall be educated on this aspect. But, in no case the engine RPM shall be restricted by locking the maximum speed of the vehicle. Instructions were already issued in this regard. The following guidelines may be explained to the Drivers through training or other media for obtaining optimum HSD KMPL.

- i) Optimum HSD KMPL can be obtained by driving the vehicle in a momentum mode, i.e. the engine power has to be utilized to attain optimum speed and there after the vehicle has to run in cruising speed, keeping accelerator pedal in no.3 position.
- ii) Whenever the vehicle is operated on down gradient, the accelerator pedal shall be maintained at no.1 position i.e. just above the idling speed. Under no circumstances driving of the vehicle shall be allowed in 'neutral' position in down gradients. This is dangerous, as the vehicle may loose stability and topples when negotiating curves.
- iii) Majority of the drivers have a bad habit of pressing the accelerator hard with pumping which leads to wastage of fuel. Accelerator has to be given gradually for attaining optimum speed. The positions of accelerator are shown below.



iv) For the latest model vehicles, provision of RPM meter is made mandatory. In the RPM meter (which reads the entire speed), there is a green band provided in the range of 1200-2000 rpm for Tata vehicles and 1400 -1800 rpm for Meghdooth of Leyland vehicles. It should be ensured that Drivers do not resort to raise the engines beyond this band either while changing the gears or while cruising.



5.00 HIGH END VEHILCES

- The effect of low KMPL of high-end vehicles is more on the overall KMPL of the Depot. Hence it is necessary to concentrate on this aspect. The DM/MF has to organize a separate training campaign by the SDI/PJDI to all the drivers of high-end vehicles who are performing low KMPL.
- As mentioned vide para no.3.02 the services of SDI / good KMPL driver shall be utilized on the lowest performance high-end routes to establish benchmark KMPL and suitable action may be taken to improve performance of low KMPL drivers.
- The Drivers of these high end vehicles shall be educated on use of overdrive (where ever available), driving in the green band rpm as discussed earlier and judicious use of alternate brakes like Retarders, exhaust brakes etc.

6.00 MOTIVATIONAL MEASURES:

Besides adopting all the above measures, the success of a Depot in attaining the highest HSD KMPL lies in the motivational levels of the team. Various circulars are issued for presenting cash awards in time, display of names of monthly and daily high and low KMPL Drivers at oil bunk, Display of best KMPL Drivers for the previous year at prominent place, Display of slogans regarding fuel conservation in Depot and vehicles, etc., which are intended to motivate the employees individually and as a team for improving the HSD KMPL. Some of the schemes/instructions are reiterated hereunder.

- a. Cash incentives ranging from Rs.50, 000/- to Rs.1, 50,000/- to the Depots based on fleet strength on attaining the targeted HSD KMPL every year.
- b. Every month 1st and 2nd best Drivers of highest saved HSD oil in the Depot will be presented Rs.250/- and Rs.150/- respectively.
- c. Award scheme for Drivers, Mechanics and Officers every year in oil conservation fortnight, sponsored by Oil companies & PCRA.

- **7.00** All the Depot Managers are advised to follow the above instructions scrupulously for improving the HSD KMPL.
- **8.00** All the RMs / Dy CMEs are advised to ensure implementation of the guidelines given above and registers to be followed during the inspection of the Depot. RMs are advised to ensure presenting of Cash Awards to the high KMPL drivers giving prominence, duly organizing small gatherings at Depot.

Please acknowledge.

Enclosed: As above

Sd/-VICE CHAIRMAN & MANAGING DIRECTOR

// ATTESTED //

EXECUTIVE DIRECTOR (E&IT)

To All Depot Managers.

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

Copy to: All ED (Zones) for information and necessary action.

Copy to: All HODs for information

Copy to: All Regional Managers for necessary action.

Copy to: All Dy CMEs / Dy CTMs of Regions for necessary action

Copy to: Dy CME (P)/Dy CME(C&B)/Dy CME (IEU)/Dy CME (IT) for information

Copy to: All DVMs/HCR for necessary action

Copy to: All WMs/COSs for necessary action

Copy to: Principal TA/HPT & all ZSTCs for necessary action

Copy to: All maintenance Incharges for necessary action

Copy to: Manual section, H.O.

ANNEXURE-A

CHECK LIST FOR LOW KMPL VEHICLES ATTENTION

- VEHICLE NO: 1
- 2 DATE OF ATTENTION
- ENGINE MILEAGE : 3
- 4 **ROUTE OF OPERATION :**
- DT.OF LAST FIE REPLACEMENT : 5
- 6 DT.OF LAST INJECTORS REPLACEMENT:
- DT.OF LAST SCH.III / IV 7

FUEL SYSTEM

		OBSE	RVATIO	NS		
i)	HSD Tank leakage					
iii)	HSD oil Leakage from FIP Overflow (due to defective feed pump O'ring)					
iv)	Condition of Fuel Filters					
V)	Condition of FIP					
vi)	Condition of Injectors					
vii)	Plunger Lift setting in BS-II					
viii	Accelerator pedal condition					
ix)	Condition of Accelerator linkages					
x)	Condition of Accelerator return spring					

ENGINE

i)	Tappet Clearance				
ii)	Condition of Rocker arm tips				
ii)	Cylinder Head Bolts/ Nuts tightness				
iii)	Air Cleaner condition				
iv)	Condition of Silencer Muffler				
V)	Condition of Exhaust brake butterfly valve				

ANNEXURE-A

CLUTCH

i)	Clutch pedal free play.				
ii)	Condition of clutch disc, worn out and slipping				
iii)	Condition of Clutch release bearing				

BRAKES

i)	Brake pedal free play				
ii)	Adequate Clearance between Brake liners & drum				
iii)	Air Building time (shall not exceed 5 min)				
iv)	Quick release of brakes after releasing the pedal				

WHEEL HUBS

i) Adequate Hub bearing play (free rolling of wheels)						
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TYRES

i)	Inflation of tyres to the recommended pressures.				
ii)	Wheel alignment condition				
iii)	Mixing of Radials and crossply tyres				

ANNEXURE-A

LUBRICATION

i)	Lubrication of UJ Cross, shackle pins, slack adjuster				
	and 'S' cam shafts and fitment of Grease nipples.				

ELECTRICAL

i)	Self condition				
ii)	Battery condition				

Signature of KMPL Mechanic				
Signature of Maintenance Incharge				

ANNEXURE -B

SUMMARY OF LOW KMPL VEHICLES ATTENTION DURING THE MONTH OF _____

SI.	Vehicle	HSD KMPL			WEEKLY KMPL AFTER ATTENTION					KMPL AT	REMARKS
No.	No.	OF PREVIOUS	DATE OF	REMARKS	1st	2	3	4	5	THE END	
		MONTH	ATTENTION	OF ATTENTION						OF	
					WEEK	WEEK	WEEK	WEEK	WEEK	MONTH	
(1)	(2)	(3)	(4)	(5)			(6)			(7)	(8)

SIGNATURE OF GARAGE INCHARGE SIGNATURE OF DEPOT MANAGER

ANNEXURE – C

DETAILS OF WORK DONE ON THE DAILY LOW KMPL VEHICLES

DATE :

S.NO.	VEHICLE NO.	ROUTE	KMPL FOR DAY	ATTENTION PARTICULARS	SIGNATURE OF MECHANIC	SIGNATURE OF	SIGNATURE OF GARAGE INCHARGE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

SIGNATURE OF GARAGE INCHARGE

ANNEXURE – D

ATTENTION PARTICULARS OF NEGATIVE TREND VEHICLES

MONTH:

						DETAILS OF ATTENTION PARTICULARS	HSD K		TER ATT	ENTION	REMARKS /
SL. NO.	VEHICLE NO.	ROUTE	KMPL OF PRESENT	KMPL OF PREVIOUS	VARI ANCE		2 nd	3 rd	4 th	MONTH	ACTION PLAN
NO.	NO.		MONTH	MONTH	ANCL		WEEK	WEEK	WEEK	-	FOR NOT
											IMPROVED
											VEHICLES
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

SUMMARY

NO. OF VEHICLES IDENTIFED AS NEGATIVE TREND IN KMPL NO. OF VEHICLES IMPROVED KMPL AFTER ATTENTION PERCENTAGE OF IMPROVEMENT

> SIGNATURE OF GARAGE INCHARGE

SIGNATURE OF DEPOT MANAGER

ANNEXURE – E

MONTHLY LOW KMPL DRIVER'S COUNSELLING REGISTER

MONTH :

SL.		STAFF	HSD KMPL		VARI-	ROUTE	TARGET	PREVIOUS	REMARKS	SIGNATURE	SIGNATURE	KMPL AT
NO.	NAME OF DRIVER	NO.	CURRENT	PREVIOUS	ANCE	OPERATED	KMPL	COUNSELLING	OF THE	OF THE	OF THE	THE END
			MONTH	MONTH		IN GENERAL		DATES	DRIVER	DRIVER	DM	OF MONTH
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

ANNEXURE - F

TRAINING OF DRIVERS BY SAFETY DRIVING INSTRUCTOR

MONTH:

SI.	Name of Driver	Staff	Present	Previous	Vari-	Route	Date of	Remarks on	Siganture	KMPL at	Remarks/action
No.		No.	month	month	ance		Training	driving habits	of the	end of	plan for not
			KMPL	KMPL			by SDI	of the driver	driver	month	improved drivers
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		1			1	1	1	1		1	I]

ACCIDENT DRIVERS

SUMMARY NO. OF DRIVERS IMPARTED TRAINING BY SDI NO. OF DRIVERS IMPROVED KMPL AFTER TRAINING PERCENTAGE OF IMPROVEMENT

SIGNATURE OF	SIGNATURE OF	SIGNATURE OF
OF S.D.I	GARGARE INCHARGE	DEPOT MANAGER

ANNEXURE - G

COUNSELLING OF DAILY LOW KMPL DRIVERS

NAME	OF THE	DRIVER					STAFF NO.		
							T		[]
S.NO.	DATE	OPERATED	HSD OIL	KMPL	ROUTE	BENCH	REMARKS	SIGNATURE	SIGNATURE
		KMS	CONSUMED			MARK		OF DRIVER	OF GARAGE
						KMPL			INCHARGE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

ANNEXURE – H

COUNSELLING OF NEGATIVE TREND DRIVERS BY DEPOT MANAGER

MONTH:

	DRIVER's	STAFF				DETAILS OF COUNSELLING	HS	D KMPL /	REMARKS/ACTION			
SL. NO.	NAME	NO.	HSD KMPL OF PRESENT MONTH	HSD KMPL OF PREVIOUS MONTH	VARI- ANCE	BY DM	1st WEEK	2nd WEEK	3 rd WEEK	4 th WEEK	MONTH KMPL	PLAN FOR NOT IMPROVED DRIVERS

SIGNATURE OF DEPOT MANAGER