



Andhra Pradesh State Road Transport Corporation
Office of the Managing Director, Bus Bhavan, Hyderabad - 500 0624.

No: OP1/200(1)/2015-MED

CIRCULAR No: 02/2015-MED, Dt -2015

Sub : HSD OIL - Receiving of HSD oil through Tank Trucks - Certain instructions to be observed while receiving and decanting of HSD oil at depots - Reg.

- Ref: 1) Circular No.23/2012-MED, dt.05.10.2012
2) Circular No.25/2008-MED, Date: 11.12.08
3) Circular No.10/2002-MED, dtd: 03.08.02.
4) Circular No.38/2001-MED, dtd: 24.12.01.
5) Circular No.37/2000-MED, dtd: 18.10.2K.
6) Circular No.32/98-MED, dtd: 04.12.98.
7) Circular No.14/95- AD&MED, dtd: 21-7-95.
8) Circular No.3/90-MED dated 5-7-1990
9) Circular No.24/87-MED, dtd: 11.09.87.
10) Circular No.5/84-Joint AD&MED, dtd: 9-3-1984.

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Instructions are in vogue on the procedure to be adopted while receiving, decanting and it's accountal of HSD oil through tank trucks at depots for proper receipt of HSD as per the invoice.

Despite issuing clear guidelines time and again through circulars, serious discrepancies have been taking place at Depots.

Recently, one tank truck left the Depot premises in Hyderabad region with 945 liters of HSD oil inside the tanker compartment which was not decanted into the underground tank. This was happened due to the utter negligence of DC(oils) and Security wing of the Depot who have failed to ensure total decanting of the product.

It is also evident during the technical audit of the depots that the following serious discrepancies are taking place at depots leading to huge shortage of HSD Oil.

- Excess delivery by the Dispensing pump.
- Leakage of HSD oil from the pipe lines connecting the underground tanks and dispensing pumps . (Wetness of sand over the ground tank is indication of such leakages).
- Leakage of oil from the pipe lines and connectors.
- Leakage from pressure hoses connected to dispensing & Nozzle
- Malfunctioning of meter in the Dispenser

- Negligence in taking daily meter readings and dip readings of HSD oil by DC(Oils).
- Negligence in reconciling the physical stocks with the book balances on daily basis due to which sudden variations if any in the oil stocks are left untraced.
- Not taking the dip readings before and after decanting of HSD oil.
- HSD oil Manuscript stock register is not being maintained properly, which should be preserved for production when abnormal variations in stocks are noticed at a later date.
- Negligence by Maintenance In-charges in crosschecking the stock levels by taking the dip readings physically at least once in fortnight.
- Usage of non-relevant calibration charts
- Poor cleanliness of dispensing pump, nozzles and oil bunk premises
- Tampering the metering unit of the Dispensing pump.
- Failure to ensure adequate firefighting equipment near oil bunk.
- Not handling the oil filling nozzle carefully and causing damages
- Failure to ensure stamping of 5 liter Can and dispensing unit by Weights & Measurements department every year through oil companies.
- Accumulation of huge shortage in HSD oil stocks (to the extent of thousands of liters) in the individual depots ranging upto 68,000 ltrs.

Corporation is spending Rs 3000 crores annually for purchase of diesel oil, which constitutes 38% of total expenditure and since this is liquid gold, any type of mishandling will cause severe financial loss besides tarnishing the image of the Corporation. In the light of the above the following instructions are reiterated once again for strict compliance.

1). HSD Oil receipts at Depots

1. Based on the indents, the Oil companies supply the HSD oil along with Invoices (5 copies) with the signature of the tanker Driver.
2. The Driver of the Oil tanker is responsible for the quantity & quality of the oil delivered by the Oil Company once the tanker is left the filling station until it is received by the Depot.
3. Receipt of the tank trucks at the depot shall be planned between 09-00 to 17-00 hrs only (except in the case of emergency).
4. The Security staff of the Depot shall check the oil tanker before entering into the Depot and verify whether the seals are intact or not.
5. The Security staff shall record the Truck Number, invoice number into the register maintained by them and allow the tanker into the premises.
6. The tankers shall be parked on a level ground for a minimum period of 15 minutes so that the oil in the tanker settles down before taking the dip readings.

7. Tank trucks should be kept in neutral position and parking brakes should be applied. Wooden chokes shall be placed on the tyres to avoid vehicle movement.
8. Battery cut-off switch should be kept in 'off' position.
9. All the six tyres of the truck shall be in properly inflated condition.

II). *Checking Procedure for Dip levels & Density*

1. During the settling period, the details furnished in the invoice like consignee, product, quantity, tank truck number etc shall be verified
2. The Dip rod calibration certificate shall be checked and the Dip rod markings for dip level & proof level for each compartment shall be crosschecked with the Weights & Measurements certificate. The dip rod marking shall also be verified with that of Invoice.
3. Proper locking (security seals) to the delivery valves & tank domes shall be ensured
4. Top manhole covers shall be checked and ensured that they are properly seated and locked
5. The tanker shall be accepted only after satisfying with the dip rods markings.
6. Main valves at the rear of the truck shall be fully opened
7. After giving sufficient settling time, the DC in presence of Security staff and Mechanical Supervisor shall open the top locks and check the each compartment with water finding paste.
8. The water finding paste shall be applied at the bottom of the dip rod and observe for any change in the colour after inserting the dip rod into each compartment. The tanker shall be rejected if the colour of the paste changes to pink or light green.
9. In case where the DC is not available, ADC(oils) may receive the HSD oil in presence of Security Staff & Mechanical Chargeman
10. The HSD oil contamination with superior kerosene oil can be detected by smell.
11. The Opening of master valves & top valves (if available) shall be kept open before checking the dips to ensure that the pipe lines are completely filled with oil.
12. Density test has to be conducted to confirm the density of the HSD oil supplied by the company as per the invoice.
13. The sample of HSD oil from the top of each compartment shall be collected in a 500 ml measuring jar for testing the density
14. By using the Hydrometer and thermometer, the readings of density and temperature of the samples have to be recorded.
15. The readings so obtained shall be verified with the ASTM charts to know the loading density of HSD oil at 15 degrees Celsius (furnished in Invoice)

16. Any variations in density beyond 0.003 shall be rejected
17. The density shall also be tested by collecting the sample from the bottom after draining 10 to 20 liters from each compartment
18. After satisfying with the product density, the dip readings for each compartment shall be taken.
19. For taking the dip readings of the compartment, the dip rod shall be inserted slowly when the vehicle is at stationery position without any oscillations.
20. The proof level of the Dip rod and the edge of inserting pipe of compartment shall be coincided properly after inserting the dip rod into the compartment.
21. For identification of oil dip level on the dip rod only blue paste shall be applied on either sides of the mark on the dip rod.
22. It shall be ensured that the dip rod is properly inserted into the compartment and touches the bottom of the tank slowly.

Precaution: To ensure that no false tubing is done in the dip tube of the compartment, the reading has to be taken by draining 20 liters from the compartment. If there is no change in the dip level even after draining the oil from the compartment then it can be suspected that false tubing is done in that particular compartment.

III). ***Procedure for assessing the Shortage of product received through Tanker:***

If shortages are found after taking the dip readings, the following procedure shall be followed to assess the shortage of oil.

1. If the dip level is found low on all the three compartments, then select the compartment No.1 and draw the oil in the measuring cans from this compartment, say 'X' litres.
2. Top-up the compartment No.2 & 3 upto correct dip level with the oil drawn from compartment No.1 and note down the quantity, say 'Y' liters.
3. Fill the Compartment No.1 to its original dip level by topping up the oil drawn from it i.e 'X' liters).
4. Now draw the oil from the other compartments (No.2 or 3) in the measurement cans and fill the compartment No.1 to the correct dip level and note down the quantity (say 'Z' liters)
5. The total shortage of all compartments is 'Y+Z' liters
6. Then endorse on the reverse of all the copies of the challans and obtain the tank truck driver signature.
7. A letter shall also be sent to the Supply point indicating the shortage of HSD oil received from the tanker.

IV). Procedure for decanting HSD oil from the Tanker:

1. Check the dip reading of the ground tank before decanting
2. connect braided hose from truck manifold valve to UG tank decanting pipe after completion of all checks. Ensure earthing of tank decanting hose to ground.
3. Ensure that dip pipe and any other hole other than the fill pipe are kept closed
4. Ensure proper connection between the unions and allow the truck crew to decant the product completely into the underground tank.
5. Ensure that the driver always stays near the hose during the decanting operations (to immediately take corrective measures in case of any leaks or emergencies).
6. Check the tanker for any leftover product before disconnecting the pipes by visual inspection and by checking with dip rod after decanting the oil completely.
7. Ensure that master valves are completely open during the process of unloading.
8. During the process of decanting the tanker, the HSD oil delivery pump shall not be operated.
9. The DC/ADC oils shall take the ground tank readings after decanting the HSD oil tank truck in the presence of Mechanical Supervisor & Security staff and record the same in the manuscript register.

V). Issue & Accountal system of HSD oil

1. After satisfying with the quantity received from the tanker, the invoice shall be signed by the Maintenance Incharge certifying that oil is received as per the invoice duly making the endorsements of shortages etc if any on the invoice.
2. Out of 5 copies of invoices, 3 shall be retained and 2 shall be sent to Oil company.
3. At all occasions the actual quantity received shall only be certified.
4. The DC immediately after certification, shall take the quantity received into the books of MTD29R along with invoice number and date.
5. Whenever the HSD oil is issued by the ADC, the opening and closing readings of the meter shall be noted and the quantity issued shall be recorded in the vehicle logsheets and manuscript register.
6. Issues to Out-depot vehicles shall be made by issuing MTS-2 and endorsing the same in the vehicle log sheet.
7. The oil issued for cleaning purpose (not exceeding 2 ltrs per vehicle) and generator shall be recorded and MTS-2s shall be issued immediately after issues.

8. The ADC incharge of the Oil bunk shall ensure that the reading of the pump always tallies arithmetically with that of the meter reading at the time of his taking over plus total oil issued during his spell of duty.
9. The DC shall ensure that total issues of the day are tallied with the summary of log sheet challan and certified by the DC every day.
10. Every day before commencement of issues, the DC shall note the meter readings, and take stock position of the HSD oil ground tank and record the same in the manuscript register.
11. It shall be the duty of the DC to reconcile the actual stocks of HSD oil with the balance as per books and satisfy himself that there are no discrepancies.
12. If there are any discrepancies, the matter shall be brought to the notice of the Maintenance incharge and the DM immediately.
13. The Manuscript register, which the DC records the daily meter readings and dip readings shall be safely preserved and produce the same to the audit inspectors.
14. Dip rods issued by the Oil companies for measuring the dip levels of the underground tanks shall be maintained carefully
15. The daily receipts and issues shall be posted in the MTD 29R returns.
16. The 29R returns shall be prepared in triplicate duly obtaining the signatures of the Maintenance incharge and the DM.
17. Every fortnight, The 29R returns shall be submitted to Regional MIS and Accounts Office for compilation and audit.
18. The Office copies of the 29R returns shall be preserved carefully by the DC.

VI). *Precautions to be taken for preventions of HSD Oil Shortage*

1. The invoice details viz., truck number, consignee, product quantity etc., shall be properly scrutinized while receiving the product
2. Dip rod calibration details available with tanker shall be verified and same shall be crosschecked with the invoice details.
3. The Dip rod shall be measured for correct length. The tip of the rod shall be checked for excess wear.
4. The worn out Dip rods of ground tanks shall be got replaced by Oil company along with suitable calibration chart.
5. The security personnel, Mechanical Supervisor not below the rank of Dy.Suptd (Mech) and custodian i.e, DC (Oils) shall witness the decanting activity as per the guidelines in circular 37/2000.
6. The intactness of seals/locks provided to the tanker valves shall be ensured to avoid pilferage.
7. The density of HSD as per invoice shall be ensured.
8. Proper precautions shall be taken at the time of decanting the tank truck to avoid short receipt of HSD oil through tank trucks

9. All the truck compartments shall be checked for false tubing/ dubious internal tanks
10. The fuel level of the tank truck shall be checked before & after decanting the product in order to confirm that no inter-connection is made between the tank compartment and its fuel tank.
11. The actual dip readings of the Ground tank shall be taken before & after decanting duly recording the same in the register.
12. The tankers shall be thoroughly checked before leaving the depot after decanting.
13. The short receipt of HSD however small it may be, shall be recorded and reported to the oil company immediately.
14. Physical stock shall always be tallied with the dip readings

The DMs are advised to ensure that the stipulated procedures are strictly followed in HSD oil receipt, accountal and issues. The DMs shall personally witness the decanting activity at least twice in a month besides scrutiny of Oil Tanker Register at regular intervals.

The Dy.Chief Mech. Engineers are advised to cross check the implementation of the instructions given above on the decanting of HSD at the depots under their jurisdiction during their visit. The Dy.CMEs shall conduct periodical review meetings with DCs(oils) and review the implementation of systems. Any laxity will be viewed seriously.

The Regional Managers are advised to ensure implementation of above instructions and review the subject during the periodical meetings with DMs/Maintenance In-charges for effective implementation.

Please acknowledge the receipt

Handwritten signature: K. S. - 17/11/15

VICE CHAIRMAN & MANAGING DIRECTOR

To
All the Depot Managers.

Copy to: Dir (V&S), ED (E), ED (O&MS), ED (A&P), FA, CAO, ED (T&C) for infn.

Copt to: ED (GHZ&HZ), ED (KDP), ED (KRMR), ED (VJA), ED (VZM), ED(NLR) for infmn.

Copy to: All RMs for necessary action.

Copy to: CME (O), CCOS, CA, CFM, CME(C&B), CE (IT), CPM, CM (HRD) for information & n/action.

Copy to: DyCME (O), DyCME (P), DyCME(C&B), DyCME (IED), DyCAO (SP&A), CSTO, COS(C) I & II for information.

Copy to: All DyCMEs, WMs, COSs & DyCAOs for necessary action.

Copy to: All AOs & AMEs (T) for information & n/action.

Copy to: All Principals of ZSTCs, BTC, HPT & TA/HPT for information.

Copy to: All Maintenance In-charges of depots for necessary action.

Copy to: In-charge, Manual Section for record.

Copy to: RAO, AG-Audi, Bus Bhavan for kind information.