

SECTION TITLE: HIGHWAY OPERATIONS

CHAPTER TITLE: FUEL AND LUBE INVENTORY

Effective: 3/2/2015

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SECTION TITLE: HIGHWAY OPERATIONS

CHAPTER TITLE: FUEL AND LUBE INVENTORY

**I. INTRODUCTION**

Effective: 3/2/2015

The purpose of this chapter is to provide procedures for the administration of Division of Highways' fuel and lubricant inventory. These procedures must be followed in order to safeguard state property, establish guidelines for safe fuel storage, and to ensure that accurate fuel inventories are documented and maintained. The guidelines discussed in this procedure are essential to fuel management for each organization and the DOH.

**II. FUEL AND LUBE INVENTORY POLICIES**

Effective: 3/2/2015

**A. PETROLEUM PRODUCT CONTAINER MARKING**

1. All petroleum product pumps, storage tanks, and vessels must be legibly and permanently labeled identifying the petroleum product contained. Label pumps and containers by stenciling in paint, permanent ink, decals or any other indelible material.
2. All fill connectors and caps must be color coded to identify the type of product:
  - a. Unleaded Gasoline – White and Black checked or White
  - b. Diesel – Yellow
  - c. Kerosene – Brown
  - d. #1 Heating Oil – Purple and Yellow striped
3. Conspicuously display fill connection and cap color key code at each pump station.
4. All required markings and instructions shall be distinct and easily readable and shall be of such character that they will not tend easily to become obliterated or illegible.
5. All equipment shall be continuously painted and maintained in proper operating condition.

**B. PETROLEUM PRODUCT SAFETY**

1. Post 'No Smoking' signs at all dispensing stations. Smoking is prohibited around explosive or flammable substances.
2. Mount appropriately sized, classed and charged fire extinguishers, in easily accessible locations, at all dispensing stations.
3. Use only brass, aluminum or plastic fill caps.
4. Regularly inspect petroleum product pumps, storage tanks, cans, etc., for damage, leaks and proper operation. Immediately repair or replace if not repairable.
5. Properly and safely contain, clean and dispose of any spills of petroleum products.
6. New tanks or cans should be dedicated to one petroleum product for the life of the container.
7. Recycle or properly dispose of old motor oil and anti-freeze. Contact Highways' Equipment Division for guidance on recycling programs.
8. General good housekeeping will be maintained at all times.

**C. RECEIPT OF FUEL, LUBRICANTS, AND OTHER STOCK ITEMS**

1. Organization managers must assure that adequately trained personnel are available at the organization when fuel deliveries are made. A DOH employee shall observe and monitor the pre and post-delivery stick readings performed by the fuel distributor.
2. Calibration charts must be posted in easy to reference locations.
3. The pre and post-delivery stick reading must be converted to gallons, utilizing the calibration chart for the storage tank and documented (fuel tank inventory gallons pre and post-delivery) on Form GL-2, Pump Station Report.

Additionally, for DOH fuel tanks equipped with the Veeder Root monitoring system, a DOH employee will use the Veeder Root System to print the tank quantity both pre and post fuel delivery. These printed reports should be attached to the GL-2 Pump Station Report associated with the delivery of fuel.

Deliveries of fuel products shall include a legible metered delivery ticket which has been processed through a meter certified and sealed by the West Virginia Division of Labor - Weights and Measures. The metered delivery ticket must have printed the quantities, product type, blended percentages, the rack prices for blended products, location, time, and date of delivery, and the driver's name. The pre and post tank stick readings shall also be recorded on the delivery ticket. A copy of the delivery ticket signed by both the delivery driver and the DOH employee observing the delivery shall be left at the location receiving the fuel delivery.

4. All tank wagon (TW) fuel deliveries shall be metered at the point of delivery and shall issue a printed ticket in compliance with the West Virginia Division of Labor. A DOH employee shall compare the fuel distributor's tank wagon metered gallons with the vendor's delivery ticket. The DOH employee, who observes the tank wagon (TW) fuel delivery, shall also observe the tank wagon's Division of Labor – Weights and Measures certification (sticker). Tank wagon vehicles not having the Division of Labor's certification shall be reported to the District Comptroller.

Tanker truck (TT) fuel deliveries may make a delivery of a complete compartment and are permitted to substitute the allocation metered ticket (from the loading point) for the metered delivery ticket. The Bill of Lading shall contain product type, quantities, location, date and time, and driver's printed and legible name.

5. The pump attendant/storekeeper shall complete Form DOT-5, Receipt of Materials, for all receipts of fuel and lubricant products.
6. The storekeeper receives lubricants, anti-freeze and other items not delivered by tanker at the storeroom or garage and stores items where they will not present a safety hazard or interfere with organizational operations.

**D. ISSUING FUEL AND LUBRICANT PRODUCTS**

1. The designated pump attendant/storekeeper is responsible for verifying all quantities transferred into or out of each organization.
2. Each pump station and authorized tank truck is issued a credit card imprinter, which will contain a plate reflecting the issuing organization number, inventory location number, and organization number.
3. All Highways fueling stations will display, near the fuel and lubricant credit card imprint machine, the DOH "Instructions for Fuel Purchases" poster. Organizations may print this poster from the DOT Intranet/DOT/Procedures/Forms.
4. Report most fuel usages using Form DOT-7, G&L Fuel Card Issue. Two types of cards may be used to imprint the DOT-7:
  - Interdepartmental card for DOT employees;
  - Outside agency card for official government/agency vehicles assigned to other agencies;
5. Make available the carbon backed middle copy of the DOT-7 to the receiving individual.
6. If a pump attendant is not present, the receiving individuals may pump their own fuel and complete the DOT-7, retaining the middle copy.
7. Record usages to equipment without E.D. numbers (chainsaws, string trimmers, etc.) on the DOT-6, Inventory Usage or Transfer, and expense to EEXP914.

**E. PORTABLE FUEL TANKS AND TANK TRUCKS**

1. The pump attendant/storekeeper will record the transfer of fuel into the tank truck or portable tank using Form DOT-6. The tank truck or portable tank assigned two-digit inventory location number will be used for the transfer of fuel to the tank truck or portable tank.
2. When fuel is issued to one of the tank trucks or portable tanks, from a pump station location, the driver will assume the same responsibility as a pump attendant/storekeeper concerning the issuance of the product carried in the tank truck or portable tank.

3. The portable tank will not be supplied a credit card imprinter. Therefore, all inventory dispensed from a tank truck or portable tank must be recorded, by hand, on Form DOT-7.
4. Return all completed DOT-7 forms, as well as any voided forms, to the pump station when the tank truck or portable tank is returned for refilling.

#### **F. PETROLEUM PRODUCT REPORTING**

1. Report all situations concerning pumps, tanks, and fuel (including water contamination problems) to the organization supervisor and the DOH fuel tank coordinator at 304-558-7474.
2. On the last workday of each month, the organizational supervisor will ensure a physical inventory ("stick" reading) is performed for all fuel types inventoried and compared to the REMIS fuel inventory balances. These monthly fuel inventory comparisons shall be documented on the Monthly Analysis of Fuel Tanks spreadsheet (See Exhibit 1).  
Additionally, for DOH fuel tanks equipped with the Veeder Root monitoring system, that system shall be utilized to print a report showing the last workday of each month's fuel inventory for all inventoried fuel types. This Veeder Root Report must be maintained with the Monthly Analysis of Fuel Tanks spreadsheet.
3. It is imperative that these fuel inventory comparisons be presented to the District Comptroller no later than the second work day of the new month. Differences of more than 5% will be reviewed for consideration of an inventory adjustment.  
An essential part of approving a fuel adjustment, specifically a write-off, is the justification. (For additional information see Item IV Fuel and Lubricant Adjustments.)

### **III. FUEL AND LUBE INVENTORY PROCESS**

Effective: 3/2/2015

#### **A. FUEL AND LUBRICANT DAILY REPORTING**

1. All fuel dispensing locations shall perform two (2) fuel tank stick readings each day the fuel dispensers are used. These fuel tank stick readings are to be performed when the fuel dispensers are turned on, prior to any fuel being dispensed, and again after the fuel dispensers are shut down at the end of the day. Additionally, at these same times each day that fuel is dispensed, the fuel dispenser meter reading shall be recorded for each type of bulk fuel at the location. The beginning (day's) stick and meter reading and the day's ending stick and meter reading will be recorded as the daily beginning and daily ending fuel quantities as required on the GL-2 Form and the GL-1, Leak Monitoring Log. All DOH organizations issuing fuel products must perform the fuel stick readings twice per day, at the start of the day (before any fuel is dispensed) and at the end of the day (after the last fuel is dispensed). The GL-2 Form has lines for recording the daily tank stick readings-inches of fuel.
2. During SRIC and other continuous shift operations, the organization's fuel tanks shall have stick readings and dispenser meter readings performed at the beginning and end of each day the fuel pumps are utilized.
3. The pump attendant/storekeeper sorts Forms DOT-5, DOT-6 and DOT-7 in numerical order by document number and attaches these documents to the GL-2. The previous work day's GL-2 data must be entered as early as possible, the next work day.

**B. FUEL AND LUBRICANT INVENTORY USAGES OR TRANSFER**

1. When fuel or lubricant is dispensed, the pump attendant/storekeeper will properly complete Form DOT-7, G&L Credit Card Issue.
2. The fuel dispensing organization must ensure the person receiving the fuel signs the form, and places the original and the hard copy, in the designated location for completed DOT-7 Forms.
3. Outside agency customers should be asked to print, as well as sign, their name on or below the "RECEIVED BY" line on the DOT-7.

4. Outside agency personnel using a DOH Outside Agency Fuel Card should be reminded to file the receipt with his or her home organization, at the earliest possible opportunity.
5. All outside agency vehicles fueling at DOH fuel installations shall have government license plates. Vehicles with non-Government type license plates are not allowed to fuel at DOH fueling locations – No Exceptions.
6. If the DOT-7's pertinent charge information for outside agencies is not legible, the Division/District should contact Finance and Administration Procurement Section for assistance.
7. Fuel and lubricant items charged to shop overhead must be recorded using authorization "EEXP914" on Form DOT-6, Inventory Usage or Transfer.

**C. MANAGEMENT OF OUTSIDE AGENCY FUEL ACCESS**

1. District and organizational managers are responsible for their assigned fuel inventories. After-hours access to DOH fuel inventory is not required, nor desirable for all outside agencies; this type of access must be managed by the DOH.
2. Access (after-hours) to DOH facilities and fuel shall be limited and controlled. When keys to DOH facilities are provided to agencies, those keys should be clearly marked "DO NOT COPY".
3. Each DOH organization which provides DOH facility keys to outside agencies, shall be required to maintain a log/spreadsheet listing the outside agency to which keys were provided. That listing should contain at a minimum, the following information:
  - a. Outside Agency Name
  - b. Number of DOH keys provided
  - c. Types of access made available, i.e. DOH gate, DOH building, DOH fuel pumps etc.
  - d. Date and the name of individual(s) receiving DOH keys
4. A copy of the log/spreadsheet listing DOH access (keys) provided to outside agencies must be maintained at the organization as well as at the DOH District

Headquarters organization. The District Engineer/Manager and District Comptroller should each have copies of these lists for each DOH organization.

5. The log/spreadsheet listing must be updated when additional keys are provided to an outside agency that already has access, or if a different agency is provided access. Additionally, an annual update of each organization's spreadsheet of agency access keys shall be prepared. The updated log/spreadsheet must be provided to the District Offices.

#### **D. PUMP STATION CREDIT CARD IMPRINTER REPLACEMENT**

A spare imprinter, without a metal issuing organization number and nameplate, will be placed at each District Headquarters to replace a broken or stolen credit card imprinter. Upon request, Finance and Administration Procurement Section will replace the metal issuing organization number and nameplate. Procurement will maintain a "Write In" plate for temporary replacement while the new plate is being prepared. The "Write In" plate will require the issuing organization to manually write in their organization number and inventory location until the new plate is received.

#### **E. FUEL TANK ADJUSTMENT CALCULATION**

The following procedure is used to calculate the percent difference between the stick reading of the gas, diesel, and kerosene storage tanks and the REMIS inventory balance:

Fuel (REMIS) balance minus stick reading\* = X

X divided by the (REMIS) balance = % difference

(\*As reflected on line 24 of the GL-2.)

If you have a difference of more than 5%, the following adjustments may be considered:

- If the REMIS balance is more than the stick reading, an approved Request for Inventory Write-Off Form DOT-6a is required (See Exhibit 2).

The Request for Inventory Write-Off must have a written justification and must be approved prior to processing the Inventory Usage (DOT-6).

- If the stick reading is more than the REMIS balance, submit a Non-vendor Form DOT-5 and an Accounting Journal Voucher Form BF-143.

The Journal Voucher entries must debit the Equipment Inventory Authorization (IEXP002) and credit the Fuel Inventory Adjustment Authorization or the organizational overhead authorization. See Item IV Fuel Adjustments.

#### IV. **FUEL AND LUBRICANT ADJUSTMENTS**

Effective: 3/2/15

Fuel adjustments are processed to maintain correct fuel inventory balances. It is a mandatory requirement that each organization having fuel inventories, perform the monthly fuel inventory verification as described in Item 11 F.

An **overage** adjustment results when the actual (stick measured) fuel quantity exceeds the REMIS inventory fuel balance.

A **shortage** adjustment results when the actual (stick measured) fuel quantity is less than the REMIS inventory fuel balance.

Fuel adjustments can be caused by different factors including:

- Failure to perform the monthly fuel inventory review
- Poor and inaccurate or incomplete recordkeeping
- Storage tank problems
- Temperature sensitivity (expansion/evaporation)
- Short/over deliveries
- Fuel tank gauge and/or fuel pump calibration issues
- Using correct storage tank chart
- Reading the stick correctly
- Theft/fraud

The Division of Highways has a **zero tolerance for theft/fraud**. Fuel and lubricant theft must be handled by district management as soon as it is identified or reported. Appropriate action(s) required include notifying the appropriate law enforcement agency and/or application of disciplinary action where agency employees are involved.

Fuel Write-Off requests (DOT-6a) may be completed for each fuel shortage which exceed the 5% difference between the actual fuel on hand and the REMIS Inventory balance. These Write-Off Requests (DOT-6a) must be prepared by the organization having the fuel shortage. A proper justification, documenting the circumstances must be completed by the organization on the DOT-6a Write-Off form, or on a separate page accompanying the DOT-6a form. **Fuel and lubricant write-offs not having an acceptable justification shall not be approved or processed.**

Fuel and lubricant write-off adjustments must be jointly approved by the District Engineer/Manager and the District Comptroller. After approval/rejection of the fuel write-off by the District Engineer/Manager and the District Comptroller, a copy of the DOT-6a Request for Write-Off will be forwarded to the Finance and Administration Division, requesting approval to expense the fuel write-off to the Fuel Inventory Adjustment Authorization (AEXP003).

The Finance and Administration Division will review the fuel write-off request/justification and determine whether the adjustment amount can be expensed to the Fuel Adjustment Authorization, or expensed against the organization's overhead authorization. Upon determination of the allowable expense authorization, the comptroller will be notified by Finance and Administration which authorization is approved to receive the fuel adjustment expense.

The comptroller will contact the organization(s), having an approved fuel adjustment and instruct the organization(s) to prepare a DOT-6, Inventory Usage Document expensing the write-off to the Finance and Administration approved expense authorization.

A copy of each DOT-6a Write-Off, whether approved or rejected, must be transmitted to the Procurement Section of the Finance and Administration Division (BFP). The Procurement Section will maintain all DOT-6a Write-Off Forms for a period of three (3) years.

While it is desirable to maintain accurate fuel inventory balances, managers should not be pressured to process excessive fuel adjustments without a proper justification and/or additional review.

Occasionally, an excessive fuel adjustment is the result of an improper 'tank stick read' or referencing the incorrect tank conversion chart. Tanks equipped with the Veeder Root System provide the organization with accurate tank inventory measurements, and where the Veeder Root System is available, it should be utilized as a second method of measuring fuel inventories. Excessive fuel adjustments may be the result of a mathematical error when comparing the 'stick' reading to the REMIS Inventory value. Often these 'errors' in fuel measurements will be discovered upon closer review. Large quantity fuel write-off requests should not be approved without a detailed justification and verification of the circumstances by management.

District Comptrollers shall maintain a spreadsheet listing of fuel adjustments requested and fuel adjustments processed. This spreadsheet must, as a minimum, list the fuel adjustment date, organization and location, fuel type, units, unit cost, and total cost, and the DOT 5/DOT 6 document number used to record the approved adjustment. Fuel adjustments, both overages and shortages shall be maintained on the Comptroller's spreadsheet by fiscal year.

**V. EXHIBITS**

Effective: 3/2/2015

MONTHLY ANALYSIS OF FUEL TANKS

January 30, 2015

EXHIBIT I

Monthly Analysis of Fuel Tanks

Tank Capacity (Gallons)	Loc. #	Date	Location	Type of Fuel	REMIS (Gallons)	Gallons Received (Not Posted)	Gallons Issued (Not Posted)	ADJUSTED REMIS BALANCE (Gallons)	Stick Reading	Amount of Difference (Gallons)	Variance
6000	01	01/30/15	County A	Gas	3294.00	1600.00		4894.00	4819	75.00	1.53%
6000	01	01/30/15	County A	Diesel	2703.00	500.00		3203.00	3100	103.00	3.22%
4000	02	01/30/15	County A	Gas	2957.00			2904.00	2950	25.00	0.86%
4000	02	01/30/15	County A	Diesel	2898.00			2898.00	2896	2.00	0.07%
4000	01	01/30/15	County B	Gas	3212.00			3212.00	3216	-4.00	-0.12%
4000	01	01/30/15	County B	Diesel	929.00	2100.00		3029.00	2999	30.00	0.99%
2000	02	01/30/15	County B	Gas	1329.00			1329.00	1367	-38.00	-2.86%
2000	02	01/30/15	County B	Diesel	766.00	950.00		1716.00	1573	143.00	8.33%
4000	01	01/30/15	County C	Gas	3391.00			3391.00	3384	7.00	0.21%
4000	01	01/30/15	County C	Diesel	1607.00	1800.00		3407.00	3372	35.00	1.03%
4000	01	01/30/15	County D	Gas	2803.00			2803.00	2805	-2.00	-0.07%
4000	01	01/30/15	County D	Diesel	1857.00	2300.00		4157.00	4002	155.00	3.73%

WVDOT REQUEST FOR INVENTORY WRITE-OFF  
 (FORM DOT-6a)

EXHIBIT II

WVDOT REQUEST FOR INVENTORY WRITE-OFF

FORM DOT-6a

Revision 01-26-10

DATE		ORG. NUMBER	INVENTORY LOC. NO.	DESCRIPTION OF INVENTORY ITEM	
CLASS	TYPE	SUBCODE	UNITS (.000)	UNIT COST (.0000)	TOTAL VALUE OF WRITE-OFF REQUEST
<b>JUSTIFICATION:</b>					
REQUESTED BY: _____				DATE REQUESTED: _____	
APPROVED:	<input type="checkbox"/>	DISAPPROVED:	<input type="checkbox"/>	DISTRICT COMPTROLLER	
APPROVED:	<input type="checkbox"/>	DISAPPROVED:	<input type="checkbox"/>	DISTRICT ENGINEER/MANAGER	
<b>COMMENTS:</b>					
AUTHORIZATION FOR EXPENSE - CHECK ONE					DATE
<input type="checkbox"/>	AEXP003 (FUEL)		<input type="checkbox"/>	AEXP004 (OTHER)	
DATE COPY SUBMITTED TO BFP _____				DATE RECEIVED BY BFP _____	