Purpose: This manual is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive 5134.12 and DoD Instruction 4140.25:

- The manual implements policy, assigns responsibilities, and provides procedures for the supply chain management, quality assurance and quality surveillance, and storage of energy commodities and related services.

- This volume assigns responsibilities and provides procedures for performing causative research, investigating, and determining any financial liability for inventory accounting discrepancies with Defense Working Capital Fund (DWCF) energy commodities stored at a DFSP or in-transit to or from a DFSP.
TABLE OF CONTENTS

SECTION 1: GENERAL ISSUANCE INFORMATION ................................................................. 4
  1.1. Applicability. .............................................................................................................. 4
  1.2. Information Collections. ........................................................................................... 4

SECTION 2: RESPONSIBILITIES ..................................................................................... 6
  2.1. Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)). 6
  2.2. Director, DLA. .......................................................................................................... 6
  2.3. DoD Component and Participating Agency Heads. ................................................... 6

SECTION 3: PROCEDURES ............................................................................................. 7
  3.1. Standard Allowable Tolerance Factors ....................................................................... 7
  3.2. Gain and Loss Categories. ........................................................................................ 8

SECTION 4: DAILY OR MONTHLY GAIN OR LOSS INVESTIGATION ................................. 13
  4.1. DoD Components....................................................................................................... 13
  4.2. RO or TM ................................................................................................................... 13
  4.3. DLA Energy Regional Offices. .................................................................................. 17
  4.4. DLA Energy-L ........................................................................................................... 18

SECTION 5: MOVEMENTS UNDER INVESTIGATION (MUI) ............................................... 19
  5.1. DoD Components....................................................................................................... 19
  5.2. DLA Energy and the DLA Energy Regional Offices .................................................. 20
  5.3. RO, PA or TM ............................................................................................................. 20
  5.4. DLA Energy-L ........................................................................................................... 20
  5.5. Receiving DFSP. ....................................................................................................... 20
  5.6. Supporting DLA Energy Regional Office. ................................................................. 20
  5.7. DLA Energy-L ........................................................................................................... 21
    a. Unmatched with No Further Investigation or Claim Action Required ...................... 21
    b. Trends Associated with Small Quantity Discrepancies ............................................ 22
    c. Large Quantity Discrepancies. ................................................................................. 22
    d. Errors in the Records. ............................................................................................... 22
  5.8. Completing the MUI. ................................................................................................. 22

SECTION 6: LIABILITY DETERMINATION ...................................................................... 24
  6.1. Investigation Roles .................................................................................................... 24
  6.2. Procedures ................................................................................................................ 25
  6.3. Liability Assessment. ............................................................................................... 26
  6.4. Inventory Adjustment. ............................................................................................. 26
  6.5. Document Retention. ............................................................................................... 26

GLOSSARY ...................................................................................................................... 27
  G.1. Acronyms. ................................................................................................................ 27
  G.2. Definitions. .............................................................................................................. 27

REFERENCES ................................................................................................................ 32

TABLES
Table 1. Standard Allowable Tolerance Factors .............................................................. 7
Table 2. Operating Variance Formula ............................................................................. 9
Table 3. Example Formula for Percentage Loss ................................................................. 9
Table 4. Example Calculation for In-Transit Variance ...................................................... 10
Table 5. Example Calculation with Formula for the Percentage of In-transit Loss ............. 10
Table 6. Monthly Loss Percentage .................................................................................... 11
Table 7. Example of Cumulative Loss that Exceeds Tolerance ....................................... 11
Table 8. Example of Cumulative Loss within Tolerance ................................................... 12
Table 9. Situations Resulting in MUI .................................................................................. 19
Table 10. Investigation Roles for a GOGO or Tactical DFSP ............................................ 24
Table 11. Investigation Roles for a GOCO DFSP Operated by a Military Service Contractor .. 24
Table 12. Investigation Roles for a GOCO DFSP Contracted or Managed by DLA Energy or GOCO DFSP ....................................................................................................................... 25

FIGURES

Figure 1. Example Situation Report .................................................................................... 14
SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY.

a. This volume applies to:

(1) OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the “DoD Components”).

(2) Non-DoD Federal Government agencies participating in the DoD supply chain management of energy commodities, referred to collectively in this volume as “Participating Agencies,” but only when and to the extent they adopt the conditions, terms, and requirements of this manual.

(3) DFSPs that manage DWCF energy commodities and not excluded by Paragraph 1.1.b. Investigation of energy non-inventory property loss will be in accordance with DoD 7000.14-R.

b. Unless otherwise agreed to, this volume does not apply to DWCF energy commodity inventories managed under terms of North Atlantic Treaty Organization, international agreement, or commercial tender agreement. The responsible Defense Logistics Agency (DLA) Energy regional office provides oversight of these DFSPs by routine and scheduled surveillance visits in accordance with this manual.

1.2. INFORMATION COLLECTIONS.


b. DD Form 200, “Financial Liability Investigation of Property Loss,” referred to in this issuance, does not require licensing with a report control symbol in accordance with Paragraph 1.b.(10) of Volume 1 of DoD Manual 8910.01.

c. DD Form 361, “Transportation Discrepancy Report (TDR)” referred to in this issuance, is prescribed in Appendix F of the Defense Acquisition Regulation Supplement and has been assigned Office of Management and Budget control number 0702-0124 in accordance with the procedures in Volume 2 of DoD Manual 8910.01. The expiration date of this information collection is listed on the DoD Information Collections System at https://eitsdext.osd.mil/sites/dodiic/Pages/default.aspx.
d. DD Form 250, “Material Inspection and Energy Receiving Report (ERR),” and DD Form 250-1, “Material Inspection and ERR, Tanker/Barge,” referred to in this volume, have been assigned Office of Management and Budget control number 0704-0248 in accordance with the procedures in Volume 2 of DoD Manual 8910.01. The expiration date of this information collection is listed on the DoD Information Collections System at https://eitsdext.osd.mil/sites/dodiic/Pages/default.aspx.
SECTION 2: RESPONSIBILITIES

2.1. ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATIERIEL READINESS (ASD(L&MR)). In accordance with DoD Directive 5134.12 and under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, the ASD(L&MR) oversees the accountability of DLA-owned energy commodity stocks and the stewardship of DWCF energy commodities.

2.2. DIRECTOR, DLA. Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, and in addition to the responsibilities in Paragraph 2.3., the Director, DLA:

   a. Establishes and implements procedural guidance governing the stewardship of DWCF petroleum products.

   b. Provides fuel accountability, gain or loss analysis, analysis of DD Form 200 reports, trend analysis, and worldwide management controls.

   c. Provides accountable officer (AO) management over inventory control program, oversight and development of organizational, regional, and DFSP-level metrics.

   d. Evaluates and, when warranted, approves inventory adjustment and disposition requests.

2.3. DOD COMPONENT AND PARTICIPATING AGENCY HEADS. The DoD Component heads and Participating Agency heads:

   a. Investigate excessive DWCF petroleum product gains and losses.

   b. Process, when warranted, a DD Form 200 for excessive DWCF petroleum product losses in accordance with DoD 7000.14-R.
SECTION 3: PROCEDURES

3.1. STANDARD ALLOWABLE TOLERANCE FACTORS. The DoD Components will:

a. Investigate losses or gains that exceed the standard allowable tolerance factors for energy commodities in Table 1, as they are identified, to determine cause.

Table 1. Standard Allowable Tolerance Factors

<table>
<thead>
<tr>
<th>DLA Energy Description of Energy Commodity</th>
<th>In-Transit Percentage</th>
<th>Storage or Operating Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation and motor gasoline (gasoline, automotive; gasoline, automotive, unleaded, regular)</td>
<td>0.005 or .50%</td>
<td>0.005 or .50%</td>
</tr>
<tr>
<td>Turbine fuel, aviation jet propellant (JP) 4 only</td>
<td>0.005 or .50%</td>
<td>0.003 or .30%</td>
</tr>
<tr>
<td>Jet fuel, distillates, residuals (e.g., turbine fuel, aviation JP-5, turbine fuel, aviation JP-8, diesel fuel, grade 2-D5000, dyed red, kerosene grade number 2-K)</td>
<td>0.005 or .50%</td>
<td>0.0025 or .25%</td>
</tr>
<tr>
<td>Pre-positioned afloat ships</td>
<td>0.005 or .50%</td>
<td>0.005 or .50%</td>
</tr>
<tr>
<td>U.S. Navy capitalized afloat ships</td>
<td>0.010 or 1.0%</td>
<td>0.010 or 1.0%</td>
</tr>
</tbody>
</table>

b. Adjust inventory documents by the actual quantity lost or gained and note discrepancy.

c. Use the established local daily limit per product, in accordance with Paragraph 7.1. of Volume 9 of this manual, as a management tool to identify abnormal daily variances and alert the Components to potential problems.

d. Attribute higher than normal daily gains and losses to missing or erroneous documentation, equipment malfunction, undocumented movements, or potential leaks or spills.

e. Correct accounting errors when they are identified.

f. Use the transportation operating agreements and commercial pipeline tender agreements to determine the allowable tolerance factor for in-transit variances, including associated breakout tanks.

g. Apply pre-positioned afloat ships and U.S. Navy capitalized afloat ships in-transit and operating or storage tolerances to all petroleum products regardless of grade.
h. Research variations between quantity shipped and quantity received in excess of the in-transit tolerances in Table 1, except for ocean tankers.

i. Correct discrepancies or practices that cause excessive variance of the in-transit tolerances in Table 1.

j. For ocean tankers, investigate shore-to-shore variations (excluding intermediate discharges) in excess of:

(1) 0.2 percent (0.002) for cargos not requiring cleaning, gas freeing, drop, or strip.

(2) 0.3 percent (0.003) for cargos requiring drop or strip.

(3) 0.5 percent (0.005) for cargos requiring gas freeing and cleaning in accordance with Military Standard 3004.

3.2. GAIN AND LOSS CATEGORIES. DoD Components categorize DWCF petroleum product gains and losses as:

a. Operating. The DoD Components will:

(1) Categorize the loss as operating for the unavoidable DWCF petroleum product inventory variance due to product physical properties, allowable measurement device error, or product evaporation that occurs during routine handling and storage operations. Determine the amount of the gain or loss by the difference between the physical inventory and the book inventory (i.e., physical inventory minus book inventory). Categorize a positive difference as a gain and a negative difference as a loss.

(2) Use the allowable tolerances for operating gain or loss listed in Table 1. Categorize the operating gain or loss tolerance as acceptable gain or loss caused by routine product handling operations based on a predetermined percentage allowed as indicated in the tolerance factors in Table 1.

(3) Notify the supporting DLA Energy regional office, research the cause of the discrepancy, and investigate out-of-tolerance operating gains and losses as described in this section. Use established threshold limits as alerts to potential problems in advance of monthly reconciliation.

(4) Calculate operating variance using the example in Table 2.
Table 2. Operating Variance Formula

<table>
<thead>
<tr>
<th>Measure product by</th>
<th>Gallons of product</th>
<th>Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP-8 product ledger</td>
<td>10,100</td>
<td>on-hand book inventory</td>
</tr>
<tr>
<td>Calibrated automatic tank</td>
<td>10,000</td>
<td>on-hand inventory</td>
</tr>
<tr>
<td>gauge or a manual gauge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculate Operating</td>
<td>10,000 – 10,100 = -100</td>
<td>Inventory loss</td>
</tr>
<tr>
<td>variance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(5) Determine the percentage loss using the example in Table 3.

Table 3. Example Formula for Percentage Loss

<table>
<thead>
<tr>
<th>Divide the loss</th>
<th>By the book inventory</th>
<th>Multiply by</th>
<th>Percentage loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>10,100</td>
<td>100</td>
<td>.99%</td>
</tr>
</tbody>
</table>

(6) Investigate the loss when the percentage loss exceeds the standard allowable tolerance factor of .25 percent (0.0025) for JP-8 storage.

b. Determinable Cause. The DoD Components will:

(1) Categorize the variance as determinable cause variance for a petroleum product gain or loss that can be attributed to a specific event without any tolerances.

(2) Categorize the gain or loss in three categories:

(a) Peacetime. For gain or loss causes (e.g., spill due to a pipeline break; fire or explosion; theft; product degradation; product regrade to a lower valued product; recovered abandoned product; disposition of excess or off-specification products; tank overflows; fuel collected through sampling; sump drains; and unrecoverable fuel at tank bottoms).

(b) Combat. For losses caused by hostile activity in a combat environment where fuel is contaminated, abandoned, destroyed, or lost in route (e.g., attack, fire, tank rupture, spillage, or fuel contaminated by debris).

(c) Major Disaster. For losses caused by natural disasters (e.g., wild fires, hurricanes, floods, storms, lightning, or earthquakes).

(2) Notify the supporting DLA Energy regional office, research the cause, and investigate all determinable cause gains and losses.

c. In-transit. The DoD Components will:

(1) Calculate in-transit variance:

(a) As the difference between the quantity shipped and quantity received.
(b) When the quantity received by the DFSP is less than the quantity shipped by the shipping activity.

(c) Without transfers between storage tanks at a single DFSP or pipeline transfers between tank farms within a DFSP complex.

(2) Use the allowable tolerances for in-transit gain or loss as listed in Table 1.

(3) Notify the supporting DLA Energy regional office, research the cause of out-of-tolerance occurrences, and investigate in-transit gains and losses as described in this section.

(4) Use the examples for in-transit variance:

(a) To calculate gain or loss of product measurements with a certified temperature compensating meter, use the formula in Table 4.

<table>
<thead>
<tr>
<th>Table 4. Example Calculation for In-Transit Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine the in-transit variance, apply the formula:</td>
</tr>
<tr>
<td>( \text{Variable } A - \text{Variable } B = \text{Variable } C )</td>
</tr>
<tr>
<td>Variable ( A ) is the amount of product for loading rack shipment from the origin completed shipping document or invoice for motor gasoline</td>
</tr>
<tr>
<td>Variable ( A = 5,000 ) gallons loading rack shipment</td>
</tr>
</tbody>
</table>

(b) To determine the percentage of in-transit loss, use the formula in Table 5.

<table>
<thead>
<tr>
<th>Table 5. Example Calculation with Formula for the Percentage of In-transit Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divide the in-transit loss</td>
</tr>
<tr>
<td>150 gallons</td>
</tr>
</tbody>
</table>

(c) Investigate an in-transit loss percentage that exceeds the standard allowable tolerance factor of .50 percent (0.005) for a motor gasoline shipment.

d. Trend. The DoD Components will:

(1) Categorize a variance as a loss trend when:
(a) Operating or in-transit gain or loss variances on end of month operating or inventory account ledgers consistently register cumulative operating gain or loss.

(b) The loss over consecutive days or months is higher than the gain total over consecutive days or months.

(c) The losses are within the tolerance criteria defined in this volume.

(2) Analyze whether cumulative operating gains and losses over consecutive operating months indicate a trend of gain or loss when individual gains and losses are within established tolerances. Document whether the gain or loss trends are due to operating, determinable, or in-transit causes or a combination of gain and loss categories.

(3) Analyze cumulative gains and losses for trends. When a gain or loss trend is found, notify the supporting DLA Energy regional office, research the cause, and investigate the gain or loss trend as described in this section.

(4) Use the examples for calculating loss trend:

(a) To calculate the variances use the example formula in Table 6.

<table>
<thead>
<tr>
<th>Table 6. Monthly Loss Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage tank containing F-76</td>
</tr>
<tr>
<td>35,000 gallons</td>
</tr>
</tbody>
</table>

(b) The monthly loss percentage should not exceed the standard allowable tolerance factor of .25 percent (0.0025) for F-76 storage.

(c) To analyze situations when:

1. Cumulative loss exceeds tolerance. Investigate a cumulative loss percentage that is almost double the standard allowable tolerance factor and indicates a trend of losses as shown in the example formula in Table 7.

<table>
<thead>
<tr>
<th>Table 7. Example of Cumulative Loss that Exceeds Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting book inventory</td>
</tr>
<tr>
<td>35,000 gallons</td>
</tr>
</tbody>
</table>

2. Cumulative loss is within tolerance. Investigate loss trends even when individual and cumulative losses are within the standard allowable tolerance factor of 0.25 percent as shown in the example formula in Table 8.
### Table 8. Example of Cumulative Loss within Tolerance

<table>
<thead>
<tr>
<th>Starting book inventory</th>
<th>Cumulative loss after 6 months</th>
<th>Loss percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>125,000 gallons</td>
<td>300 gallons</td>
<td>.24 % (0.0024)</td>
</tr>
</tbody>
</table>
SECTION 4: DAILY OR MONTHLY GAIN OR LOSS INVESTIGATION

4.1. DOD COMPONENTS. The DoD Components will:

a. Account for, investigate, and report government property losses at government-owned government-operated (GOGO) DFSPs (base-level or intermediate) according to the procedures in DoD 7000.14-R.

b. Prevent losses of government-owned property at contractor-operated (GOCO) or contractor-owned contractor-operated DFSPs in accordance with the procedures in DoD Instruction 4161.02.

c. Improve operating efficiency of operating-storage and reduce fuel losses from in-transit quantity discrepancies with continual research.

d. Review quantity variances monthly with the responsible officer (RO), property administrator (PA), terminal manager (TM), or higher officials as deemed appropriate to prevent losses.

4.2. RO OR TM. The RO or TM:

a. Research data records and shipping or receipt documents to determine the cause of the discrepancy.

b. Investigate variances of energy commodity losses or gains that exceed the standard allowable tolerance factor stated in Table 1.

c. Notify the supporting DLA Energy regional office, research the cause in detail, and investigate DWCF inventory discrepancies in accordance with DoD 7000.14-R.

d. Document the discrepancies when they are discovered using the following categories:

   (1) “Operating losses” when the cumulative monthly operating loss of DWCF energy commodity inventory exceeds the allowable tolerances shown in Table 1.

      (a) Initiate detailed causative research on the entire loss and include the findings with MILSPETS or DD Form 1348-8.

      (b) Forward a copy of the forms and the findings to the supporting DLA Energy regional office no later than the 15th day of the following month.

   (2) “Determinable cause losses” when a determinable loss of DWCF inventory occurs and when product regrades or disposal action is necessary due to product quality.

      (a) Notify the supporting DLA Energy regional office by forwarding a signed copy of a situation report, DD Form 361, “Transportation Discrepancy Report,” or DD Form 1348-8,

(b) Include the who, where, when, what, and how of the incident in the notification details, see Figure 1.

**Figure 1. Example Situation Report**

<table>
<thead>
<tr>
<th>Name of DFSP:</th>
<th>“Four Acres Air Force Fuel Point”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situation Report Number:</td>
<td>Numbered sequentially by year and report number, e.g., “201601”</td>
</tr>
<tr>
<td>Date of Report:</td>
<td>13 November XXXX</td>
</tr>
<tr>
<td>Event:</td>
<td>Brief Description, e.g., Undetermined Fuel Loss</td>
</tr>
</tbody>
</table>

I. **Background and Current Situation:** Give brief background of the event and situation update from the last SITREP, e.g. “On 12 November XXXX, our records indicate a loss of 1,205 gallons of unleaded fuel from Tank 4.”

II. **Operations Status and Update:** Provide overall status by color code: Green, Yellow, Red or Black; followed by narrative providing specifics relating to the response to the event; and if applicable, information relating to efforts to locate the source of the excessive loss and any corrective actions taken to date, e.g., “Operational Status: Yellow. Update:

1. Our analysis suggests the average daily gain or loss on (non-receipt days) is approx. 37 gallons overall +/- 10 gallons. On the days we receive, our overall loss can be as high as 98 gallons +/- 10 gallons. We verified the automated tank readings against manual readings using a tape and bob. The difference between the two readings was less than 10 gallons. ATG appears to be functioning correctly. All inventory documents have been accounted for with no errors noted.

2. Tank 4 was placed on leak test as of 0945hrs, 13 November XXXX. Results are expected 15 November XXXX. Our current stocks of unleaded in tank 5 will sustain current requirements until 30 December XXXX with no immediate mission impact.

3. Notified our local command (specify who) and the DLA Energy regional office (specify who you reported this to). DLA Energy provided the acquisition cost of the unleaded received to be $2.78 per gallon. Estimated value of the reported loss, 1,205 gallons Unleaded @ $3.61 per gallon, is $4350.05.

4. Will provide follow-up on 15 November XXXX.”

III. **Point(s) of Contact:** List name, phone, cell phone, fax numbers of individual(s) who should be contacted if additional information is desired.

| Signature of Responsible Officer or Terminal Manager | Date: 13 November XXXX |
(c) Initiate and include the detailed causative research on the entire gain or loss when it exceeds the allowable tolerances shown in Table 1.

(d) Through the supporting DLA Energy regional office, request the DLA Energy Logistics Operations Directorate (DLA Energy-L) processes a regrade or downgrade transaction.

(e) Initiate and include the detailed causative research. Submit to DLA Energy through the supporting DLA Energy regional office, a request for approval to remove tank bottoms. The request must be approved before processing any loss or gain transaction. Make every reasonable attempt to remove and transfer all usable products into other adequate DWCF storage before any approval of tank bottom removals.

(3) “In-transit losses” when an in-transit loss exceeds the allowable tolerances shown in Table 1.

(a) Forward a copy of a DD Form 361.

(b) Start a DD Form 200.

(c) Include detailed causative research on the entire in-transit loss if the RO or TM suspect or there is evidence of negligence, abuse, willful misconduct, or deliberate unauthorized use or disposition of the product by DoD personnel who contributed to the loss.

(d) Forward a signed copy of the DD Form 200, with supporting documentation, to the appropriate DLA Energy regional office.

(4) “Loss trend” when in-transit gain or loss variances and inventory account ledgers consistently register cumulative operating gain or loss totals over consecutive months.

(a) Track and analyze end-of-month gains or losses for individual tanks, containers, and vessels to identify trends.

(b) Notify the supporting DLA Energy regional office and initiate detailed causative research whenever observed inventory operating loss trends occur (e.g., unusual loss patterns that cannot be explained, although the overall operating loss for the product is within allowable tolerance).

(c) Include the findings of the causative research and forward a signed copy of a DD Form 1348-8 to the supporting DLA Energy regional office.

(d) Analyze all aspects of the product movement, to include delivery or receipt and gain or loss documentation for each product to identify trends.

(e) Notify the supporting DLA Energy regional office and initiate detailed causative research whenever observed in-transit loss trends that are within the allowable gain or loss tolerance limits (e.g., in-transit loss trend is within tolerance for each delivery, a pattern of losses within tolerance during weekend deliveries).
(5) Initiate a DD Form 200 for all unresolved inventory discrepancies for each stock number:

(a) That satisfy criteria when:

1. Monthly losses of each petroleum product stock number exceed monthly allowable tolerances and are valued at $2,500 or more by:
   a. Computing the quantity exceeded times procurement unit price.
   b. Estimating the latest cost of similar assets at the time of acquisition when the original acquisition cost is unknown.
   c. Using the latest cost of similar assets discounted for inflation since they were acquired.

2. A new loss pattern is identified or repetitive losses where the cumulative total exceeds $2,500.

3. Any inventory loss that a person with oversight responsibility, suspects there is evidence of fraud, theft, negligence, abuse, willful misconduct, or deliberate unauthorized use or disposition of the product.

4. Upon DLA Energy request based on:
   a. Internally monitoring inventory for discrepancies, trends, and repetitive losses.
   b. Evaluating DFSP.
   c. Causative research.
   d. Suspected or evident negligence, abuse, willful misconduct.
   e. Deliberate unauthorized use or disposition of the product.

(b) Within 14 days of the date of discovery, in accordance with Section 5 of this volume and DoD 7000.14-R:

(6) “Negligence,” “abuse,” or “misconduct” when a DWCF inventory loss occurs and there is suspected or evident negligence, abuse, willful misconduct, or deliberate unauthorized use or disposition of the product. Initiate a DD Form 200, include the findings of the causative research, and forward a signed copy of the DD Form 200 to the supporting DLA Energy regional office.

   e. Cooperate with the investigating officer, financial liability officer, or board appointed to investigate government property loss, damaged, destroyed, or stolen. Ensure appropriate corrective action, financial liability assessment, or disciplinary actions occur.
f. Upon request from the investigating officer, financial liability officer or board appointed to investigate government property lost, damaged, destroyed, or stolen, provide clarification of information or investigative actions stated on the DD Form 200 submitted.

g. Include the findings of the causative research and forward a signed copy of DD Form 200 to the supporting DLA Energy regional office.

h. Maintain a copy of each completed DD Form 200 and supporting documents in the document control file for 10 years when pecuniary liability is determined and for 3 years when pecuniary liability is not determined, in accordance with Volume 10 of this manual. Notify the DLA Energy Counsel through the supporting DLA Energy regional office whenever any investigative agency contacts the affected unit with respect to any indication or suspicion of fraud, theft, or negligence.

i. Research the cause in detail and investigate DWCF inventory discrepancies upon request from DLA Energy.

(1) Initiate detailed causative research when DLA Energy internal inventory monitoring has identified an unresolved inventory discrepancy or trend. Include the findings of the causative research and forward a signed copy of the applicable documents to the supporting DLA Energy regional office as required.

(2) Perform additional causative research when initial causative research does not fully document unresolved inventory discrepancies.

4.3. DLA ENERGY REGIONAL OFFICES. DLA Energy regional offices:

a. Provide oversight responsibility for any DFSP when:

(1) It is exempt from the requirement to appoint an RO, PA, or TM.

(2) The agreement does not specify otherwise for DWCF inventories in accordance with Section 2.

b. Review and evaluate adequacy of RO, TM, and PA documentation and notify the DFSP if further causative research is necessary or perform its own causative research.

c. After completing causative research, carefully review the documentation to determine whether a DD Form 200 is warranted.

(1) When a DD Form 200 is not warranted, retain the forms submitted and causative research to serve as documentation and justification to adjust the inventory record. Coordinate with DLA Energy-L, and notify the DFSP of any inventory adjustment or approval of the losses.

(2) When a DD Form 200 is deemed warranted and as directed by DLA Energy-L:
(a) For GOCO DFSPs managed or contracted by DLA Energy or contractor-owned contractor-operated DFSPs, DLA Energy –L will serve as the appointing authority for the investigation, and appoint an investigating officer to start a DD Form 200 to record DWCF property loss facts and circumstances. The investigating officer will act in accordance with DoD 7000.14-R.

(b) For GOCO DFSPs operated by a Military Service contractor, tactical DFSPs, and GOGO DFSPs and in coordination with the applicable Service control point, notify the RO’s or PA’s Military Service commander of the findings and request that an investigating officer be appointed to start a DD Form 200 to record DWCF property loss facts and circumstances.

d. Monitor financial liability investigations of property loss status so that investigations are completed quickly and effective corrective actions are identified and forwarded to DLA Energy-L.

4.4. DLA ENERGY-L. DLA Energy-L, as the AO for DWCF petroleum product inventory:

a. Determines when an investigation is necessary, and appoints an investigating officer or financial liability officer or board to determine appropriate corrective actions or recoupment of product or financial loss when evidence of negligence, abuse, willful misconduct, or deliberate unauthorized property use or disposition exists.

b. Reviews completed financial liability investigations of property loss and, as applicable, comments, concurs, or non-concurs with requests for clarification from the affected organization.

c. Ensures that each investigation that recommends recovering petroleum inventory or financial loss, as appropriate, has been legally reviewed.

d. Maintains a database of ongoing and closed financial liability investigations with the control number, site name, description of loss, event date, date investigation requested, investigating officer, RO, appointing authority, and date completed.
SECTION 5: MOVEMENTS UNDER INVESTIGATION (MUI)

5.1. DOD COMPONENTS. The DoD Components:

a. Research, investigate, and reconcile MUIs.

b. Notify DLA Energy of an MUI:

(1) When the gain or loss of an in-transit stock movement or a free on board origin contract movement exceeds the allowable tolerance for stock transfers and purchase movements as described in Section 3.

(2) For movement via truck, rail, pipeline, barge, and tanker.

(3) For situations listed in Table 9. Out-of-tolerance conditions on receipts can occur for a variety of reasons; varying factors are normally taken into account when researching an MUI. Understanding what caused the out-of-tolerance conditions can aid in investigation.

Table 9. Situations Resulting in MUI

<table>
<thead>
<tr>
<th>MUI Situations</th>
<th>Description of MUI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity of Fuel Shipped</td>
<td>Gains or losses are relative to the movement quantities.</td>
</tr>
<tr>
<td>Transportation Operating Agreements or Pipeline Accounts</td>
<td>Although monthly inventory reconciliation is completed by the supporting DLA Energy regional office, periodic reviews are conducted to determine whether a claim is warranted as determined by internal DLA Energy procedures. The requirement to complete the monthly, quarterly, or bi-annual reviews can complicate or lengthen the time associated with an investigation on an individual movement. Multi-product pipelines with large volume throughput can present even more challenges.</td>
</tr>
<tr>
<td>Quantity Determination</td>
<td>Supportable, consistent, or acceptable methods for quantity determination must exist at the discrepant DFSP. Considerations must be applied to how measurements are taken at both the shipping and receiving activity. Maintenance and calibration records should be reviewed to ensure manufacture recommended or other documented schedules are being followed. This, along with conversions associated with American Petroleum Institute and temperature variances, can lead to inaccurate measurements.</td>
</tr>
<tr>
<td>Accounting</td>
<td>Careless accounting methods or data entry can lead to errors in documenting. This is the “easiest” to detect and is a suggested starting point for MUI research.</td>
</tr>
<tr>
<td>Missing Fuel</td>
<td>If the DFSP cannot determine the cause of the out-of-tolerance receipt, then theft, fraud, spills, or leaks must be considered. If during the course of the investigation indicators of fraud, waste, or abuse are seen, the supporting DLA Energy regional office, DLA Energy-L, and DLA Energy Counsel will be contacted as soon as possible and provided a situation report of the investigation and events that occurred. Individual tank or piping records must also be reviewed to ensure leaks or faulty equipment did not contribute to the losses.</td>
</tr>
<tr>
<td>Truck Diversion</td>
<td>A truck may experience a change in course while in route to the discharge location. This may be due to an unexpected accident or a conscious decision made by the driver because of road conditions, safety issues, etc.</td>
</tr>
<tr>
<td>Major Disasters</td>
<td>Fuel that was lost due to disasters such as floods, fires, etc.</td>
</tr>
</tbody>
</table>
5.2. **DLA ENERGY AND THE DLA ENERGY REGIONAL OFFICES.** These offices ensure that all excessive in-transit variances are documented and investigated.

5.3. **RO, PA OR TM.** The RO, PA, or TM helps in MUI investigations when the DLA Energy-L or the DLA Energy regional office requests.

5.4. **DLA ENERGY-L.** DLA Energy-L:

   a. Monitors out-of-tolerance movements through various queries of MUI including information retrieved from the DLA Energy System of Record.

   b. Conducts trend analysis of DFSPs where there are frequent occurrences of MUIs.

   c. Requests documentation for out-of-tolerance movements.

5.5. **RECEIVING DFSP.** The receiving DFSP:

   a. Starts the investigation process.

   b. Determines if the data is correct by double checking quantities entered at the shipment and receipt points.

   c. Initiates corrections into the Accountable Property System of Record (APSR) if quantity discrepancies are found between the receipt data or the shipping data and the data entered in the APSR.

   d. Completely investigates discrepancies with communications between ROs to verify quantities and measurements.

   e. Documents the results of the investigation and all findings on an DD Form 361 and submits to the supporting DLA Energy regional office.

5.6. **SUPPORTING DLA ENERGY REGIONAL OFFICE.** The supporting DLA Energy regional office:

   a. Conducts the investigation on a broader scope with other investigative resources not available at the DFSP, if the MUI has been investigated by the receiving DFSP and no discrepancies were found.

   b. Obtains and reviews the documents for the investigation:

(a) Review for quantity discrepancies, the reason for discrepancy, and that the forms reflect the same information.

(b) Use as an aid in identifying shipments that are out of tolerance.

(2) Records of MUI.

(3) Applicable DLA Energy Class III B (Bulk Petroleum) supply chain management procedural guidance to determine whether specific guidance has been issued for the local operating area that is the subject of the investigation.

(4) Contract and all relevant contract clauses. Review to determine if any exceptions are noted. Notify and contact the contract specialist or contracting officer to find out if there are any exceptions.

c. When the DD Form 361 is not provided by the receiving DFSP, the supporting DLA regional office reviews:

(1) The reason for discrepancy to make sure that the forms reflect the same information.

(2) All entries that correspond to the measurement of the shipment and receipt.

d. Works with the DFSP during the investigation to ensure MUIs are cleared no later than 30 days from the event.

e. Completes the MUI:

(1) With the documentation on the investigation results.

(2) With a memorandum for the record that summarizes the results of the investigation, what action was or is being taken, the investigation number, and the signatures of both the inventory manager that investigated the in-transit variance and his or her supervisor or division chief.

(3) With copies of the applicable DLA Energy system of record, receipts screens, contract provisions for shipment discrepancies, DD Form 361, DD 250s, and any other related correspondence.

5.7. DLA ENERGY-L. The DLA Energy L office will review and categorize the MUI findings as:

a. Unmatched with No Further Investigation or Claim Action Required. The out-of-tolerance conditions associated with the movement can be explained, for example, as:

(1) One time occurrences and small shipments (e.g., single tank trucks) where the quantity shipped is less than 10,000 gallons.
(2) A shipment of 3,964 gallons and a receipt of 3,906 gallons results in a minus 1.463 percent out-of-tolerance condition (which is above the allowable tolerance) but the actual loss equates to only 58 gallons.

(3) An isolated incident where no indication of fraud is found and the cost to investigate would outweigh the cost of the loss.

b. Trends Associated with Small Quantity Discrepancies. Categorize liabilities or discrepancies that are traced back to a load source or discharge location contributing to the consistent out-of-tolerance conditions. Further investigation is required to determine the cause which may be site-specific handling issues, fraud, or abuse. Identify corrective action taken.

c. Large Quantity Discrepancies. Categorize single movements by barge, tanker, or pipeline, or movements involving multiple trucks in a single delivery that are traced back to a load source or discharge location that rarely experiences out-of-tolerance conditions. Describe the investigation to reconcile the movement in the DLA Energy System of Record.

d. Errors in the Records. Categorize movement records found to be the result of data entry errors occurring because of a mistake in the data entry of the shipment, certified load, or receipt. Improper or incorrect temperature compensation calculations can also be the source of data errors. Use the source document to correct the original record and close the MUI.

5.8. COMPLETING THE MUI. The supporting DLA Energy regional office:

a. Determines if the MUI can be reconciled and if so, reconciles the MUI:

(1) Initiates a DD Form 200.

(2) Files a claim.

b. Determines if the MUI is unreconciled because an explanation cannot be provided and the investigator is unable to determine the reason for the discrepancy. For unreconciled MUI, the supporting DLA Energy regional office initiates:

(1) A DD Form 200 in an attempt to recover the cost of the fuel provided by a DoD Component or Participating Agency DFSP.

(2) A claim with the contracting officer to attempt to recover the cost of the fuel provided by a contractor operated DFSP.

(3) A claim to the common carrier in accordance with internal DLA Energy procedural guidance.

c. Determines if the MUI is reconcilable.

(1) Reviews the investigation results and recommendations for validity and completeness.
(2) Provides Inventory Accountability Division supporting documents if the discrepant quantity is valued at $2,500 or greater.

(3) Verifies cleared MUIs, as needed.

(4) Investigates MUIs for product accounts in the APSR.
SECTION 6: LIABILITY DETERMINATION

6.1. INVESTIGATION ROLES:

a. DFSPs:

   (1) Staff for financial liability investigations of property loss based on ownership and operation using the guidelines in Tables 10 through 12.

   (2) Use the guidelines in Tables 10 through 12 except when there is disqualification due to conflict of interest.

b. The approving authority is not required to designate an appointing authority.

Table 10. Investigation Roles for a GOGO or Tactical DFSP

<table>
<thead>
<tr>
<th>Role</th>
<th>GOGO</th>
<th>Tactical DFSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigating Officer</td>
<td>As appointed by the Service commander</td>
<td>As appointed by the Service commander</td>
</tr>
<tr>
<td>Reviewing Authority</td>
<td>RO or commander of RO</td>
<td>RO or commander of RO</td>
</tr>
<tr>
<td>Appointing Authority</td>
<td>Commander of RO</td>
<td>Commander of RO</td>
</tr>
<tr>
<td>Approving Authority</td>
<td>Next level military commander</td>
<td>Next level military commander</td>
</tr>
<tr>
<td>Financial Liability Officer or Board</td>
<td>Military Service by appointing authority</td>
<td>Military Service by appointing authority</td>
</tr>
<tr>
<td>Accountable Property Officer</td>
<td>Logistics Operations Supply Chain Director, DLA Energy-L</td>
<td>DLA Energy-L</td>
</tr>
</tbody>
</table>

Table 11. Investigation Roles for a GOCO DFSP Operated by a Military Service Contractor

<table>
<thead>
<tr>
<th>Role</th>
<th>Military Management Team</th>
<th>Contractor Management Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigating Officer</td>
<td>As appointed by the Service commander</td>
<td>Property administrator or as appointed by the Service commander</td>
</tr>
<tr>
<td>Reviewing Authority</td>
<td>RO</td>
<td>PA</td>
</tr>
<tr>
<td>Appointing Authority</td>
<td>Commander of RO</td>
<td>Commander of PA</td>
</tr>
<tr>
<td>Approving Authority</td>
<td>Next level military commander</td>
<td>Next level military commander</td>
</tr>
<tr>
<td>Financial Liability Officer or Board</td>
<td>Military Service by appointing authority</td>
<td>Military Service by appointing authority</td>
</tr>
<tr>
<td>Accountable Property Officer</td>
<td>DLA Energy-L</td>
<td>DLA Energy-L</td>
</tr>
</tbody>
</table>
### Table 12. Investigation Roles for a GOCO DFSP Contracted or Managed by DLA Energy or GOCO DFSP

<table>
<thead>
<tr>
<th>Role</th>
<th>Government-Owned</th>
<th>Contractor-Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigating Officer</td>
<td>As appointed by DLA Energy-L or DLA Energy regional office commander, or Director, Aerospace Energy business unit (BU)</td>
<td>Terminal manager, property administrator, or as appointed by DLA Energy-L, DLA Energy regional office commander, or Director, Aerospace Energy BU</td>
</tr>
<tr>
<td>Reviewing Authority</td>
<td>As appointed by DLA Energy-L, DLA Energy regional office commander, or Director, Aerospace Energy BU</td>
<td>Property administrator, or as appointed by DLA Energy-L, DLA Energy regional office commander, or Director, Aerospace Energy BU</td>
</tr>
<tr>
<td>Appointing Authority</td>
<td>DLA Energy regional office commander, or Director, Aerospace Energy BU</td>
<td>DLA Energy regional office commander or Director, Aerospace Energy BU</td>
</tr>
<tr>
<td>Approving Authority</td>
<td>DLA Energy, Logistics Operations Directorate, or Director, Aerospace Energy BU</td>
<td>DLA Energy, Logistics Operations Directorate, or Director, Aerospace Energy BU</td>
</tr>
<tr>
<td>Financial Liability Officer/Board</td>
<td>DLA Energy regional office by appointing authority</td>
<td>DLA Energy regional office by appointing authority</td>
</tr>
<tr>
<td>Accountable Property Officer</td>
<td>DLA Energy-L</td>
<td>Director, DLA Energy or Logistics Operations Directorate</td>
</tr>
</tbody>
</table>

### 6.2. PROCEDURES.

a. The accountable officer for DLA Energy-L:

   (1) Determines financial liability and maintains records of inventory losses.

   (2) Uses the DD Form 200 as the official supporting source document to establish personal liability debt, relief from accountability, and inventory and financial record adjustments.

b. The DFSP starts a DD Form 200 within 14 working days of knowledge of the unresolved loss.

c. An individual not directly supervised by the RO, PA, or designated government representative at contracted locations will conduct the financial liability investigation:

   (1) Review and evaluate adequacy of facilities to safeguard government property. Assess degree of protection necessary to satisfy statutory and regulatory requirements, and the degree of theft and pilferage susceptibility against loss trends.

   (2) Determine if compliance with prescribed regulations is evident and if adequate procedures exist and are followed.
(3) Determine personnel involved in the loss incident, their level of training, and the level of responsibility assigned to them by management.

(4) Determine evidence of either simple or gross negligence or abuse.

(5) In accordance with DoD 7000.14-R when financial liability is recommended, notify the individual of their opportunity to examine the findings and recommendations, obtain representation, make a rebuttal statement, and present any mitigating factors that may have contributed to the negligence or abuse.

(6) Review causative research conducted by the RO or TM who identified the loss incident and conduct further causative research as necessary.

(7) Identify lessons learned and recommend actions to minimize recurrence of the inventory loss.

(8) Record the investigation on DD Form 200 and submit with all supporting documentation to the supporting DLA Energy regional office for review, comments, and final coordination through DLA Energy and appropriate contracting officer as required.

(9) Submit the form and supporting documentation to DLA Energy for review in all instances including investigations completed without DLA Energy involvement.

6.3. LIABILITY ASSESSMENT. For an assessment of individual or collective liability, the assignment of debt and the process of collections will vary depending on the type of DFSP:

a. Government operated DFSPs will process legal action and computation of financial loss in accordance with DoD 7000.14-R and DoD Component or Participating Agency procedures.

b. Contractor operated DFSPs, subject to the terms of the contract, may be held liable for shortage, loss, damaged, destroyed or stolen government property in accordance with Military Standard-3004 and Federal Acquisition Regulation 45.104.

6.4. INVENTORY ADJUSTMENT. DFSPs will use the findings of causative research documented on the DD Form 1348-8, DD Form 361 and, where applicable, the DD Form 200 as supporting documentation for adjusting the inventory to account for the loss.

6.5. DOCUMENT RETENTION. DFSPs will retain all supporting causative research and DD Form 200 documents in the DFSP document control file and accountable official files in accordance with Volume 2 of this manual.
Glossary

G.1. Acronyms.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AO</td>
<td>accountable officer</td>
</tr>
<tr>
<td>APO</td>
<td>accountable property officer</td>
</tr>
<tr>
<td>ASD(L&amp;MR)</td>
<td>Assistant Secretary of Defense for Logistics and Materiel Readiness</td>
</tr>
<tr>
<td>APSR</td>
<td>accountable property system of record</td>
</tr>
<tr>
<td>BU</td>
<td>business unit</td>
</tr>
<tr>
<td>DD Form</td>
<td>DoD Form</td>
</tr>
<tr>
<td>DFSP</td>
<td>Defense fuel support point</td>
</tr>
<tr>
<td>DLA</td>
<td>Defense Logistics Agency</td>
</tr>
<tr>
<td>DLA Energy-L</td>
<td>DLA Energy Logistics Operations Directorate</td>
</tr>
<tr>
<td>DWCF</td>
<td>Defense Working Capital Fund</td>
</tr>
<tr>
<td>GOCO</td>
<td>government-owned contractor-operated</td>
</tr>
<tr>
<td>GOGO</td>
<td>government-owned government-operated</td>
</tr>
<tr>
<td>JP</td>
<td>jet propellant</td>
</tr>
<tr>
<td>MILSPETS</td>
<td>Military Standard Petroleum System</td>
</tr>
<tr>
<td>MUI</td>
<td>movements under investigation</td>
</tr>
<tr>
<td>PA</td>
<td>property administrator</td>
</tr>
<tr>
<td>RO</td>
<td>responsible officer</td>
</tr>
<tr>
<td>TM</td>
<td>terminal manager</td>
</tr>
</tbody>
</table>

G.2. Definitions. These terms and their definitions are for the purpose of this issuance and will serve as standard terminology for DoD supply chain materiel management of energy commodities and services.

AO. DLA Energy-L is responsible for accountability and management oversight for all DWCF Class III B inventory locations. The DLA Energy Inventory Division Chief serves as AO for worldwide DWCF Class III inventories.

APO. An individual who is appointed by proper authority:

   Based on his or her training, knowledge, and experience in property management, accountability, and control procedures.
To establish and maintain an organization’s accountable property records, systems, or financial records, in connection with government property, irrespective of whether the property is in the individual’s possession.

**appointing authority.** An individual who appoints financial liability officers, if required; approves or disapproves the recommendations of the APO, reviewing authority, or financial liability officer; and recommends actions to the approving authority. The approving authority may act as the appointing authority or designate an appointing authority in writing. DoD Component regulations designate who may serve as the appointing authority. The appointing authority is normally senior to the reviewing authority, the accountable property officer, and financial liability officer.

**approving authority.** An individual who makes determinations to either relieve involved individuals from responsibility or accountability or approve assessment of financial liability. DoD Component regulations designate who may serve as the approving authority. The approving authority is normally senior to the appointing authority.

**book inventory.** The calculated inventory that should be on-hand for each energy commodity, as reflected in the account ledgers. The last reported physical inventory quantity plus any inventory increase resulting from receipts, returns, positive regrades, determinable gains, or recovered products minus inventory decrease resulting from sales, shipments, determinable losses, negative adjustments, and regrades from the account ledger.


**causative research.** An investigation of discrepancies such as gains or losses with a complete review of all transactions and supporting documentation to compare transaction level detail reported with the supporting documentation. For example, transaction changes or edits, shipment discrepancies, and unposted or rejected documentation occurring in the same accounting month, the most recent location reconciliation within the last year which included quantity. Causative research ends when the cause of the discrepancy has been discovered or when, after review of the transactions, no conclusive findings are possible.

**determinable cause loss or variance.** A product loss that can be associated with a specific event such as a spill due to a line break, fire or explosion, theft, product degradation, product regrade to a lower valued product, disposition of excess, or off-specification products.

**determinable gain or loss.** A product loss or gain that can be attributed to a specific event such as a pipeline break or recovered abandoned product.

**drop or strip.** Tank cleaning terms associated with variance limits in accordance with Military Standard 3004.

**financial liability officer.** An individual who is appointed in writing by the appointing authority to conduct an investigation to determine responsibility for loss, damage, destruction, or theft of U.S. Government property. Individuals so appointed are not the APO or property custodian with
any direct interest in the property being investigated. Eligibility requirements are listed in DoD 7000.14-R.

**intermediate discharges.** Intermediate discharges are discharges at two or more places.

**in-transit loss.** The difference between the product quantity shipped and quantity received that occurs when the quantity received by the DFSP is less than the quantity shipped by the shipping activity. The calculated in-transit loss percentage is the in-transit loss divided by the quantity shipped.

**inventory variance expectancy.** A tolerance criteria developed to account for unavoidable variance in handling and storing energy commodities. Industry standard requires meter accuracy to 0.5 percent (one half of one percent). Losses vary to some degree by volume of product, tank configuration (such as fixed or floating roof), mode of delivery, and prevailing weather. Vaporization is unavoidable due to agitated pumping movement, winds blowing over tank vents, and high temperatures.

**investigating officer.** An investigating officer can be appointed by the appointing authority to initiate an investigation to determine the cause for a reportable energy commodities loss. This individual normally completes Blocks 1- 22 on the DD Form 1348-8 and Blocks 17-29 on the DD Form 361.

**locally established threshold limits.** A management tool to identify higher than normal daily variances and provide alerts to potential problems. Higher than normal daily gains and losses can be attributed to missing or erroneous documentation, equipment malfunction, undocumented movements, or potential leaks or spills.

**loss trend.** In-transit variances and operating gain or loss variances may fluctuate under normal operations between gains and losses. Accordingly, this alternating daily operating gain or loss variance generally offsets the cumulative gain or loss for an accounting month. Example of a loss trend is when in-transit gain or loss variances on end of month operating or inventory account ledgers consistently register cumulative operating gain or loss totals over consecutive months with losses out numbering gains, although losses are within the tolerance criteria defined in this volume.

**MUI.** Investigation conducted when the gain or loss of an in-transit stock movement or a free on board origin contract movement exceeds the allowable tolerance of plus or minus 0.5 percent for stock transfers and purchase movements. Investigation conducted for movement types associated with MUIs that include truck, rail, pipeline, barge and tanker.

**operating gain or loss.** The difference between the physical inventory and the book inventory: operating gain or loss equals physical inventory minus book inventory. A positive difference is a gain and a negative difference is a loss. For example, a petroleum product ledger calculates 10,100 gallons of product as on-hand book inventory, while the physical inventory measured by a calibrated ATG or a manual gauge indicates only 10,000 gallons of on-hand inventory. The negative difference between the book inventory and the physical inventory reflects a 100 gallon loss.
operating gain or loss tolerance. A predetermined percentage allowed as acceptable energy commodity gain or loss caused by routine product handling operations.

operating loss or variance. The unavoidable DWCF inventory loss due to product physical properties, or the allowable measurement device error, or the product evaporation that occurs during routine handling and storage operations. The operating loss or gain is the difference between book inventory and physical inventory. For example, when a book inventory reflects 100,000 gallons and the physical inventory measurement reflects 99,000 gallons of product physically on-hand, the operating loss is 1,000 gallons.

PA. An authorized contracting officer representative who is duly appointed and assigned to administer contract terms and provisions that govern contractor obligation to provide diligent care, custody, and protection of U.S. Government property.

Participating Agencies. Non-DoD Federal Government agencies that participate in the DoD supply chain management of energy commodities, but only when and to the extent they adopt the conditions, terms, and requirements of this manual.

physical inventory. The total on-hand quantity of each energy commodity grade to include energy commodities stored in all permanent storage tanks, tactical storage tanks, breakout tanks, pipelines, manifolds, system components such as filter separators and basket strainer housings, mobile transport vehicles and dispensing equipment that store DWCF energy commodities.

pre-positioned afloat. DWCF product carried aboard afloat pre-positioning force ships.

product downgrade. The approved redesignation of a petroleum product that does not fully comply with its specification requirements to a different petroleum product.

product regrade. Redesignation of a petroleum product that fully complies with its specification requirement to another petroleum product grade for unconditional use.

RO. An individual who is directly responsible for all government property and oversees all aspects of the DFSP operation, must be a U.S. citizen and government employee, either military or civilian, and must be duly appointed by proper authority to provide diligent care, custody, and protection of government property at U.S. Government operated DFSPs. Refer to paragraph 3.3.c. of Volume 6 of this manual for additional information.

reviewing authority. An individual designated in writing by the approving authority to review the results of supply system stock research and analysis.

tolerance factor. The amount of an energy commodity which might be lost or gained under normal operating conditions. Energy commodities are subject to losses and gains due to volumetric fluctuations by evaporation, temperature changes, and spillage during loading or discharge.

TM. An individual who is directly responsible and accountable for all Government property in accordance with contract requirements and oversees all aspects of the DFSP operation. The TM established and maintains a property control system to control, protect, preserve, and maintain
government property at contractor operated DFSPs. See Paragraph 3.3.d. of Volume 6 of this manual for additional information.
REFERENCES

Defense Federal Acquisition Regulation Supplement, current edition
Federal Acquisition Regulation, current edition