



DoD MANUAL 4140.25, VOLUME 12

DoD MANAGEMENT OF ENERGY COMMODITIES: DEFENSE FUEL SUPPORT POINT (DFSP) INVENTORY ORDERING, RECEIPTS, AND SHIPMENTS

Originating Component:	Office of the Under Secretary of Defense for Acquisition and Sustainment
Effective:	March 2, 2018
Releasability:	Cleared for public release. Available on the Directives Division Website at http://www.esd.whs.mil/DD/ .
Approved by:	Robert H. McMahon, Assistant Secretary of Defense for Logistics and Materiel Readiness

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:

- This 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 to account for Defense Working Capital Fund (DWCF) bulk petroleum stored at DFSPs.

TABLE OF CONTENTS

SECTION 1: GENERAL ISSUANCE INFORMATION	4
1.1. Applicability	4
1.2. Information Collections	4
SECTION 2: RESPONSIBILITIES	5
2.1. Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)) ..	5
2.2. Director, DLA	5
2.3. DoD Component and Participating Agency Heads	5
SECTION 3: PROCEDURES	6
3.1. Tactical Locations	6
3.2. Mandatory Contract Internal Instructions	6
SECTION 4: ORDERING AND REQUISITION	8
4.1. Scheduling and Ordering in the SPW	8
4.2. Enterprise External Business Portal (EEBP) Ordering Energy Commodities for DLA Inventory and Customer Direct Delivery	9
4.3. Ordering Energy Commodities From Bulk Contract Sources	9
g. Reporting Contract Underlifts	13
4.4. Ordering Energy Commodities From Post, Camps, and Stations (PC&S) Contract Sources	13
4.5. Ordering Energy Commodities From a DFSP	16
4.6. Requisitioning Fuel Additives	16
4.7. Collaboration	17
SECTION 5: SHIPPING AND RECEIVING	18
5.1. General	18
5.2. General Measurement Standards, Quantity Determination, and Volume Correction Procedures	19
5.3. Receipt of Product into DWCF Energy Commodity Inventory	24
5.4. Fuel Additives	33
APPENDIX 5A: RECEIPT DELIVERY IN-CHECK AND OUT-CHECK PROCEDURES FOR DFSPs	37
APPENDIX 5B: TDR PROCEDURES	40
SECTION 6: SHIPMENTS BETWEEN DFSPs	42
6.1. Delivery Hours	42
6.2. Quality Control of Shipment Conveyances	42
6.3. Shipments of DWCF Energy Commodities	42
6.4. Procurement Contract Shipments	47
6.5. Direct Delivery Energy Commodity Shipments to Non-Capitalized Entities	47
GLOSSARY	48
G.1. Acronyms	48
G.2. Definitions	49
REFERENCES	52

TABLES

Table 1. Receipt Documentation	18
--------------------------------------	----

Table 2. Volume Correction Factors (VCF) for DiEGME (Degree Celsius) 34
Table 3. VCF for DiEGME (Degree Fahrenheit) 35
Table 4. Kilograms of DiEGME to Liters 35
Table 5. Kilograms of DiEGME to Gallons 36
Table 6. Pounds of DiEGME to Gallons 36
Table 7. TDR Procedures..... 40

SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY.

a. This issuance applies to 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”).

b. 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.

1.2. INFORMATION COLLECTIONS.

a. Department of Defense (DD) Form 250, “Material Inspection and Receiving Report,” and DD Form 250-1, “Tanker/Barge Material Inspection and Receiving Report,” referred to in Table 1 and Paragraphs 4.6.c.(2)(b) and 5.3.g.(1), are prescribed in Appendix F of the Defense Federal Acquisition Regulation Supplement and have been assigned Office of Management and Budget control number 0704-0248. The expiration date of this information collection is listed in the DoD Information Collections System at <https://apps.sp.pentagon.mil/sites/dodiic/Pages/default.aspx>. All DD forms can be found at <http://www.esd.whs.mil/Directives/forms/>.

b. DD Form 361, “Transportation Discrepancy Report (TDR),” referred to in Table 1, Paragraph 5.3 and Appendix 5B, 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 in the DoD Information Collections System at <https://apps.sp.pentagon.mil/sites/dodiic/Pages/default.aspx>.

c. DD Form 1348-7, “DoD MILSPETS DFSP Shipment and Receipt Document,” and DD Form 1348-8, “DoD MILSPETS: DFSP Inventory Accounting Document and End-of-Month Record,” referred to in Table 1, Paragraph 5.3.i.(2)(c), and throughout Section 6, do not require licensing with a report control symbol in accordance with Paragraph 1.b.(10) of Volume 1 of DoD Manual 8910.01.

d. Defense Logistics Agency (DLA) Form 2046, “Petroleum Receipts Summary,” referred to in Table 1 and throughout Section 5 of 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.

e. The Stock Projection Worksheet (SPW) and the Invoicing, Receipt, Acceptance, and Property Transfer (iRAPT) Energy Receiving Report, referred to throughout this issuance, do not require licensing with a report control symbol in accordance with Paragraph 1.b.(10) of Volume 1 of DoD Manual 8910.01.

SECTION 2: RESPONSIBILITIES

2.1. ASSISTANT SECRETARY OF DEFENSE FOR LOGISTICS AND MATERIEL 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 management of all records produced for the management of DoD bulk petroleum.

2.2. DIRECTOR, DLA. Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, in accordance with DoD Instruction 4140.25, and in addition to the responsibilities in Paragraph 2.3., the Director, DLA:

- a. Provides management and accountability of DLA-owned energy commodities.
- b. Oversees capitalization of energy commodities at Military Department or Military Service installations and closure or realignment of DFSPs, as appropriate, in coordination with the DoD Components.

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

- a. Manage and provide accountability of DLA-owned petroleum stocks.
- b. Implement procedural guidance governing the stewardship of DWCF petroleum products.

SECTION 3: PROCEDURES

3.1. TACTICAL LOCATIONS. A DoD Component uses:

- a. The same procedures for all phases of inventory ordering, receipts, and shipments for DWCF fuels at tactical locations as for non-tactical locations.
- b. Specific tailored instructions for tactical locations to meet accounting and reporting requirements, based on:
 - (1) Site-specific relationships between DoD Components and those of participating nations.
 - (2) Exigent delivery modes.
 - (3) Physical connection or field communications between DFSPs to fuel end users.
- c. Current DLA Energy procedural inventory management guidance and instructions on the DLA Energy Website at <https://dla.deps.mil/dod/dla/dlaenergy/scm/SitePages/Publications.aspx>.

3.2. MANDATORY CONTRACT INTERNAL INSTRUCTIONS. A DoD Component:

- a. Incorporates the contract clauses for DWCF energy commodities and services into requirements for contracts at locations that store or distribute DWCF energy commodities.
- b. Obtains current copies of the contract clauses tailored for DWCF energy commodities and services DLA Energy Procurement Process Support Directorate, at (703) 767-8607 or Defense Switched Network (DSN) 427-8607. Tailor DFSP contracts to address specific types of DWCF requirements and services for:
 - (1) Custody of petroleum products in contract clause I121.
 - (2) General shipping conditions in contract clause F1.05.
 - (3) Determination of quantity in storage in contract clause F1.14.
 - (4) Responsibility for U.S. Government-owned petroleum products in contract clause I116.
 - (5) Inventory control records and systems of record in contract clause I119.04.
 - (6) Inventory control records and systems of record U.S. Government-owned contractor-operated in contract clause I119.05.
 - (7) Liability for fuel spills in contract clause I116.01.
 - (8) Environmental protection for DFSP storage in contract clause I180.02.

- (9) Protection of U.S. Government property and spill prevention in contract clause I186.
 - (10) Removal of water bottoms in contract clause C19.04.
 - (11) Sampling and testing of petroleum products in DFSP storage in contract clause C19.07.
 - (12) Designation of the defense fuel region in contract clause G22.
 - (13) Quality control plan in contract clause quality assurance provision (QAP) E1.11.
 - (14) Laboratory testing for sulfides in water in contract clause QAP E34.
 - (15) Quality representative in contract clause QAP E22.01.
 - (16) Contractor inspection responsibilities for DFSP storage in contract clause QAP E28.
 - (17) Contract turnover inspection in contract clause QAP E29.01.
- c. For DFSP locations that additize fuel, tailors DFSP contracts to address requirements for:
- (1) Operation of conductivity additive system in contract clause F45.01.
 - (2) Operation of fuel system icing inhibitor (FSII) additive system in contract clause F45.03.
 - (3) Operation of corrosion inhibitor (CI) additive system in contract clause F45.04.
- d. Incorporates the procedures for security and fire protection described in applicable contract clauses into the requirements for contracts at locations that store or distribute DWCF energy commodities or a host tenant support agreement that complies with DoD Instruction 4000.19.
- e. May encounter unique situations that require modification of the DLA Energy internal instructions, e.g., changes to the intended end-use of petroleum products or operating environment.
- f. May submit proposed modifications to the appropriate DLA Energy contracting office.

SECTION 4: ORDERING AND REQUISITION

4.1. SCHEDULING AND ORDERING IN THE SPW.

a. The scheduler will prepare and maintain the SPW to ensure movements from vendors and between plants meet minimum contract lift requirements, established inventory guidelines, facility constraints, and what is needed for sale.

b. Through the nomination, the scheduler will generate purchase requests and stock transport orders (STOs).

c. The scheduler will communicate the planned movements along the supply chain with vendors, carriers, inspectors, partners, and others using the nomination.

d. The scheduler will use the following nomination types:

(1) **Origin (O)**. A location on a transport system is used as a supply point to the transport system. Therefore, an O-nomination line item supplies product to the transport system that is defined in the nomination header.

(2) **Destination (D)**. A location on a transport system is used as a receiving point of the transport system. Therefore, a D-nomination line item receives product from the transport system that is defined in the nomination header.

(3) **Delivery Quantity (DQ) Destination**. Free on board (FOB)-origin purchase into an origin acceptance plant.

(4) **Delivery Order (DO) Destination**. FOB-origin purchase into an origin acceptance plant after a purchase order has been created for the movement.

(5) **Origin at Destination at Acceptance Plant**. A transfer done from the in-transit plant into origin acceptance plant.

e. A DFSP may serve as central distribution point to support other DFSPs when it is cost effective to the overall product distribution pattern; STO will be used.

(1) The DLA Energy regional office concerned provides routing instructions to both the shipping DFSP transportation office and vendor. The DFSP shipping office:

(a) Schedules transportation (e.g., tank trucks) for loading or shipping of energy commodities.

(b) Enters shipment data directly into the third party payment system. Prepares a military freight warrant at overseas locations where the third party payment system is not available.

(c) Coordinates shipping schedules with the receiving DFSPs.

- f. DLA Energy funds transportation costs associated with intra-DFSP shipments.

4.2. ENTERPRISE EXTERNAL BUSINESS PORTAL (EEBP) ORDERING ENERGY COMMODITIES FOR DLA INVENTORY AND CUSTOMER DIRECT DELIVERY. A DLA Energy customer will use the EEBP to order energy commodities.

- a. The ordering activity will select proper contract line item number, ensuring product and delivery conditions are correct.
- b. The ordering activity will ensure that confirmation is received.

4.3. ORDERING ENERGY COMMODITIES FROM BULK CONTRACT SOURCES.

a. Scheduling. The DFSP scheduler communicates the planned movement along the supply chain with vendors, carriers, inspectors, partners and others using the nomination process.

(1) Each DLA Energy regional office concerned will use SPWs to produce a DO. All ordering officers will use SPWs and the nomination process to place orders.

(2) Authorized ordering offices prepare DOs for DFSPs.

(3) Installation level DFSPs:

(a) Schedule deliveries with suppliers based on DOs data created by the DLA Energy regional office concerned.

(b) Immediately notify the DLA Energy regional office concerned of changes in the monthly requirement quantity. Notify the appropriate DoD Component service control point (SCP) and DLA Energy regional office of any change affecting the annual projected requirement by more than ten percent.

b. Placing DOs. Unless stated otherwise in a contract, each DLA Energy regional office concerned and DFSP:

(1) Schedules deliveries in advance of required delivery dates (RDD).

(a) For delivery by ocean tanker, place the order no later than 20 days before the RDD.

(b) For delivery by barge or pipeline, place the order no later than 15 days before the RDD.

(c) For delivery by tank car or truck, place the order no later than 2 days (48 hours) before the RDD.

(2) Notifies suppliers of urgent orders by telephone, facsimile, or e-mail whenever required, and create a supporting DO within 24 hours of the ordered date.

(3) Prepares one order for each contract line item required to create a single tanker, barge, or pipeline shipment.

(4) Creates single orders for incremental delivery quantities within the minimum or maximum stated in the contract quantity internal instruction, unless otherwise agreed on by the U.S. Government and the supplier.

c. Order Amendments. The authorized ordering office amends the submitted DD Form 1155, "Order for Supplies or Services," to amend orders and prepare amendments for the following situations. The form is available at <http://www.esd.whs.mil/Directives/forms/>.

(1) **Decreased Ordered Volume Due to Consumption Change.** The supplier must agree to the amendment at no additional cost to the U.S. Government. The ordering officer promptly notifies the DLA Energy contracting officer (KO) when the supplier does not agree. The DO will reference the supplier concurrence to no cost.

(2) **Quantity Variance.** The ordering officer:

(a) Reviews for cause variances between the total quantity ordered and total received or delivered that exceeds the contract-allowed variance.

(b) Amends the order when the variance is determined to be within scope of the contract.

(c) Refers variations outside the contract scope to the KO for determination.

(d) Creates amendments involving quantity changes when:

1. The quantity delivered is acceptable to the DLA Energy ordering officer.

2. The supplier fails to deliver the entire order quantity by conclusion of the delivery period, no further product requirement exists, and there is no intention to hold the supplier liable.

(3) **Delivery Failure.** The ordering officer:

(a) Keeps the order status open when the supplier fails to deliver a portion of an order during the delivery period when the specific quantity is a contract requirement, unless the KO directs the ordering officer otherwise.

(b) Allows time for the U.S. Government either to obtain the remaining quantity through legal action or to hold the supplier liable for any incurred costs to obtain the undelivered quantity from alternate sources.

(c) Informs the KO and DLA Energy-Logistics Operations Directorate (DLA Energy-L) of the contractor's failure to deliver (FTD) by e-mail, facsimile, or follow up telephone call. Additionally:

1. The ordering officer will complete the normal FTD form and send it to the inventory manager and KO.
2. The KO and inventory manager will review concur with the FTD form.
3. The supply planner will then terminate the order.
4. The KO will add the normal FTD form to records management files associated with the purchase order.

(d) Specifies in the FTD notice:

1. Pertinent contract and order information.
2. Projected delivery date of quantity in question.
3. Contractor reason for the FTD.
4. Date the replacement quantity is required.
5. Impact to the U.S. Government.
6. Suggested alternate sources of supply.

d. DO Cancellations.

(1) Although orders obligate the U.S. Government to accept the product, suppliers may cooperate when unexpected circumstances delay or prevent acceptance of scheduled deliveries.

(2) The ordering officer:

(a) Closely coordinates DO cancellations with the supplier to minimize negative effect on the supplier.

(b) Tries to establish a new delivery date whenever possible through mutual agreement with the supplier before cancelling an order.

(c) Notifies the KO when mutual agreement is not possible.

(3) The DLA Energy regional office:

(a) Promptly notifies the KO when termination for convenience by the U.S. Government is the only alternative.

(b) Provides the KO the contract number, order number, date of order, quantity, product code, delivery date requested, shipment destination, reason for termination, and summary of ordering officer actions.

e. Delivery Delays or Special Considerations. The ordering officer:

(1) Notifies the DLA Energy regional office concerned, which in turn notifies the KO and DLA Energy-L, when a contractor fails to fulfill contract delivery requirements.

(2) Provides immediate or potential effect of delays to the KO, on prescribed minimum inventory levels, day-to-day support capability, and possible increased costs to the U.S. Government.

(3) Orders across multiple contract sources to maintain a balanced lifting program throughout the supplier base.

(4) Notifies the appropriate chain of command and the KO when a supplier is behind on deliveries that necessitate another supplier to deliver ahead of contracted quota by 10 percent or more.

(5) Places orders consistent with ordering and delivery terms specified in the contract.

(6) Unless otherwise directed by DLA Energy-L or the KO, limits deliveries from suppliers who have failed to deliver one or more times to no more than a 1-week supply.

(7) Promotes prompt processing should default action be necessary.

(8) Refuses further deliveries against an order after initiating default action against the order.

(9) Places new orders against the contract for the *pro rata* share of the contract.

(10) Keeps the KO informed if the contractor continues to fail to deliver against subsequent orders.

f. Contract Flexibility. The ordering officer:

(1) Accommodates consumption rate changes.

(2) Coordinates with DLA Energy-L and the KO for approval before implementation.

(3) Transfers quantity between line items if a contract line item requires overlifting when the product is from a same grade line item on the same contract and the contractor has sufficient product available to satisfy the projected overlift quantity.

(4) Overlifts the final order, and increases final orders placed against bulk delivery contracts per contract clause for ocean tanker, barge, or pipeline when the final order placed for each product from each refinery source is increased to a quantity:

(a) Sufficient to fill the conveyance.

(b) Required to fulfill the maximum parcel size established by applicable carrier or international agreement.

(5) Allows order submissions from date of award through end of the specified ordering period before a new contract delivery period for bulk contracts.

(6) Orders or accepts deliveries from new contracts before the specified contract delivery period when necessary.

(7) Limits requests for advance delivery and submits them to DLA Energy-L and KO for approval and contract modification.

(8) Requires delivery up to 30 days beyond the established delivery period when order submittal occurs within the established ordering period to ensure a continuous fuel resupply.

(9) Coordinates with DLA Energy-L and KO before placing orders for delivery into the 30-day carry-over period.

g. Reporting Contract Underlifts.

(1) The DLA Energy regional office concerned monitors contract lifts by each contract at least monthly and initiate actions if it is determined the contract may be underlifted.

(2) The ordering officer compares projected customer requirements against the contract balance and notifies their chain of command if the contract may not meet minimum lift guarantee as specified by the contract award. The ordering officer uses Military Surface Deployment and Distribution Command, Military Sealift Command (MSC), and commercial contract carriers.

(3) The DLA Energy regional office concerned or ordering officer notifies DLA Energy-L and the KO if the contract may be underlifted or if a contract modification is required.

h. Product Shipment. The DLA Energy regional office:

(1) Uses Military Surface Deployment and Distribution Command, MSC, and commercial contract carriers.

(2) Provides traffic management technical direction and assistance to ensure safe and efficient bulk fuel distribution.

4.4. ORDERING ENERGY COMMODITIES FROM POST, CAMPS, AND STATIONS (PC&S) CONTRACT SOURCES.

a. DLA Energy Customers. DLA Energy customers will use the EEBP to order energy commodities:

(1) To produce the DO and to order DLA Energy PC&S contract energy commodities.

(2) To place orders and amendments.

(3) Schedule deliveries with suppliers based on DOs submitted to the contractor.

b. DOs. An ordering office:

- (1) Contacts the DLA Energy Help Desk at 1-800-446-4950 for additional assistance.
- (2) Ensures data is accurate and consistent with contract terms before obligating the DWCF with an order.
- (3) Uses the orders to fulfill daily, weekly, or monthly requirements.

c. DO Distribution. Once signed, EEBP forwards copies to DFSPs and suppliers on the distribution list.

d. Placing DOs. An ordering office:

- (1) Schedules deliveries in advance of RDD as outlined in the contract.
- (2) Submits a hard copy or EEBP within 24 hours of the ordered date if orders cannot be placed via EEBP and a verbal order is accepted by the contractor.
- (3) Prepares one order for each contract line item.

e. Order Amendments. An ordering office prepares an amendment when:

- (1) The supplier agrees to an amendment to decrease ordered volume due to consumption change at no additional cost to the U.S. Government. Promptly notify the KO when the supplier does not agree.
- (2) The total quantity ordered and total received or delivered exceeds the contract allowed variance. Review the cause of the variances and amend the order accordingly if it is determined to be within the scope of the contract. Refer variations outside the contract scope to the KO for determination. Create amendments involving quantity changes when:
 - (a) The quantity delivered is acceptable to the ordering officer.
 - (b) The supplier fails to deliver the entire order quantity by the conclusion of the delivery period, no further product requirement exists, and there is no intention to hold the supplier liable.
- (3) The supplier fails to deliver a portion of an order during the delivery period that the quantity remains a requirement.
 - (a) The ordering office keeps the order status open:
 1. Unless the DLA Energy KO directs otherwise.
 2. To allow time for the U.S. Government either to obtain the remaining quantity through legal action and hold the supplier liable for any incurred costs to obtain the undelivered quantity from alternate sources.

(b) Inform the KO of contractor FTD by e-mail, facsimile, or follow-up telephone call.

(c) Submit the required FTD notice data to the KO.

f. DO Cancellations.

(1) Although orders obligate the U.S. Government to accept the product, suppliers may cooperate when unexpected circumstances delay or prevent acceptance of scheduled deliveries.

(2) The ordering officer:

(a) Closely coordinates DO cancellations with the supplier to minimize negative effects on the supplier.

(b) Postpones or defers the delivery date whenever possible through mutual agreement with the supplier before cancelling an order.

(c) Notifies the KO when mutual agreement is not possible.

g. Delivery Delays (Special Considerations). The ordering officer:

(1) Notifies the KO when a contractor fails to fulfill delivery requirements. The KO notification is the ultimate responsibility of the ordering officer.

(2) Provides immediate or potential effect of delays on prescribed minimum inventory levels, day-to-day support capability, and possible increased costs to the U.S. Government.

(3) Places orders consistent with solicitation, ordering, and delivery terms specified in the contract award documents.

(4) Limits deliveries from suppliers who have failed to deliver one or more times to no more than a 1-week supply to encourage prompt processing should default action be necessary, unless otherwise directed by the KO.

(5) Does not accept further deliveries against an order after initiating default action against the order, but may continue to place new orders against the contract.

(6) Keeps the KO informed if the contractor continues to fail to deliver subsequent orders.

h. One-time Buy. Purchasing goods when a long-term contract does not exist leads to a one-time buy scenario.

(1) If product is required before establishing a long-term contract, the DFSP user uses EEBP to initiate a one-time buy.

(2) One-time buys will be worked manually by an acquisition specialist.

4.5. ORDERING ENERGY COMMODITIES FROM A DFSP.

a. Requirements and Requisitions.

- (1) The receiving customer:
 - (a) Submits the 30-day required quantity to the shipping DFSP in writing.
 - (b) Schedules shipments from the shipping DFSP.
 - (c) Requisitions single or multiple deliveries.
 - (d) Holds requests that generate shipments in an active or open status until the customer receives the total quantity or amends the request.
 - (e) Investigates open or unmatched movements.
- (2) The shipping DFSP may request the receiving customer to amend requisitions when the remaining quantity is less than a full tank truck or rail car load.

b. Requisition Time. The receiving DFSP submits a requisition:

- (1) To the shipping DFSP in advance of RDD.
- (2) For shipside deliveries, less than 20 days in advance, if the transaction improves strategic operations or prevents ship movement delays.

4.6. REQUISITIONING FUEL ADDITIVES.

a. DLA Energy:

- (1) Centrally funds bulk and packaged fuel additives through the DWCF.
- (2) Will add new requirements for packaged fuel additives to the obligation authority program.

b. DoD organizations should contact their DLA Energy regional office supply planner or scheduler to order bulk fuel additives for DWCF-owned products.

c. Each DLA Energy regional office:

- (1) Coordinates bulk fuel additive requirements with DLA Energy-L.
- (2) Orders new bulk fuel additive requirements or redistribute fuel additive from existing stocks using SPWs.
- (3) Facilitates DFSPs to ensure adequate supply is available to satisfy mission requirements.

(4) Helps the DFSP acquire lateral support from another DFSP.

(5) Contacts DLA Energy-L for help if lateral support is not available within the theater.

d. Any customer that requires packaged fuel additives should contact DLA Aviation through FedMall at <http://www.dla.mil/Info/FedMall/>.

e. The DFSP notifies the DLA Energy regional office concerned when delivery delays will adversely affect mission capability.

4.7. COLLABORATION.

a. Consumption requirements are submitted through the EEBP base or activity customers on a monthly basis.

(1) Participating Agencies and DoD Components submit forward requirements directly through EEBP using location maintainer and collaboration roles.

(2) Upon request, SCPs will assist DLA Energy in establishing location maintainer and collaboration roles for applicable bases or activities.

b. See Section 3 of Volume 7 of this manual for further details about collaboration.

SECTION 5: SHIPPING AND RECEIVING

5.1. GENERAL.

a. Document Transactions. A DoD Component:

(1) Documents accounting transactions relative to receipts of shipments from a DFSP and deliveries from vendors.

(2) Processes transactions in accordance with this section.

b. Document Retention. The DFSP:

(1) Maintains signed copies of all shipment and receipt documentation for DWCF-managed fuel inventories:

(a) In the DFSP daily document control file as required by Volume 2 of this manual.

(b) As specified in contract clause I119.04 when applicable.

(2) Keeps completed forms used for transaction types as listed in Table 1. The forms can be found at <http://www.esd.whs.mil/Directives/forms/>.

Table 1. Receipt Documentation

Form Number	Use(s)
iRAPT	Quality, quantity verification, and receipt acceptance of commercial product delivered via all modes.
DD Form 250	Quality, quantity verification, and receipt acceptance of commercial or DWCF product delivered to a DFSP via any overland mode.
DD Form 250-1	Quality, quantity verification, and receipt acceptance of commercial or DWCF product delivered by tanker or barge.
Commercial Meter Ticket/Bill of Lading	Receipt acceptance for commercial product delivered to a DFSP.
DD Form 361	When one or more conditions listed in Paragraph 5.3.a.(6)(c) exist.
DD Form 1348-7	Receipt quantity verification; DFSP to DFSP DWCF product. Receipt documentation of shipments from Navy shore terminals to afloat DFSPs.
DLA Form 2046	Record single or multiple product receipts of the same product daily. To be used in conjunction with accompanying delivery and receipt documentation.

c. Waivers to Policy.

(1) A DFSP may submit a waiver request, in writing, to DLA Energy-L. The request should be routed through the applicable SCP or appropriate DLA Energy regional office for DLA Energy intermediate terminal and commercial pipeline operations.

(2) A North Atlantic Treaty Organization (NATO) or foreign government-managed DFSP reports and documents transactions in accordance with the specified terms and conditions of the applicable NATO or DLA Energy agreement.

(3) A DFSP may occasionally receive free fuel or assistance-in-kind fuel from foreign governments in accordance with the terms and conditions addressed in DLA Energy guidance issued when needed by the applicable NATO or DLA Energy agreement.

d. On-Board Quantity (OBQ) and Remaining on Board (ROB).

(1) The DFSP:

(a) Identifies and measures any OBQ at the time of loading of a conveyance or ROB product at the termination of receipt of a delivery.

(b) Annotates the OBQ or ROB on the appropriate shipment or receipt document accompanying the delivery.

(c) Advises the applicable DLA Energy regional office or transportation office of OBQ or ROB quantities found on the conveyance if the delivery is by ocean tanker.

(2) The DLA Energy regional office concerned and DLA Energy-L for ocean tanker deliveries:

(a) Advises DFSPs of appropriate additional actions to be taken when OBQ or ROB quantities are reported.

(b) Accounts for U.S. Government-owned stocks that are not off-loaded at the intended destination.

(c) Advises the reporting activity of appropriate actions.

5.2. GENERAL MEASUREMENT STANDARDS, QUANTITY DETERMINATION, AND VOLUME CORRECTION PROCEDURES.

a. Each DFSP:

(1) Uses the approved American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) for volume corrections.

(2) Uses products that are correct in volume in accordance with Military Department-specific or Service-specific guidance for Military Department-managed or Service-managed DFSPs.

(3) When receiving product from procurement contracts or vendors, uses the petroleum industry standards for quantity determination for quantities to be volume corrected to a standard temperature of 60° Fahrenheit (F) (15° or 20° Centigrade (C) if measured in liters).

(a) Use the term “net” when documenting quantities that have been converted to 60° F (15° or 20° C for quantities measured in liters).

(b) Use the term “gross” when documenting quantities that have not been converted to a standard temperature of 60° F (15° or 20° C for quantities measured in liters).

(4) Transfers product in shipments between DFSPs in quantities equal to or greater than 5,000 gallons (19,000 liters) that are volume corrected to a standard temperature of 60° F (15° or 20° C if measured in liters).

b. A DFSP determines quantity for fuel shipments and receipts with:

(1) **Weigh Scales.** Weigh the shipping conveyance before and after loading for shipments and for receipts when a weigh scale is used for quantity determination. Determine before and after weights under the same conditions, i.e., the driver should remain in the vehicle for both the before and after weighing.

(2) **Meters to Determine Receipt or Shipment Quantities.** When using a temperature compensating meter (TCM), calibrate the meter and set the density on the meter before using the meter.

(3) **Conveyance Gauges.** Use a conveyance gauge reading only for quantity determination when certified strapping or gauge charts are available for each individual delivery conveyance.

(4) **Issue or Receipt Tank Gauges.** Use issue or receipt tank gauge readings only when strapping or gauge charts have been certified in accordance with the MPMS. Use automatic tank gauge (ATG) readings instead of manual gauge readings only if the ATG is fully operational and ATG systems have been calibrated, as discussed in Paragraph 5.2.b.(4)(b). If this quantity determination method is employed, provide copies of the certified strapping charts and the ATG calibration certificate, on request.

(a) Certified strapping charts are required. Certified strapping charts are capacity charts prepared by an independent agent, engineer, or surveyor for each container (tank) in which DWCF product is being measured or stored. Fuel storage tanks holding DWCF product will have a minimum of 5,000 gallon capacity. Existing storage tanks at capitalized locations with less than 5,000 gallons of capacity are grandfathered. Tanks will have strapping charts certified to 1/16 inch (or metric equivalent) and have ATGs capable of measuring and displaying level data in 1/16 inch (or metric equivalent) increments. Demonstrate that the entire certified

strapping chart has been loaded into the Accountable Property Systems of Record (APSR) application or applicable ATG database.

(b) Certify strapping charts to 1/8 inch, or metric equivalent, increments for tanks 10,000 U.S. gallons or less and 1/16 inch, or metric equivalent, increments for tanks greater than 10,000 U.S. gallons. Locations that do not possess gauging charts in 1/16 inch increments will use those graduated in 1/8 inch increments (or metric equivalent) until the next internal inspection, when new charts will be generated. Tanks that do not have an internal inspection requirement must request charts via the Sustainment, Restoration, and Modernization Module in the DLA External Business Portal, which can be accessed at <https://business.dla.mil/landing/index.jsp>, and requires an account.

(c) Measure and display ATG level data in 1/16 inch, or metric equivalent, increments.

1. In the absence of a functional ATG, manual readings will be obtained by calibrated tape and bob or calibrated rod (dip stick). Determine the level of the tank contents by reference manual innage measurements until three consecutive measurements agree within a range of 1/16 inch or metric equivalent.

2. The facilities working manual gauging tapes will be properly validated for accuracy annually by performing a manual comparison, at 15-foot increments, against a National Institute of Standards and Technology traceable or master manual gauging tape. As a courtesy, DLA will perform an annual validation under the ATG Maintenance Program during the annual ATG Preventive Maintenance site visit.

3. Tapes determined to be out of tolerance or limits during the annual validation will be noted, and it is the responsibility of the facility or service agency to have them replaced. Damaged, broken, or lost facility tapes and bobs are not the responsibility of DLA or the DLA ATG Maintenance Program and are not help desk-eligible issues.

(d) Request and obtain certified strapping charts before placing new tanks into service to replace manufacturer's strapping charts for factory prefabricated storage tanks. The manufacturer's strapping charts for factory prefabricated storage tanks are not certified strapping charts since they do not take into consideration the actual on-site installation of the storage tank (e.g., pitch and roll).

(e) Re-strap storage tanks if:

1. They have undergone major repairs or modifications.

2. The product stored in floating roof tanks has been changed to address roof displacement factors.

3. The tank has been damaged by lightning, winds, or earthquakes.

4. The current strapping charts are identified as or suspected of being inaccurate.

c. DLA Energy:

- (1) Manages the ATG calibration and maintenance program.
- (2) Funds the maintenance and calibration of ATG systems installed on tanks storing DWCF-owned fuel.
- (3) Maintains and calibrates ATG systems in accordance with Chapter 3 of the MPMS.

d. Each responsible officer (RO) or terminal manager (TM):

(1) Satisfies specific customer coordination requirements, e.g., notification to parent commands or SCPs before submission of requests to the DLA Energy Help Desk.

(a) Submits requests for maintenance or calibration of ATG systems to energy.helpdesk@dla.mil, 1-800-446-4950, or DSN: 697-6733.

(b) Submits requests for normal maintenance and calibration requests that are corrective or preventive maintenance actions to the DLA Energy centralized maintenance team with:

1. DFSP name, DoD activity address code (DoDAAC), facility identification number, and installation number.
2. Facility identification number of the tank or tanks requiring service.
3. A detailed description of the nature or the problem.
4. DFSP project point of contact information, e.g., name, rank, phone number, and e-mail address.

(2) Submits calibration requests through the DLA Energy Help Desk for maintenance and calibration of any ATG systems not covered under the provisions of an existing maintenance contract.

e. The RO and TM:

(1) Maintain ATG maintenance records, calibration records, and certified strapping charts for each storage tank in the DFSP document control.

(2) Calibrate ATG systems with certified strapping charts and verifies all certified strapping chart data points are accurately loaded to the ATG system.

(3) Load a minimum of 21 certified strapping chart data points to ensure statistical accuracy and correct extrapolation of converted gauge quantities.

(4) Verify extrapolated gauge quantities computed by the ATG system against the certified gauge charts and amended as required.

(5) Ensure that changes to gauge data reference points as a result of re-strapping or calibration of fuel tanks are accurately reloaded to the ATG system.

(6) Verify extrapolated gauge quantities computed by the ATG system against the new strapping or calibration chart.

f. Each DFSP:

(1) Uses volume correcting for all shipment and receipt quantities to improve inventory management, especially in areas where ambient temperatures are consistently above or below 60° F (15° or 20° C for quantities in liters).

(2) Volume corrects to a standard temperature of 60° F (15° or 20° C if measured in liters) for shipments between DFSPs and the subsequent receipt of shipments in quantities equal to or greater than 5,000 gallons (19,000 liters). Converts quantities measured in liters at 15° or 20° C to gallons at 60° F using ASTM International D1250 or API MPMS conversion tables that apply based on the commodity and temperature, e.g., Table 53 of ASTM International D1250 for crude oil measured at 15°C or API Table 5a for petroleum products measured at 60°F. Records the volume at 60° F (15° or 20° C for quantities measured in liters) where calibrated TCMs are available all shipment and receipt quantities.

(3) Uses the approved API method for volume correction as specified in applicable contract internal instructions or contract narratives for all contract deliveries and receipts. Uses the delivery conveyance equipped with a non-TCM for quantity determination where the applicable contract narrative or internal instruction specifies. Reports the delivery and subsequent receipt quantity in gross quantity as discussed in Paragraph 5.4.c.(3)(b).

(4) Uses the approved methods for obtaining net quantities at 60° F (15° or 20° C for quantities in liters) in this order of preference:

(a) Calibrated TCM.

(b) ATG Certified for Custody Transfer.

(c) **Calibrated non-TCMs with Manual Temperature Conversion.** This method involves using the temperature and density (or API gravity) obtained from a calibrated temperature probe installed mid-stream in the piping manifold adjacent to the meter. To ensure the most accurate volume correction, the DFSP selects the same ambient conditions of the meter and piping near the temperature probe (i.e., both meter and piping where the probe is installed are exposed to the same climatic conditions). Uses the approved temperature and density determination methods in Chapters 7 and 9 of the MPMS.

(d) **Issue or Receipt Tank Gauge.** The DFSP corrects volume using temperature and density (or API gravity) obtained from the issue or receipt tank.

(e) **Certified Weight Scale.** The DFSP corrects volume using temperature and density (or API gravity) obtained from fuel in the conveyance being weighed.

(5) Submits project documentation that provides the project scope, justification, and cost estimate as described in Volume 8 of this manual, e.g., any Service-specific form or format that includes real property information and category codes in accordance with Unified Facilities Criteria-3-701-01.

5.3. RECEIPT OF PRODUCT INTO DWCF ENERGY COMMODITY INVENTORY.

a. The RO and property administrator (PA) at each DFSP:

(1) Ensure proper quality control, receipt quantity verification procedures, and timely transaction processing procedures are followed for all receipts of product into DWCF energy commodity inventories.

(2) Check all in-bound energy commodity deliveries using the receipt checklist in Appendix 5A to ensure:

(a) Product quality standards are met before receipt of the product.

(b) The quantity of product actually received, as compared to the shipment quantity reflected on the shipping documentation, is within acceptable in-transit gain or loss tolerances.

(3) Report discrepancies with deliveries to the appropriate quality assurance representative (QAR) responsible for release of deliveries and the applicable DLA Energy regional office. Immediately notify the DLA Energy Direct Delivery Fuels KO at 1-800-2TOP-OFF, or 1-800-286-7633 when discrepancies exist with PC&S contract deliveries. Contact the DLA Energy Direct Delivery KO during normal business hours, 07:30 - 16:30 Eastern Standard Time, Monday through Friday at (703) 767-8500 (DSN Prefix 427).

(4) Investigate and report quality deficiencies promptly in accordance with the procedures in Volume 9 of this manual for product delivered from contract sources and for DWCF-owned product.

(5) Investigate variances between quantity shipped and quantity determined at the destination that exceed the tolerances specified in Paragraph 5.3.b.(2) to determine root causes and to ensure that appropriate corrective actions have been implemented. Annotate the product quantity at the destination, method used to determine quantity, and other defects noted with the delivery on the receipt document.

(6) Submit transportation discrepancy reports (TDRs):

(a) In accordance with the general guidance in Part 2 of Defense Transportation Regulation 4500.9-R, available at <https://www.ustranscom.mil/dtr/dtrp2.cfm>, which exempts bulk petroleum shipments via all transportation modes from TDR submission requirements.

(b) In accordance with specific guidance in Volume 11 of this manual on the submission of TDRs for bulk petroleum shipments via all transportation modes.

(c) With additional information, in accordance with the instructions in Appendix 5B when one or more of the below conditions exist:

1. There is evidence of damage, theft, or tampering.
2. Seals are missing, broken, or improperly installed; or seal numbers annotated on the shipping document do not match the seals on the conveyance.
3. There is a variance between the quantities determined at origin (i.e., loading) and at the receipt location that exceeds allowable tolerances.
4. Shipment documentation is missing or invalid.
5. There are other noted discrepancies with delivery conveyance.

(d) To DLA Energy-L through appropriate command channels, applicable DLA Energy regional office, QAR, SCP, and subarea petroleum offices (SAPO), if applicable.

b. Where there is evidence of fraud, theft, or gross negligence:

(1) The RO, TM, or PA of a receiving DFSP notifies the RO, TM, or PA of the shipping DFSP before unloading any deliveries.

(2) The RO, TM, or PA of a shipping DFSP:

(a) Informs the local commanding officer, appropriate command level office or KO, and the DLA Energy Fraud Counsel.

(b) Investigates and provides documented results of the investigation to the DLA Energy Fraud Counsel.

(c) Reports suspected fraud cases to the DLA Energy Fraud Counsel via the 24-hour operating center at 1-800-2TOPOFF or 1-800-286-7633.

c. For receipt quantity determination of DWCF energy commodity shipments from other DFSPs, the receiving DFSP:

(1) Enters the transaction receipt quantity to the Enterprise Business System (EBS) through the APSR for DFSP to DFSP shipments with the quantity determined at the destination using approved quantity determination methods.

(2) Submits requests for exceptions, if needed, on a case-by-case basis to DLA Energy-L:

(a) Where a receiving activity in a tactical environment does not have the capability to accurately meter or gauge receipt quantities.

(b) Where receipt facility limitations dictate the simultaneous receipt of product from multiple sources into a single receipt tank or through a common manifold meter.

(3) Submits appropriate facility project upgrade requirements to DLA Energy.

(4) In instances where the quantity determination at the destination is waived by DLA Energy, bases the receipt transaction quantity on the quantity determined at the origin as reflected on the shipment document, providing the delivery conveyances are properly sealed and there is no evidence of tampering or theft.

(5) Notifies the appropriate DLA Energy regional office and SCP any time seals are missing or broken or when there is evidence of theft.

d. Except for ocean tankers or as specified by contract, the DFSP:

(1) Researches variations between the quantity shipped and the quantity received in excess of 0.5 percent (0.005).

(2) Takes appropriate actions to correct discrepancies or practices that caused the excessive variance.

e. For ocean tankers, the DFSP investigates 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 DoD Instruction 4140.25.

f. The RO, TM, PA, or designated representative at the receiving DFSP:

(1) Contacts the shipping DFSP to advise of excessive variances and to request verification of the quantity shipped.

(2) Uses the verification to:

(a) Identify computation and documentation errors that may contribute to an excessive variance.

(b) Make appropriate corrections to shipment or receipt documentation.

(3) Investigates excessive variances not attributable to computation or documentation errors.

(4) Submits a DD Form 361 in accordance with Appendix 5B, when discrepancies exist.

(5) Notifies the appropriate DLA Energy regional office and DLA Energy about excessive variances or documentation errors.

g. When ocean tankers or barge cargoes are discharged at two or more DFSPs, each DFSP:

(1) Conducts investigations within the week in which the excessive gain or loss is discovered.

(2) Enters the quantities discharged at intermediate points in the discharge column of the DD Form 250-1.

(3) Adjusts the receipt quantities on the DD Form 250-1 to 60° F (or 15° or 20° C when metric is used).

(4) Indicates no loss or gain for the intermediate points.

(5) From intermediate discharge points, advises the final discharge point of the quantity received in advance of mailing documents to expedite loss or gain calculations.

(6) Calculates the total in-transit gain or loss at the final discharge point.

(7) Investigates excessive in-transit gain or loss variances.

(8) Documents findings on DD Form 361 and submit to DLA Energy-L via facsimile at (703) 767-9380 from the final discharge point when discrepancies exist.

h. The DFSP categorizes contract receipts as FOB origin or FOB destination.

(1) For FOB destination contracts, the U.S. Government accepts custody of product shipments based on quantities received at the destination.

(2) For FOB origin contracts, the DLA Energy QAR:

(a) Converts product load quantities to 60° F (15° or 20° C for quantities measured in liters).

(b) Validates both the gross quantities and converted or net quantities.

(c) Documents receipt discrepancy using a DD Form 361 when vendor invoice quantities determined at origin are contestable because the vendor fails to deliver the validated load quantity to the intended destinations.

(3) The DoD Component:

(a) Has the option to have representation present for verification of quantities shipped and product quality for FOB origin contracts.

(b) Follows alternate release procedures or certificates of conformance where it is not feasible for a QAR to be present at the FOB origin location.

(c) Uses receipt quantity determinations the contractors provide:

1. With the option to have a representative present at the destination to witness how the contractors determine quantities and compute temperature compensations.

2. For FOB destination contracts when specified in their contracts.

(4) The DFSP:

(a) Verifies allowable contract variances between the quantity ordered and the quantity delivered:

1. Up to 10 percent variance compensating for loading and handling conditions;

or

2. As specified in the contract.

(b) Notifies the appropriate DLA Energy contracting office or DLA Energy regional office ordering officer when available storage limitations or mission requirements result in insufficient ullage required to off-load deliveries greater than the ordered quantity.

(c) Adjusts subsequent orders when multiple orders are placed and variances up to 10 percent occur between the amounts ordered and quantity shipped.

(d) Distinguishes between:

1. The quantity ordered and quantity shipped variances.

2. Quantity discrepancies between the quantity shipped and the quantity actually delivered, as discussed in Paragraph 5.4.a.(3).

i. The DFSP determines the receipt quantity for PC&S contract truck delivery conveyance, e.g., tank truck, truck and trailer, or tank wagon.

(1) For TCMs on the conveyance, the receipt quantity is the observed quantity at 60° F (15° or 20° C for quantities in liters).

(2) For calibrated non-TCMs on the conveyance, the DFSP:

(a) Uses the meter on the conveyance to determine the gross quantity of product off-loaded.

(b) Annotates the observed API gravity and the temperature of the receipt on the receipt document, and process the gross quantity as the quantity on the receipt transaction.

(c) Uses the observed temperature and API gravity converted to API at 60° F (15° or 20° C for quantities in liters) to compute the net receipt quantity for comparison to operating gain and loss computations reflected on the end of month (EOM) inventory summary report.

(d) Annotates the remarks block of the DD Form 1348-8, operating gain or loss summary with the cumulative gain or loss attributed to the difference between gross and net quantities for the receipts.

1. TCMs are not normally used for deliveries of residual fuels.

2. When TCMs are used, use volume correction to 60° F (15° or 20° C for quantities in liters) for all deliveries.

j. When a calibrated loading rack meter ticket is used because other preferred means of quantity determination (e.g., receipt meters, conveyance meters, and receipt scales) are not available at the destination, the DFSP:

(1) Volume corrects the quantity shipped to 60° F (15° or 20° C for quantities in liters) at the loading rack.

(2) Records on the meter ticket with the gross and net gallons (or gross and net liters), the observed and corrected API gravity (or density), and temperature (F or C) of the product at the time of loading.

(3) Accepts the net quantity reflected on the loading rack meter ticket as the receipt or payment quantity when the entire quantity is unloaded and verification is made that the truck is empty.

(4) Uses the receipt tank measurements when they are identified under a line item in the contract schedule as an approved method of quantity determination, instead of the loading rack meter ticket.

(5) Approves receipt tank measurements for determining receipt or payment quantity when identified in the schedule.

(6) When receipt tank measurements are not identified under a line item in the contract schedule as an approved method of quantity determination, uses the loading rack meter ticket quantity as the receipt or payment quantity, even if it differs from the receipt tank quantity by more than 0.5 percent.

(7) When the quantity variation exceeds 0.5 percent, notifies the applicable DLA Energy regional office or DLA Energy KO as soon as possible.

k. The DFSP uses the MPMS for quantity determination methods for bulk contract receipts and shipment receipts.

(1) **Tank Truck, Tank Wagon, or Truck with Trailer.** Each DFSP determines receipt quantities for deliveries via tank truck, tank wagon, or truck and trailer with:

(a) **Receipt Meters.** The DFSP:

1. Uses calibrated receipt meters as the preferred method for receipt quantity determination.

2. Uses calibrated TCMs on the receiving tank system to determine the receipt quantity, when available.

3. Converts quantities to 60° F (15° or 20° C for quantities in liters) as required in Paragraph 5.3., when non-TCMs are used to determine the receipt quantity.

(b) **Loading Rack Meter Tickets.** The DFSP uses loading rack meter tickets for bulk contract and DWCF fuel receipt quantity determination as discussed in Paragraph 5.3.c.(3), for PC&S contract deliveries. Converts receipt quantities to 60° F, (15° or 20° C for quantities in liters) as required in Paragraph 5.3.

(c) **Gauging the Receipt Tank.** When other approved methods (e.g., calibrated receipt meter or weigh scales) are not available at the delivery location, the DFSP uses before and after gauge readings of the receipt tank to verify receipt quantity. Reports discrepancies between the quantity determination at origin and the verified receipt quantity based on before and after receipt tank gauge readings converted to 60° F (15° or 20° C for quantities in liters) to the QAR, the applicable DLA Energy regional office, and Quality and Technical Support (DLA Energy-DQA).

(2) **Weighing the Truck.** The DFSP uses a calibrated scale to determine the weight of the fuel. Use this weight to calculate the receipt quantity with volume correction as discussed in Paragraph 5.3. When contracts are written requiring the use of scales to determine quantities shipped and received, asks the contractor to show proof of scale calibration to DLA Energy.

(3) **Deliveries by Rail Tank Car.** The DFSP determines the receipt quantity using a calibrated receipt meter or by using the gauge readings of the receipt tank converted to 60° F (15° or 20° C, if liters).

(4) **Deliveries by Intermodal Tank Container.** The DFSP bases the receipt quantity on calibrated receipt meter or receipt tank gauge readings converted to 60° F (15 or 20° C for liters). For FOB origin contract deliveries via intermodal tank container, uses the shipped quantity for the receipt quantity when:

(a) The conveyance is sealed at the loading point with serially numbered seals.

(b) The seal numbers are recorded on the delivery ticket.

(c) The seals are intact on arrival at the receiving activity. The DFSP notifies the QAR at origin, the appropriate DLA Energy regional office, SCP, and DLA Energy-DQA immediately if the seals are not intact or if there is any other evidence of tampering.

(5) **Deliveries by Pipeline.**

(a) **Pipeline FOB Destination.** The DFSP determines receipt quantity at the receiving activities by using calibrated receipt meters or by gauging the receipt tank. Corrects volume correction to 60° F (15° or 20° C for liters).

(b) **Pipeline FOB Origin or Junction.** The DFSP determine receipt quantity by temperature compensating calibrated meter or by gauging the shipping tank. Packs the pipeline between the shipping tank and the FOB junction meter and receipt point at the time of the gauging. Adjusts the volume correction to 60° F (15° or 20° C for liters) for all receipts.

(6) **Deliveries by Ocean Tanker and Barge.** The DFSP determines receipt quantities by calibrated meter or by gauging the shore receipt tank before and after delivery. The DFSP:

- (a) Takes before and after off-load gauge readings of the ocean tanker or barge.
- (b) Uses the ocean tanker or barge gauge readings for comparison of variance between meter or shore tank gauge quantity determination and ocean tanker or barge gauge quantities.
- (c) Directs the receiving DFSP or regional QAR to witness the gauging of the ocean tanker or barge and shore or receipt tanks.
- (d) Adjusts the volume correction to 60° F (15° or 20° C for liters).

(7) **Contract Deliveries of Bunker Contract fuel into DWCF Fuel Inventory.** The DFSP processes all bunker contract uploads into capitalized ocean vessels as a direct sale to the vessel. The DFSP:

- (a) For capitalized vessels, processes a return for credit (defuel) transaction to the APSR equal to the quantity of the upload from the sale to the capitalized vessel for receipt of bunker fuels into DWCF fuel inventory aboard capitalized ocean vessels.
- (b) Processes bunker fuels sold by tonnage with the amount shown on the invoice for the shipping quantity in tons.

1. Since bunker fuel is rarely weighed, obtains the weight in tons reflected on the invoice by converting the measured volume to tons using the appropriate petroleum measurement table for intra-conversion between volume and measures and density measures in Chapter 11.1 of Volume XI of the MPMS.

2. Uses the appropriate petroleum measurement table referenced above to convert to and from metric units and to convert weights to volumes and vice versa.

(8) **Contract Deliveries to a Marine Service Station.** The DFSP determines the receipt quantity by a calibrated meter or by gauging the shore tank before and after delivery. Corrects the volume to 60° F (or 15° to 20° C for liters) as discussed in Paragraph 5.3.

(9) **Into-Truck Contract Line Items.** The DFSP establishes requirements for fuel delivery into DWCF fuel inventory stored in DoD- owned or -leased refueling vehicles or line haul trucks as either bulk or PC&S contract line items. This is necessary because of systematic limitations that prohibit the receipt of fuel into DWCF fuel inventory from standard into-plane contracts. Documents receipts of product from into-truck contract line items.

- (a) Documents individual uploads on a DLA Form 2046 with:
 - 1. The date, truck number, and upload quantity based on calibrated meter.
 - 2. Names of the truck operator and contractor representative at the loading rack.

3. Summary of individual truck uploads.

4. Joint verification of the total daily receipt quantity by signature of contractor and U.S. Government representatives on the DLA Energy Form 2046.

(b) Processes a receipt transaction based on total daily receipt quantity. Correct the temperature to 60° F, (15° or 20° C for quantities measured in liters) unless otherwise specifically stated in the into-truck contract narrative. In the event the into-truck contract line item is at gross quantity, document all subsequent inventory transactions, e.g., sales, credits, inventory, and reports at gross.

1. When processing receipt transactions when the delivery period extends over a period of more than 1 day, the receiving DFSP:

(1) Processes the receipt transaction to the APSR after all individual truck or rail car loads for that shipment number are received when receipt of a product shipment cannot be completed in 1 day.

(2) Processes the receipt when the entire shipment is received if the transport mode is via pipeline, barge, or ocean tanker.

(3) Coordinates with the shipping DFSP to ensure the entire shipment is credited against the applicable shipment number in the receipt transaction.

(4) Posts the physical inventory transactions to the APSR on a daily basis.

(a) The transaction may reflect an abnormal daily operating gain in those cases where a receipt transaction is held pending completion of the receipt. The daily operating gain or loss should balance out once the receipt is completed and the receipt transaction processed to the APSR.

(b) If the operating gain or loss does not balance out once the receipt transaction is processed, conduct an investigation to determine and document the reason for the excessive gain or loss.

(c) When receipts of shipments extend into the next month, document that a partial receipt of a shipment was carried over for input into the APSR to the next month.

1. Make an entry in the “Memo” block of the EOM operating gain or loss report.

2. Account for the EOM operating gain or loss impacted by the partial receipt reflected in the closing physical inventory, but not in the closing book inventory.

3. Annotate the “Memo” block of the EOM operating gain or loss report for the month reflecting the partial receipt quantity in the physical inventory and the subsequent month reflecting the receipt transaction for the total receipt quantity.

5.4. FUEL ADDITIVES.

a. CI and Static Dissipative Additive (SDA). CI and SDA, also termed electrical conductivity additive or anti-static additive, are not managed through a bulk program. Due to the amount of fuel additives used relative to bulk petroleum inventory, a DFSP:

(1) Obtains CI and SDA by ordering the fuel additive through FedMall at <http://www.dla.mil/Info/FedMall/>.

(2) Accounts for and secures fuel additives.

b. FSII. The DoD Component:

(1) Uses diethylene glycol monomethyl ether (DiEGME) as a chemical compound for FSII.

(2) Procures DiEGME from a contract that meets product specifications and API standards identified in MIL-DTL-85470B with:

(a) A relative density at 20° C/20° C between 1.021 and 1.025 kilograms per liter (kg/L).

(b) A relative density in the range of 6.1 and 6.8 degree (at 60° F).

(c) A relative density at 15° C is in the range of 1.024 - 1.028 kg/L.

(d) A relative density at 60° F is in the range of 1.023 to 1.028 kg/L.

(3) Receives and in-checks bulk FSII, which is normally delivered via tank truck or intermodal tank container.

(a) Uses receipt in-check procedures in Appendix 5A are applicable to bulk FSII receipts.

(b) Performs a visual examination of the workmanship and a density determination before acceptance to verify delivery of the correct chemical with no apparent contamination.

(c) Takes the density measurement as close as possible to the standard temperatures either at 60° F, 15° or to 20° C for liters.

(d) Places the sample in a controlled temperature environment, such as a warm room or refrigerator, to warm or cool the sample before taking the density measurement. Does not use direct heat or extreme cold (e.g., an oven or hot plate, or an ice bath or freezer) to accelerate warming or cooling of the sample.

(e) Immediately notifies the QAR at the origin, the applicable DLA Energy regional office, and DLA Energy-QA if the density measurement of the sample is not within the density ranges specified in Paragraph 5.4.b.

(f) Checks each lot of drummed FSII received into DWCF inventory for workmanship and density.

(4) Documents FSII receipts from contract sources using the DD Form 250. Documents FSII shipments and receipts between DFSPs on DD Form 1348-7.

(5) Performs FSII shipment and receipt quantity determination for:

(a) **Bulk Contracts.** The DFSP determines the quantity for FSII shipments of bulk contract by weight in air converted to quantity. Documents the net and converted quantities that were verified by the QAR at the origin on the DD Form 250.

1. Notifies the QAR at the origin and DLA Energy regional office ordering officer if any discrepancies are noted with the delivery conveyance or shipment documentation, (e.g., missing or broken seals; seal numbers do not match seal numbers on the shipping document; or any other evidence of tampering, theft, or sabotage).

2. When receipt quantity determination is made at the destination, bases the quantity on weight in air converted to gallons, calibrated off-loading meter, or by gauging the receipt tank.

3. Converts gross quantities to net quantity using conversion factors identified in Tables 2 through 6.

Table 2. Volume Correction Factors (VCF) for DiEGME (Degree Celsius)

TEMP °C	VCF	TEMP °C	VCF	TEMP °C	VCF	TEMP °C	VCF
-1	1.0148	10	1.0046	21	0.9946	32	0.9848
0	1.0138	11	1.0037	22	0.9937	33	0.9839
1	1.0129	12	1.0027	23	0.9928	34	0.983
2	1.012	13	1.0018	24	0.9919	35	0.9821
3	1.011	14	1.0009	25	0.991	36	0.9812
4	1.0101	15	1	26	0.9901	37	0.9804
5	1.0092	16	0.9991	27	0.9892	38	0.9795
6	1.0083	17	0.9982	28	0.9883	39	0.9786
7	1.0073	18	0.9973	29	0.9874	40	0.9778
8	1.0064	19	0.9964	30	0.9865		
9	1.0055	20	0.9955	31	0.9856		
VCF = volume correction factor; TEMP = temperature							

Table 3. VCF for DiEGME (Degree Fahrenheit)

Temp °F	VCF	Temp °F	VCF	Temp °F	VCF	Temp °F	VCF
30	1.0158	50	1.0052	70	0.9948	90	0.9846
31	1.0153	51	1.0047	71	0.9943	91	0.9841
32	1.0148	52	1.0042	72	0.9938	92	0.9836
33	1.0142	53	1.0037	73	0.9933	93	0.9831
34	1.0137	54	1.0031	74	0.9928	94	0.9826
35	1.0132	55	1.0026	75	0.9923	95	0.9821
36	1.0126	56	1.0021	76	0.9917	96	0.9816
37	1.0121	57	1.0016	77	0.9912	97	0.9811
38	1.0116	58	1.001	78	0.9907	98	0.9806
39	1.011	59	1.0005	79	0.9902	99	0.9801
40	1.0105	60	1	80	0.9897	100	0.9796
41	1.01	61	0.9995	81	0.9892	101	0.9791
42	1.0094	62	0.999	82	0.9887	102	0.9786
43	1.0089	63	0.9984	83	0.9882	103	0.9781
44	1.0084	64	0.9979	84	0.9877	104	0.9776
45	1.0079	65	0.9974	85	0.9872		
46	1.0073	66	0.9969	86	0.9867		
47	1.0068	67	0.9964	87	0.9862		
48	1.0063	68	0.9959	88	0.9856	104	0.9776
49	1.0058	69	0.9953	89	0.9851		

Table 4. Kilograms of DiEGME to Liters

Specific gravity 20° C/20° C of DiEGME	To convert weight in kg to liters at 15° C, multiply by:
1.021	0.9766
1.022	0.9756
1.023	0.9746
1.024	0.9737
1.025	0.9727

Table 5. Kilograms of DiEGME to Gallons

Specific gravity 20° C/20° C of DiEGME	To convert weight in kg to gallons at 60° F, multiply by:
1.021	0.2582
1.022	0.2579
1.023	0.2576
1.024	0.2574
1.025	0.2572

Table 6. Pounds of DiEGME to Gallons

Specific gravity 20° C/20° C of DiEGME	To convert weight in pounds to gallons at 60° F, multiply by:
1.021	0.1171
1.022	0.1170
1.023	0.1169
1.024	0.1168
1.025	0.1167

(b) **Drummed FSII Receipts.** Bases the receipt transaction quantity for drummed FSII on the shipping invoice quantity providing all drums are received and there is no evidence of tampering with the seals.

(c) **FSII Shipments and Receipt of Bulk FSII between DFSPs.** Determines shipment and receipt quantities based on weight in air converted to volume, by calibrated meter, or by gauging, providing the storage or transport tank has a certified strapping chart. Converts measured quantities to net quantity using approved conversion factors identified in the appropriate Tables 2 through 6.

(d) **Net quantity of DiEGME.** Determines net quantity of DiEGME based on observed volume and temperature. Multiplies the observed volume of the DiEGME by the VCF corresponding to the temperature of the DiEGME as shown in either Table 2 or 3, as applicable.

(e) **Weight of DiEGME to Volume at 60° F or 15° or 20° C.** When quantity determination is based on weight in air, uses the conversion factors provided in Tables 4 through 6 to convert weight in air to volume. Multiplies the correction factor of the corresponding observed specific gravity at 20° C/20° C by the product weight to determine the volume in gallons at 60° F (or 15° or 20° C for liters).

APPENDIX 5A: RECEIPT DELIVERY IN-CHECK AND OUT-CHECK PROCEDURES FOR DFSPS

Before receipt into DWCF energy commodities inventories and, when applicable, after off-load of the delivery conveyance is completed, the DFSP checks energy commodities deliveries.

a. Shipping Documentation. Verify shipping documentation, including:

- (1) Delivery to correct delivery location.
- (2) Correct product reflected on the shipping document.
- (3) Conveyance seal numbers, if appropriate for the mode of transport, reflected on the shipping document.
- (4) Documentation of quality analysis results at origin, where applicable.

b. Conveyance. Check the delivery vehicle or mode of transport for evidence of theft, tampering, sabotage, leaks, or other obvious safety or quality discrepancies.

- (1) Verify that seals, if applicable for mode of transport, are not missing, broken, or tampered with.
- (2) Verify that the numbers on installed seals match the seal numbers on the shipping document.

c. Product. Verify that the product delivered was the product ordered.

- (1) Verify that the product markings on the conveyance match the product shown on the shipping document.
- (2) Get a sample to perform a visual analysis for color, water, and sediment. Qualified personnel collect samples in compliance with MIL-STD-3004 and Military Department-specific or Service-specific quality guidance.
- (3) Get a representative temperature and API density of the product in the delivery conveyance. Ensure API density is within the appropriate range for the product ordered.
- (4) Get samples for laboratory analysis on a random basis or in accordance with DoD Component guidance to ensure product specification requirements are met.

d. Receipt Quantity Determination.

(1) **Opening Measurements.** Obtain opening (i.e., before receipt) measurements using one of the following approved methods:

(a) **Calibrated Conveyance Meter.** For conveyance modes with calibrated off-loading meters, ensure the meter register is reset to zero and annotate the totalizer meter reading on the petroleum daily receipt summary before starting the receipt.

(b) **Conveyance Gauge.** For conveyance modes with certified gauging charts, get gauge measurements from the conveyance if conveyance gauge reading is used for quantity determination. Annotate gauge readings, product temperature, API gravity, and converted quantity on the petroleum daily receipt summary.

(c) **Calibrated Receipt Meter.** If receipt quantity is determined using a calibrated meter, ensure the meter register is reset before starting the receipt. Annotate the totalizer meter reading on the petroleum daily receipt summary. If the receipt quantity is determined using a calibrated TCM, reset the meter totalizer and density before starting the receipt. Annotate the totalizer meter reading, product temperature, and API density on the petroleum daily receipt summary.

(d) **Weigh Scale.** If the receipt quantity is determined or verified using a calibrated scale, get the weight of conveyance before off-load. Annotate the weight, product temperature, API density, and converted quantity on the petroleum daily receipt summary.

(e) **Receipt Tank Gauge.** When other receipt quantity determination or verification methods are not available at the receiving location, get opening (i.e., before receipt) gauge readings, product temperature, and API density from the receipt tank. Annotate the gauge measurements, temperature, API density, and converted quantity on the petroleum daily receipt summary.

(2) **Receive Product.** After the product is unloaded, verify that conveyance compartments are empty. Look for evidence of fraud, such as false tank bottoms, isolated compartments, or bulk heads.

(3) **Closing Measurements.** Get weight, closing meter, or receipt tank gauge readings. Annotate the readings and converted quantity on the petroleum daily receipt summary.

(4) **Compute In-Transit Variance.**

(a) Compute the quantity variance between the quantity shipped, as reflected on the shipping document, and the quantity determined at destination.

(b) Compute the percentage of variance between the quantity shipped and quantity received. Enter variance percentage on the petroleum daily receipt summary. If the variance exceeds the allowable tolerance for the mode of receipt, annotate the receipt document to reflect the method of determination and quantity determined at the destination. Notify the QAR at the origin of the shipment, the applicable DLA Energy regional office, and DLA Energy-DQA when quantity variances exceed the allowable tolerance. Notify the KO at DLA Energy Direct Delivery Fuels for PC&S contract deliveries exceeding quantity variance tolerances.

(c) When the receipt tank gauge method is used to determine the receipt quantity for multiple deliveries via tank truck, rail car, or intermodal tank container that are from the same source of supply:

1. Take a beginning tank gauge, temperature, and API gravity test before beginning off-load of the first delivery.
2. Take a closing tank gauge, temperature, and API gravity test after the last delivery is received.
3. Take a before and after, or closing tank, gauge of the receipt tank for multiple deliveries instead of for each individual delivery.
4. If deliveries are from different sources of supply, use a separate receipt tank to the greatest extent possible for each source of supply with opening and closing measurements recorded for each receipt tank.

APPENDIX 5B: TDR PROCEDURES

DFSPs complete the DD Form 361 by following the guidelines in Table 7.

Table 7. TDR Procedures

Block	Topic	Instructions
1	Date	Enter date of report.
3	To	Enter “DLA Energy-L.”
4	Reporting activity	Enter the name and DoDAAC of reporting DFSP.
5	Consigner	Enter the name of shipping location (i.e., origin).
6	Consignee	Enter the name and DoDAAC of the receiving DFSP (i.e., destination).
7	Shipper	Enter the shipper name.
8	Carrier’s name	Enter the shipper’s standard carrier alpha code.
10	Bill of lading number or type	Enter the bill of lading number if applicable.
11	Mode of code	Enter the shipment mode.
13	Date consignee received shipment	Enter the date of the receipt.
14	Date discrepancy discovered	Enter the date the discrepancy was discovered (normally the date of receipt).
15	Date carrier notified	If applicable, enter the date the carrier was notified of the discrepancy.
16	Carrier representative contacted	If applicable, enter the name of the carrier representative notified of the discrepancy and their telephone number.
17	Seal numbers and condition	If applicable, check the appropriate box to indicate if seals were intact, broken, or missing. Include details, as appropriate.
18	Transportation control number	Enter the contract or order number for shipment from contract sources and refineries. Enter the shipment document number for shipments from a DFSP. Enter the transportation number, if assigned.

Table 7. TDR Procedures, Continued

Block	Topic	Instructions
19	Commodity and national stock number (NSN)	Enter NSN and product code.
20	Type of pack	Enter "Bulk."
21	Quantity discrepant	Enter the number of gallons over or short (i.e., the difference between the quantity shipped and quantity received).
23	Unit of issue	Enter "GL" for gallons.
24	Units billed or shipped	Enter the quantity shipped.
25	Units	Enter the quantity received.
27	Value	Use standard price to determine the value of the quantity variance. Available on the DLA Energy Website at http://www.dla.mil/Energy.aspx .
28	Remarks	Enter the applicable cause (or probable cause of loss or gain) and associated data such as: Were compartments gauged and water cuts and temperatures verified on arrival of conveyance? Were seals intact? Was any water detected? Was a dry tank certificate issued? Were there hose breaks or leaks during discharge? Attach copies of loading and discharge documents, and vessel ullage reports at origin, intermediate, and destination discharge points. Such data helps to determine responsibility and liability.
29a through 29d	Preparer information	Enter the name, e-mail address, telephone number, and facsimile number of the preparer of the discrepancy report.

SECTION 6: SHIPMENTS BETWEEN DFSPS

6.1. DELIVERY HOURS. Each DFSP:

- a. Makes every effort to schedule tank truck deliveries to arrive at receiving locations during normal duty hours.
- b. Makes all necessary arrangements to receive product during other than normal duty hours when it is not feasible to receive monthly *pro rata* quantities of product from contractual sources during normal duty hours.
- c. Documents receipt restrictions, such as off-loading capability limitations or local restrictions to tank truck delivery windows or scheduling during the requirements submission phase of contract development.

6.2. QUALITY CONTROL OF SHIPMENT CONVEYANCES. The DFSP applies strict conveyance quality control standards to all shipping conveyance modes transporting DWCF fuel in accordance with MIL-STD-3004.

6.3. SHIPMENTS OF DWCF ENERGY COMMODITIES. The DFSP transports DWCF energy commodities between capitalized DFSPs via U.S. Government or contracted transportation. As shipments transfer product from one DFSP to another, the responsibility and accountability for the product also transfers from one RO or TM to another. Each DFSP completes:

a. Documentation and Processing of DWCF Energy Commodity Shipments. Process prompt shipment transaction to APSR to enable the receipt DFSP to process a receipt transaction. Record DWCF energy commodity shipments into APSR and process within 1 business day of the shipment. Input and process shipment transactions in accordance with the Base Level Support Application (BLSA) documentation. Document all DWCF fuel shipments.

(1) Enter the product grade, NSN, unit of issue, quantity of shipment, quantity determination method, to include whether or not the shipment quantity is adjusted to 60° F (15° or 20° C if measured in liters), date of shipment, shipping activity and receiving activity DoDAACs, addresses, and point of contact information in the applicable data entry fields.

(2) Assign shipment document numbers using BLSA. Construct document numbers to input shipments directly into BLSA using the processing screens or construct manual shipment document numbers. For example, use shipment document number SE5F263257J801 for the first shipment of Jet Propellant-8 from SE5F26 on September 14, 2013.

- (a) Shipper's DoDAAC [positions 1-6 of the document number, e.g., SE5F26].
- (b) Julian date [positions 7-10 of the document number, e.g., 3257].

(c) Two-digit product code (1st and 3rd digit of the standard three-digit grade code) [positions 11-12 of the document number, e.g., J8].

(d) A two-digit sequence number or two-digit alpha character [positions 13-14 of the document number, e.g., 01].

(3) Enter the STO Number. STOs are forwarded via e-mail from EBS when nominations are created by supply planners. If STOs are not being received at the location, the regional supply planner should be contacted to obtain them. In order to receive STOs from EBS, an e-mail address must be on the distribution list designated for the receiving location. It is recommended that each location establish a group e-mail address to enable multiple individuals to receive STOs. Group e-mail addresses provide better STO management.

(4) Enter separate document numbers for individual carriers when multiple carriers are used to transport shipments. Individual document numbers are entered into the financial supply chain network, Syncada, for transportation payment purposes. Each shipment will require a document number for each vessel moving product. EBS tracks movement of DLA material and captures associated transportation costs.

(5) Enter batch or cargo data when required, or input data entry requirements for various modes of transport as follows:

(a) For shipment by ocean tanker or commercial barge, enter the actual cargo number for the shipment.

(b) For delivery by U.S. Government or commercial conveyance via tank truck or rail, leave the Batch/Cargo data field blank, unless Paragraph 6.3.a.(5)(d) applies.

(c) For delivery that is by commercial pipeline, enter the actual batch number provided by the commercial pipeline company. If a batch number is not used by the commercial pipeline company, enter "PIPELINE" in the Batch/Cargo data field. If delivery is by U.S. Government pipeline, enter "GPIPELIN" in the Batch/Cargo data field.

(d) For delivery is by commercial rail tank cars, commercial tank trucks, and commercial pipeline paid via Syncada, enter "POWRTRCK" in the Batch/Cargo data field. Overseas locations that do not participate in the Syncada Program will ensure copies of completed shipping documents are provided to the applicable DLA Energy regional office for processing in accordance with the terms and conditions of the contract with DLA Energy.

(e) Upload Start/End Dates (DD Form 1348-7/iRAPT Receiving Report) or Load/Commence Start/End Dates (iRAPT Receiving Report). For pipeline shipments, enter the upload start date and upload end date on the DD Form 1348-7 or iRAPT Receiving Report; or Load Commence Start Date and Load End Date on the iRAPT Receiving Report for barge and tanker shipments. This does not apply for truck or rail shipments.

(f) Enter all applicable release information in the Shipment Release Information/Additional Data/Remarks block of the DD Form 1348-7 (Remarks or Statement of Quality sections of the iRAPT Receiving Report). Additional data sheets such as quality analysis

results may be used as appropriate. When additional data sheets are used, they will be attached to and kept with the document control copy of the shipment document. Alternate release authority is required by the QAR when the QAR is not available to verify product shipments. In those instances, an alternate release authority statement must be entered in the Remarks area of the shipment document. Local shipments between DFSPs located on the same installation are exempt from the alternate release statement requirement.

(g) Prepare the shipment documentation in accordance with the procedures outlined in Section 3 of this volume. The shipping and receiving DFSP will retain completed shipment documents on file in accordance with Table 1. The shipping DFSP representative will sign and date blocks 17a and 17b of the DD Form 1348-7, or the applicable block of the iRAPT Receiving Report. The receiving DFSP will complete Blocks 18 to 22 and acknowledge receipt by signing and dating Blocks 23 and 24 of the DD Form 1348-7, or the applicable block of the iRAPT Receiving Report. The receiving DFSP will return one copy of the countersigned DD 1348-7 or Energy Receiving Report to the shipping DFSP for filing in the Daily Document Control File.

b. Processing of Returned or Diverted DWCF Energy Commodity Shipments. Make every effort to minimize shipment returns by emphasizing accurate projection of delivery requirements and subsequent scheduling of shipments to meet the requirements. However, unpredictable circumstances may dictate the return of full or partial shipment quantities to the shipping DFSP or diversion of shipments to another DFSP. When shipments cannot be off-loaded at the intended destination or when diversion of a shipment is necessary to support mission requirements, each DFSP:

(1) Notifies their appropriate DLA Energy regional office and the shipping DFSP.

(2) Documents the return or diversion on the original shipment document at the origin. Completes the appropriate transactions in APSR:

(a) **Return of Shipment to Shipping DFSP.** If the entire shipment is returned to the shipping DFSP, process a reversal for the shipment transaction. If the ship to DFSP off-loads part of a shipment and returns the balance to the shipping DFSP, process a reversal and correction to the shipment transaction to adjust the quantity to the actual off-loaded quantity.

(b) **Diversion of Shipment to a Different DFSP.** If an entire quantity of a shipment is diverted to another DFSP, process a reversal and correction to the shipment transaction to reflect the new ship to DoDAAC of the DFSP receiving the diverted shipment. For partial shipment diversions to another DFSP, process a reversal and correction to the shipment transaction to reflect the actual quantity received at the original ship to DFSP; then process a new shipment transaction to the DFSP receiving the diverted partial shipment.

(c) **Diversion of Shipment to a Non-capitalized End-Use Customer.** If the entire shipment is diverted to a different customer, process a reversal of the shipment transaction. Then process a sale transaction to the original end-use customer receiving the product. For partial shipment diversions to a different end-use customer, process a reversal and quantity correction to the original shipment transaction. Then process a sale transaction to the different end-use customer for the quantity of product diverted.

(3) When necessary, the DFSP or the appropriate DLA Energy regional office will document shipments and product diversions in Syncada according to established procedures.

c. Shipment Notices. Notify the receiving DFSP and the QAR on release of shipments. Notify on release of shipments by rail car or tank truck. Make shipment notification by phone, electronic mail, or by providing the receiving DFSP an advance copy of the shipment document in sufficient time to allow for receipt planning. Include in the notification the shipment number, grade and quantity of product shipped, cargo or batch numbers (as applicable to ocean tanker, barge, or pipeline shipments), rail car and tank truck numbers, and seal numbers, when applicable.

(1) **Overseas Tanker Shipment Notices.** Notify the respective SAPO and receipt DFSP RO or PA for tanker shipments slated overseas through the weekly tanker arrival schedule or by direct message when shipments originate outside the SAPO area of responsibility.

(2) **Shipments Calendar.** Use the shipments calendar as a tool for visibility of shipments between DFSPs and to monitor the status of DWCF fuel shipments and receipts.

d. DWCF Energy Commodity Shipments Via Rail. Document DWCF energy commodity shipments via rail car using the DD Form 1348-7 or iRAPT Receiving Report according to instructions in Paragraph 6.3.a. The DD Form 1348-7 is the preferred source document for shipments overland; however, wholesale DFSPs may use the iRAPT Receiving Report to document shipments. Seal all hatch and manifold openings on rail cars and annotates seal numbers on the shipping document accompanying the shipment to the destination. Complete quantity determinations for rail shipments by calibrated meter or by before and after gauge readings of the issue tanks using certified strapping charts.

e. DWCF Energy Commodity Shipments Via Intermodal Tank Containers. Document DWCF energy commodity shipments via Intermodal Tank Containers using the DD Form 1348-7. Use the DD Form 1348-7 to document shipments overland or uses the DD Form 250 to document wholesale shipments. Determine shipment quantities by gauging the shipping tank, by a calibrated meter, or by weight using a calibrated weight scale. Seal all hatch and manifold openings on intermodal containers and annotate seal numbers on the shipping document accompanying the shipment to the destination.

f. DWCF Energy Commodity Shipments Via Pipeline. Determine shipment quantities by calibrated meter or by before and after gauge reading of the shipping tanks. Document DWCF shipments via U.S. Government-owned or operated pipelines using the DD Form 1348-7. Use the DD Form 1348-7 to document shipments over land or use the DD Form 250 to document wholesale shipments. Document DWCF fuel shipments via commercial pipelines using a DD Form 250 or vendor's meter ticket.

g. DWCF Energy Commodity Shipments Via Barge. Determine shipment quantities by calibrated meter or by before and after gauge reading of the shore issue tanks. Document the shipments via U.S. Government or commercial contract barges using the iRAPT Receiving Report or DD Form 1155, according to instructions in Paragraph 6.3.a. Additionally, the receiving DFSP will take, before and after up-load, gauge readings of the barge. The barge

gauge readings will be used for comparison of variance between meter or shore tank gauge quantity determination and barge gauge quantities. The receiving location or DLA Energy regional office QAR will witness the gauging of the barge and shore or issue tanks. The DLA energy supply planner will create an order (nomination) in EBS. Nominations can have multiple lines for each vendor for the overall movement of product on the order. The DFSP:

(1) Processes DWCF energy commodity shipments via the U.S. Gulf Coast Barge Contract using the DoDAAC specified in the contract as the ship to customer DoDAAC.

(2) Makes the appropriate data entry through the DLA Energy system of record Carrier Planned Movement module to enable processing of shipments and subsequent receipt at discharge DFSPs.

h. DWCF Energy Commodity Shipments Via Ocean Tanker. Determine shipment quantities by calibrated meter or by before and after gauge readings of the shore issue tank(s). Document DWCF energy commodity shipments via tanker using the wide area workflow Energy Receiving Report in accordance with the instructions in Paragraph 6.3.c. Additionally, before and after load gauge readings will be taken of the tanker. The tanker gauge readings will be used for comparison of variance between meter or shore tank gauge quantity determination and tanker gauge quantities. The receiving location or regional QAR will witness the gauging of the tanker and shore or issue tanks.

(1) For DWCF energy commodity shipments via MSC tanker, a DLA energy supply planner creates a nomination to move product from one DFSP to another. Shipments of DWCF energy commodities via the MSC Ocean Tanker will be processed using the ocean tanker DoDAAC as the “ship to” DoDAAC. DLA Energy-Bulk Petroleum (DLA Energy-FEB) will make the appropriate data entry to enable processing of shipments and subsequent receipt at discharge DFSPs. A DLA energy supply planner creates a nomination to move product from one DFSP to another DFSP.

(2) Cargo numbers will be used to identify DWCF energy commodities (in-transit inventory) issued to MSC ocean tankers. These issues will be reported to DLA Energy-FEB via MSC Report 4020-4. DLA Energy-FEB will record cargo diversions and receipts by ocean tankers.

i. Capitalized DWCF Energy Commodity Shipments to Navy Ships (e.g., Oilers, Carriers and L-Decks). Determine shipment quantities by calibrated meter, or by before and after gauge readings of the shore issue tanks. Document DWCF energy commodity shipments from shore terminals into capitalized Navy afloat vessels using DD Form 1348-7 or iRAPT Receiving Report may be used by DFSPs to document shipments to capitalized U.S. Navy oilers, carriers, and L-Deck vessels. Shipments between capitalized U.S. Navy vessels will be documented using the DD Form 1149 or iRAPT Receiving Report and processed in accordance with Naval Supply Systems Command Instruction 4026.1.

6.4. PROCUREMENT CONTRACT SHIPMENTS. DFSPs:

- a. Use bulk contracts and PC&S contracts for procurement contract shipments categorized as FOB origin or FOB destination contracts.
- b. Follow the individual contract narratives, which specify terms of the contract with regard to FOB origin or FOB destination.
- c. Use the DLA business applications available:
 - (1) For bulk contract items.
 - (2) For ground products provided under PC&S contracts.
- d. Use the EBS application to automatically generate e-mail notices to:
 - (1) The appropriate contract vendor and ordering office when an order is created.
 - (2) The appropriate QAR responsible for release of bulk contract deliveries for bulk contract orders.
 - (3) Ordering office personnel and to the DFSP advising that the shipment has been released on QAR approval of the contractor invoice.
 - (4) Electronically sign the discharge in with a personal identification code.

6.5. DIRECT DELIVERY ENERGY COMMODITY SHIPMENTS TO NON-CAPITALIZED ENTITIES. A DFSP uses:

- a. iRAPT for direct sales to:
 - (1) Order ground fuel deliveries of non-capitalized PC&S contract line items.
 - (2) Generate a direct sale to the customer DoDAAC by accepting the vendor invoice and loading the fund cite against the non-capitalized contract line item.
- b. iRAPT to:
 - (1) Accept bulk contract deliveries to non-capitalized entities that are FOB origin by the QAR.
 - (2) Generate a direct sale to the customer.
- c. APSR for bulk contract direct deliveries to non-capitalized entities that are FOB destination.

GLOSSARY

G.1. ACRONYMS.

API	American Petroleum Institute
APSR	Accountable Property Systems of Record
ASD(L&MR)	Assistant Secretary of Defense for Logistics and Materiel Readiness
ATG	automatic tank gauge
BLSA	Base Level Support Application
C	Centigrade
CI	corrosion inhibitor
DFSP	defense fuel support point
DiEGME	diethylene glycol monomethyl ether
DLA	Defense Logistics Agency
DLA Energy-DQA	DLA Quality and Technical Support Division
DLA Energy-FEB	DLA Bulk Petroleum Products Branch
DLA Energy-L	DLA Logistics Operations Directorate
DO	delivery order
DoDAAC	DoD activity address code
DSN	Defense Switched Network
DWCF	Defense Working Capital Fund
EBS	Enterprise Business System
EEBP	Enterprise External Business Portal
EOM	end of month
F	Fahrenheit
FOB	free on board
FSII	fuel system icing inhibitor
FTD	failure to deliver
iRAPT	invoicing, receipt, acceptance, and property transfer
kg/L	kilogram per liter
KO	contracting officer
MIL-DTL	military detail specification
MIL-STD	military standard
MPMS	Manual of Petroleum Measurement Standards
MSC	Military Sealift Command
NATO	North Atlantic Treaty Organization
NSN	national stock number

OBQ	on-board quantity
PA	property administrator
PC&S	post, camps, and stations
QAP	quality assurance provision
QAR	quality assurance representative
RDD	required delivery dates
RO	responsible officer
ROB	remaining on board
SAPO	subarea petroleum office
SCP	service control point
SDA	static dissipative additive
SPW	stock projection worksheet
STO	stock transport order
TCM	temperature compensating meter
TDR	transportation discrepancy report
TM	terminal manager
VCF	volume correction factors

G.2. DEFINITIONS. These terms and their definitions are for the purposes of this volume and serve as standard terminology for DoD supply chain materiel management of energy commodities and services.

additize. The addition of something in small amounts such as a chemical to improve it in some way, e.g., CI, SDA, or FSII.

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, and positive regrades or recovered products minus inventory decrease resulting from sales, shipments, and negative adjustments, such as spills and regrades from the account ledger.

certified strapping charts. Capacity charts prepared by an independent agent, engineer, or surveyor for each container (e.g., tank) in which DWCF product is being measured or stored.

default action. Action(s) that the KO takes when a contractor fails to fulfill contract delivery requirements.

DFSP. A capitalized energy commodity facility that receives, stores, and issues DWCF-owned energy commodities.

DWCF. A DoD revolving fund that finances the buying and selling of goods and services. It also provides cost visibility and accountability to facilitate business operations. DLA inventories are sold to end user operational accounts (e.g., military units and federal agencies) that reimburse the DLA Division -DWCF for costs incurred.

gross quantity. The gross quantity is volume of a DWCF energy commodity at ambient temperature not corrected to 60°F.

inventory transaction. Any event that effects or changes the DWCF energy commodity inventory account ledger. Inventory transactions include receipts, sales, credits, shipments, regrades, determinable gains or losses, physical inventory adjustments, and EOM operating gain or loss adjustments.

net quantity. The volume of a DWCF energy commodity that is temperature corrected to 60°F, as described in Chapter 12 of the MPMS.

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.

overlifting. Receiving a quantity of product that is above the order quantity.

PA. An authorized KO 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 to include those 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.

pro rata. Proportionate quantity stated in contract.

residual fuels. Any by-product with a viscosity equal to or greater than regular, not light refinery distillates.

RO. An individual who is directly responsible for all U.S. Government property and oversees all aspects of the DFSP operation. Must be a U.S. citizen and U.S. 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.

SCP. An individual who serves as the central management function for each Military Department or Military Service to coordinate requirements, technical issues, and supply actions with military units and DLA Energy.

shipment. A DFSP transfer of a capitalized energy commodity and its accountability to another DFSP.

Syncada. A global financial supply chain network that offers business-to-business payments in the cloud under the software as a service model.

TM. An individual who is directly responsible and accountable for all U.S. 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. Refer to paragraph 3.3.d. of Volume 6 of this manual for additional information.

tolerance. A predetermined percentage allowed as acceptable energy commodity gain or loss caused by routine product handling operations.

REFERENCES

- American Petroleum Institute, “Manual of Petroleum Measurement Standards (MPMS),” May, 2004¹
- ASTM International D1250, “Standard Guide for Use of the Petroleum Measurement Tables,” 2013
- Defense Federal Acquisition Regulation Supplement, current edition
- Defense Transportation Regulation 4500.9-R, “Defense Transportation Regulation Part II: Cargo Movement,” current edition
- DoD Directive 5134.12, “Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)),” May 25, 2000, as amended
- DoD Instruction 4000.19, “Support Agreements,” April 25, 2013
- DoD Instruction 4140.25, “DoD Management Policy for Energy Commodities and Related Services,” June 25, 2015
- DoD Manual 8910.01, Volume 1, “DoD Information Collections Manual: Procedures for DoD Internal Information Collection,” June, 30, 2014, as amended
- DoD Manual 8910.01, Volume 2, “DoD Information Collections Manual: Procedures for DoD Public Information Collections,” June 30, 2014, as amended
- Military Detail Specification 85470B, “Detail Specification: Inhibitor, Icing, Fuel System, High Flash NATO Code Number S-1745,” current edition²
- Military Standard 3004, “Quality Assurance/Surveillance for Fuels, Lubricants and Related Products,” current edition
- Naval Supply Systems Command Instruction 4026.1, “Fuel Management and Accounting Afloat Directive,” current edition³
- Unified Facilities Criteria 3-701-01, “DoD Facilities Pricing Guide,” March 2011, as amended

¹ This manual is available on the DLA Energy Portal in publications at <https://dla.deps.mil/dod/dla/dlaenergy/scm/SitePages/Publications.aspx>

² This document is available at <http://quicksearch.dla.mil/qsSearch.aspx>

³ This document is available in the Naval Logistics Library at <https://nll.navsup.navy.mil/default.cfm>