



DoD MANUAL 4140.25, VOLUME 4

DoD MANAGEMENT OF ENERGY COMMODITIES: QUALITY AND TECHNICAL MANAGEMENT

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

- The manual implements policy, assigns responsibilities, and provides procedures for the supply chain management, quality assurance (QA) and quality surveillance (QS), and storage of energy commodities and related services.
- This volume assigns responsibilities and provides procedures for contract quality assurance (CQA), QS, laboratory services, standardization, cataloging, partnering with non-government organizations (NGOs), and alternative energy management for energy commodities and related services.

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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY. This volume applies to:

a. OSD, the Military Departments (including the Coast Guard at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), 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 terms of this manual.

1.2. INFORMATION COLLECTIONS.

a. The Annual Stock Rotation Plan, referred to in Paragraph 4.3.c.(2), does not require licensing with a report control symbol in accordance with Paragraph 3.1.b.(9) of Volume 1 of DoD Manual 8910.01.

b. The consolidated laboratory fee schedules, referred to in Paragraph 5.2.a.(5), do not require licensing with a report control symbol in accordance with Paragraph 3.1.b.(10) of Volume 1 of DoD Manual 8910.01.

c. The Acquisition Streamlining and Standardization Information System (ASSIST) Database, referred to through Section 6 of this issuance, has been assigned Office of Management and Budget control number 0704-0188 in accordance with the procedures in Volume 2 of DoD Manual 8910.01. The expiration date of this information collection is listed on the DoD Information Collections System at <https://apps.sp.pentagon.mil/sites/dodiic/Pages/default.aspx>.

d. The consolidated DoD position and comments on non-government standards (NGS), referred to in Paragraph 6.3.c.(10), do not require licensing with a report control symbol in accordance with Paragraph 3.1.b.(9) of Volume 1 of DoD Manual 8910.01.

1.3. SUMMARY OF CHANGE 2. This change is administrative and updates references and organizational symbols in accordance with the reorganization begun by the July 13, 2018 Deputy Secretary of Defense memorandum.

SECTION 2: RESPONSIBILITIES

2.1. ASSISTANT SECRETARY OF DEFENSE FOR SUSTAINMENT. Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, the Assistant Secretary of Defense for Sustainment develops policy, prescribes guidance, and provides oversight as necessary to ensure successful implementation of this volume.

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

a. Serves as the integrated materiel manager for energy commodities and related services, including natural gas, coal, propellants, pure gases, chemicals, and cryogenic fluids, in accordance with DoD Instruction 4140.01 and Volume 3 of DoD Manual 4140.01.

b. As the DoD Executive Agent for Bulk Petroleum, as designated in DoD Directive 5101.08E, administers the integrated materiel management of bulk petroleum products and related services, including CQA, QS, laboratory support, standardization, cataloging, partnering with NGOs, and alternative energy management.

c. Develops, publishes, and maintains DoD QA and QS procedures that establish minimum standards for the management of energy commodities.

d. Assesses the impact of DoD policy and Congressional legislation on current and future strategic energy commodity initiatives, as they relate to the implementation of this volume.

e. Reviews and provides recommendations to the Assistant Secretary of Defense for Sustainment on policy, implementation, and technical documents, both government and commercial, that have the potential to affect DLA's mission associated with energy commodities and related services.

f. Train personnel, commensurate with their CQA and QS duties, to ensure the quality of Defense Working Capital Fund (DWCF) energy commodities in accordance with the requirements in applicable contracts and Military Standard (MIL-STD) 3004.

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

a. Execute their CQA responsibilities, when applicable, in accordance with the requirements in DLA Energy contracts and MIL-STD-3004.

b. Establish and maintain a QS program for DWCF energy commodities stored at facilities under Military Service control and at facilities for which QS responsibility has otherwise been

assigned to the DoD Component or Participating Agency. The QS program must meet the minimum requirements prescribed in MIL-STD-3004.

c. Train personnel, commensurate with their CQA and QS duties, to ensure the quality of DWCF energy commodities at military facilities in accordance with the requirements in applicable contracts and MIL-STD-3004.

2.4. COMBATANT COMMANDERS. In addition to the responsibilities in Paragraph 2.3., the Combatant Commanders provide general theater oversight, in accordance with Joint Publication 4-03, of the quality management of bulk petroleum products as well as related records and reports.

SECTION 3: CQA

3.1. PURPOSE. This section:

a. Describes procedures to ensure that energy commodities and related services that contractors provide to the DoD Components and Participating Agencies meet the terms and conditions of the contracts under which they are provided.

b. Establishes CQA and acceptance requirements for each energy commodity's purchase program.

(1) When a contract nonconformance is found as a result of government CQA, a corrective action request by the contract administration office may be issued to the contractor, which requires the contractor to investigate, resolve, and prevent recurrence of the nonconformance.

(2) CQA is performed solely for the benefit of the U.S. Government and does not relieve the contractor of inspection responsibilities under the contract.

3.2. CQA AND ACCEPTANCE.

a. The DoD Component or Participating Agency:

(1) Performs CQA and acceptance in accordance with the terms and conditions specified in the contracts for energy commodities and related services.

(2) Determines the extent of CQA at any point before acceptance.

(3) Considers acceptance as conclusive in all cases except for latent defects, fraud, gross mistakes, or as otherwise stated in the contract.

(4) Performs QS upon receipt in accordance with the requirements outlined in Section 4, regardless of the location and extent of CQA.

(5) Reports quality deficiencies related to DWCF energy commodities in its custody to DLA Energy, in accordance with procedures in this volume and MIL-STD-3004.

(6) Provides available DWCF energy commodity quality data to DLA Energy-Quality (DLA Energy-DQA), upon request.

(7) Arranges physical access to installations for all energy commodity delivery modes, from both contractors and defense fuel support points (DFSPs), to facilitate delivery to the customer.

b. In coordination with the applicable DoD Component, DLA Energy-DQA:

(1) Establishes procedures to ensure that energy commodities and related services furnished to the DoD Components and Participating Agencies by contractors meet the terms and conditions of the contract under which they are provided by:

(a) Defining contractor CQA requirements and establishing criteria for and location of U.S. Government inspection and acceptance in solicitations and contracts.

(b) Establishing guidelines for U.S. Government surveillance of contractor CQA.

(c) Performing oversight of contractor and U.S. Government CQA performance.

(d) Resolving CQA-related issues, including, but not limited to, deviations and waivers involving nonconforming supplies and services.

(2) Receives, controls, and investigates quality deficiency reports, and provides disposition instructions, in accordance with procedures in this volume and MIL-STD-3004.

(3) Develops and maintains the customer or depot complaint system database to track reported quality deficiencies and analyze trends. The complaint system database must be developed in a manner that ensures that the collection, use, maintenance, and distribution of personally identifiable information are in accordance with Section 552a of Title 5, United States Code, also known as the "Privacy Act of 1974;" DoD Instruction 5400.11; and DoD 5400.11-R.

(4) Provides DFSPs and customers with disposition instructions for off-specification products, directly or through DLA Energy Logistics Operations Directorate and the DLA Energy regional office, as appropriate. Coordinates with the appropriate service control point (SCP) or DLA Energy regional office before providing disposition instructions.

(5) Develops quality-related and quantity-related contract requirements to meet the needs of each DLA Energy purchase program, in accordance with the Part 46 of the Federal Acquisition Regulation and Part 246 of the Defense Federal Acquisition Regulation Supplement. Such contract requirements will include the creation and maintenance of DLA Energy internal instructions that complement or supplement regulatory requirements in coordination with the Military Services.

(6) Develops and maintains the product quality information system to track the actual test data associated with supplies provided to DLA Energy under its various purchase programs. Organizes and publishes this test data annually to make it available to government and commercial organizations for review and analysis with an email notification to the SCPs.

(7) Advises Military Sealift Command (MSC) on technical matters affecting the quality of DWCF energy commodities transported by MSC-controlled tankers and afloat pre-positioning force vessels. Such technical matters include the establishment of quality requirements for inclusion in tanker charter agreements and the evaluation of tankers for suitability to carry DWCF energy commodities.

(8) Reviews and provides recommendations on claims against contractors related to product quality, vessel demurrage, and service contract performance.

(9) Reviews, analyzes, and presents quality-related data to management, with recommendations for corrective actions and process improvements, when appropriate.

(10) Conducts quality system management visits:

(a) To ensure that DLA Energy regional offices are in compliance with QA or QS policy.

(b) To ensure appropriate QA or QS programs and procedures are in place.

(c) To obtain feedback from field personnel.

(11) Makes recommendations on the need for pre-award surveys based on quality. Participates in the review of these surveys, and does not recommend awarding if there are quality concerns.

3.3. PURCHASE PROGRAMS.

a. Bulk Fuels Program.

(1) **Free On Board Origin.** DLA Energy:

(a) Performs CQA and acceptance at origin.

(b) Ensures product meets contract quality requirements before passing the custody transfer point onto government-furnished transportation.

(c) Completes quantity determination at origin, in accordance with the terms of the contract.

(2) **Free On Board Destination.** The DoD Component or Participating Agency:

(a) Performs CQA and acceptance at destination, or as required by contract.

(b) Ensures that the product meets specification requirements before receipt from contractor-provided transportation into government storage.

(c) Performs quantity determination at destination, or as required by contract.

b. Posts, Camps, and Stations (PC&S) Program. The DoD Component or Participating Agency:

(1) Completes CQA at destination by:

(a) Reviewing the contractor's delivery documents to verify delivery of the correct product.

(b) Conducting limited testing at the receiving activity, without unduly delaying delivery, or more comprehensive testing at a laboratory specified by the receiving organization.

(c) Performing quantity verification using an available method appropriate for the mode of delivery, unless otherwise stated in the contract.

(2) If origin inspection is imposed in accordance with the terms of the contract, DLA Energy will include any actions in the CQA necessary to ensure that the product meets contract quality requirements before shipment.

c. Into-Plane Program.

(1) The crew of the receiving aircraft:

(a) Performs final CQA and acceptance under the Into-plane Program by reviewing the contractor's delivery documents to verify receipt of the correct product.

(b) Notifies the DLA Energy regional office quality manager of any contract nonconformances.

(c) Uses the Into-plane Contract Information System, Quality Hold, or Fuel Shortage Information located on the DLA Energy Website (at https://cis.energy.dla.mil/energy_cis/) to determine the quality status of all into-plane facilities.

(d) Will not use locations on quality hold.

(e) Assumes responsibility for the risk if accepting fuel at locations that are on quality hold.

(2) The DLA Energy quality assurance representatives (QAR) for defense energy commodities will conduct on-site inspections at each location, on a frequency:

(a) Determined by guidance in the DLA Energy Mandatory End Product Performance Guide for Into-plane Contract Facilities in MIL-STD-3004.

(b) No longer than every 18 months.

(3) The QAR:

(a) Validates that the contractor has taken and shipped the samples required by the contract.

(b) Notifies the DLA Energy regional office quality manager, DLA Energy-Quality Operations Division (DLA Energy-DQ), and the contracting officer promptly regarding all nonconformance with contract terms.

(4) DLA Energy-DQ may request placing a contract location on quality hold:

(a) If any sample submitted by a contractor under the terms of the contract fails the required testing.

(b) Until investigation and retesting confirm that the product once again meets specification requirements.

(c) Due to other quality-related or safety-related contract nonconformances, until an investigation confirms correction of the problem.

(5) DLA Energy-DQ validates the problem and forwards a formal recommendation to the contracting officer.

(6) The contracting officer makes the final decision to place a location on quality hold.

(7) The contracting officer publishes a notice to airmen to identify any contract location placed on quality hold.

d. Bunker Fuels Program. The receiving activity, vessel, or ship:

(1) Performs CQA and acceptance under the Bunker Fuels Program.

(2) Reviews the contractor's delivery documents to verify delivery of the correct product.

(3) Performs any tests as needed within its capability to ensure product quality, provided such tests can be performed without unduly delaying delivery by the contractor.

(4) Performs quantity verification using an approved method appropriate for the mode of delivery, unless otherwise stated in the contract.

e. Facilities Program.

(1) Each DLA Energy regional office identifies requirements for commercial facilities for the storage and distribution of DWCF energy commodities based on the availability of Military Service and foreign government infrastructure.

(2) The QAR makes periodic site visits to each facility and performs CQA to ensure conformance with contract requirements.

f. Laboratory Services Program. DLA Energy:

(1) Identifies and establishes laboratory contracts with worldwide commercial laboratory support to complement support provided by DLA Energy-owned and Service-owned laboratories.

(2) Performs CQA on the laboratory contracts by monitoring sample submissions, reviewing tests reports.

(3) Conducts site visits to ensure that contract terms and conditions are being met.

(4) Coordinates a Military Service's request for commercial lab services in order to obtain contract coverage as needed for quality testing.

3.4. NONCONFORMING SUPPLIES. The QAR or customer:

a. Promptly contacts DLA Energy-DQ, directly or through the appropriate SCP or DLA Energy regional office, upon discovery of nonconforming energy commodities before acceptance.

b. Rejects nonconforming supplies offered by the contractor, unless the contractor obtains a deviation waiver from the contracting officer.

c. Reports nonconforming supplies discovered after acceptance in accordance with the procedures outlined in Section 4 of this volume and in MIL-STD-3004.

3.5. CONTRACT DEVIATIONS AND WAIVERS.

a. The DoD Component or Participating Agency:

(1) Accepts energy commodities and related services that conform to all contract terms and conditions before acceptance.

(2) May, at its discretion, accept nonconforming supplies or services when the contractor has obtained a deviation or waiver from the contracting officer in accordance with the contract, as described in Part 46-407 of the Federal Acquisition Regulation.

(3) Annotates a description of the waiver or deviation, if granted, including the name, office symbol, and telephone number of the contracting officer granting the waiver or deviation on the shipping document.

b. The contracting officer:

(1) Coordinates all technical and quality deviation or waiver requests for energy commodities and related services with DLA Energy-DQ.

(2) Provides a description of the waiver, including the name, office symbol, and telephone number of the contracting officer granting the waiver.

c. DLA Energy-DQ:

(1) Coordinates each deviation or waiver request with the appropriate DLA Energy regional office or SCP, when appropriate and possible, before forwarding recommendations to the contracting officer.

(2) May accept product nonconformance with SCP coordination when the product can be brought back within specification requirements before delivery to the customer.

SECTION 4: QS

4.1. PURPOSE. This section:

- a. Prescribes procedures to maintain the quality of DWCF energy commodities throughout the supply chain and to verify the quality delivered directly to customers from contract sources.
- b. Describes QS functions relative to the Bulk Fuels, Aerospace Energy, Into-plane, Bunkers, and PC&S purchase programs and identifies specific QS procedures, publications, sampling and testing criteria, stock rotation guidelines, and procedures for the resolution of quality deficiencies. The objective of the QS program is to maintain product quality for energy commodities from the source of supply to the end user.

4.2. QS PROGRAM.

- a. The DoD Component or Participating Agency:
 - (1) Uses the procedures in MIL-STD-3004 to perform QS for energy commodities in its custody.
 - (2) Establishes the QS programs as described in this volume.
 - (3) Supplements MIL-STD-3004 requirements at military locations in accordance with technical guidance from the respective Military Services.
 - (4) Designates a quality representative, if the DoD Component or Participating Agency has a QS responsibility, to manage the QS program at DFSPs that store and dispense DWCF energy commodities.
 - (5) Ensures that its QARs are properly trained and qualified to perform the functions required by MIL-STD-3004.
 - (6) Establishes and maintains a QS program that applies to:
 - (a) Government-owned and government-operated DFSPs and afloat pre-positioning force vessels.
 - (b) Military contracted government-owned and contractor-operated facilities that directly support contracted military installation operations.
 - (c) Foreign government DFSPs integrated into the DoD supply system by a written agreement between the Military Services and a foreign government.
 - (d) Loading and discharging of MSC-controlled tankers at U.S. Government terminals operated by a foreign government under a written agreement with a Military Service or North Atlantic Treaty Organization terminals operated by Service personnel.

(e) DLA Energy contracted government-owned and contractor-operated and contractor-owned and contractor-operated DFSPs where DLA Energy has assigned QS to a DoD Component or Participating Agency through a written agreement.

(7) Determines the need for and purchase commercial documents necessary for the QS of DWCF.

b. DLA Energy:

(1) Assesses military installation DFSP QS procedures in coordination with respective SCP or DLA Energy regional office.

(2) Includes both quality and quantity controls in QS procedures.

(3) Provides supply, storage, and distribution for energy commodities to:

(a) The Bulk Fuels Program with products such as aviation fuels, naval distillate fuel, lube oils, and fuel additives to meet DoD Component and Participating Agency requirements.

(b) The Into-plane Program with contracts to service DoD or federal civilian aircraft at commercial airports throughout the world. The product is supplied directly to the customer and conforms to either commercial or military specifications according to the procedures for into-plane servicing pursuant to MIL-STD-1548.

(c) The PC&S Program with commercially available ground fuels directly to customers.

(d) Aerospace Energy Programs with aerospace energy products and services to support national and commercial space programs and national defense programs.

(4) Monitors specific product quality requirements incorporated into the Bulk Fuels Program contracts for DLA Energy contractor operated DFSPs.

(5) Monitors quality requirements under commercial transportation agreements, such as transportation operating agreements, in accordance with the terms of those agreements.

(6) Provides origin contract oversight for aerospace energy programs.

c. DoD Component- or Participating Agency-operated DFSPs establish a QS program:

(1) That meets MIL-STD-3004 requirements for land-based and afloat DWCF storage locations having custody of products delivered under the Bulk Fuels Program.

(2) That meets MIL-STD-3004 requirements at DWCF PC&S locations where the DoD Component or Participating Agency has custody of the DWCF inventory.

(3) That complies with the procedures of the DoD Component or Participating Agency for non-DWCF PC&S locations.

d. For sampling and testing, the DLA Energy regional office, DoD Component, or Participating Agency that has QS responsibility for energy commodities:

- (1) Follows procedures in MIL-STD-3004 for sampling and testing of energy commodities at DFSPs.
- (2) Performs testing at DLA Energy, commercially contracted, or Service-owned laboratories.
- (3) Samples and tests DWCF energy commodities, unless otherwise transferred by written agreement.
- (4) Follows the following procedures in contracts for sampling and testing services:
 - (a) The contractor provides laboratory or testing services for contractor-owned and contractor-operated and government-owned and contractor-operated storage contracts when applicable.
 - (b) Into-plane contracts prescribe fuel sampling and testing requirements for aviation fuel procured through the Into-plane Program.

e. For quality deficiencies found in energy commodities purchased through the Bulk Fuels Program, Aerospace Energy Program, Into-plane Program, and PC&S Program:

- (1) The DoD Component, Participating Agency, or DLA Energy regional office that has QS responsibility for documenting quality deficiencies, promptly notifies DLA Energy-DQA, which serves as the customer or depot complaint program manager.
- (2) DFSPs and customers report product quality deficiencies, including quality-related equipment or operational problems, to the appropriate SCP or DLA Energy regional office.
- (3) The SCP or DLA Energy regional office forwards validated complaints to DLA Energy-DQA for resolution.
- (4) The DoD Component, Participating Agency, or DLA Energy regional office that has QS responsibility for documenting quality deficiencies coordinates with DLA Energy-DQA, the appropriate DLA Energy regional office, SCP, and Joint Petroleum Office (JPO) on the investigation, quality evaluation, disposition of the off-specification product, and inventory management actions.

f. DLA-Energy DQA, at the conclusion of their review and evaluation, provides disposition instructions to the customer or DFSP, directly or through DLA Energy-Logistics Operations Directorate and the DLA Energy regional office, as appropriate.

g. For the Bulk Fuels Purchase Program, the DoD Component, Participating Agency, or DLA Energy regional office that has QS responsibility for documenting quality deficiencies:

(1) Promptly notifies DLA Energy-DQA, and the appropriate DLA Energy regional office, SCP, and JPO when there are off-specification products, equipment malfunctions, and operating deficiencies related to fuel quality in accordance with MIL-STD-3004 and DLA Regulation 4155.24.

(a) Provides copies of all off-specification test results to DLA Energy-DQA as soon as possible with information copies to the appropriate DLA Energy regional office, SCP, and JPO.

(b) Isolates and does not issue off-specification product until disposition instructions are provided.

(2) Completes a thorough investigation of off-specification product, including suspected cause, possible corrective action, related costs, and estimated correction time.

(3) Sends the investigation results to DLA Energy-DQA, and the appropriate DLA Energy regional office, SCP, and JPO, within 7 days of the finding.

(4) Coordinates with DLA Energy-DQA, the appropriate DLA Energy regional office, SCP, and JPO on the investigation, quality evaluation, disposition of the off-specification product, and inventory management actions.

h. For energy commodity quality deficiencies within the Into-Plane Program, Bunker Program, and PC&S Program:

(1) DoD Component or Participating Agency promptly notifies the respective SCP or DLA Energy regional office concerning all product quality problems.

(2) The SCP or DLA Energy regional office initiates investigative action and reports suspected problems with into-plane, bunker, and PC&S programs to DLA Energy-DQA in accordance with MIL-STD-3004 and DLA Regulation 4155.24.

(3) DLA Energy-DQA:

(a) Directs any further investigation and issues disposition instructions with into-plane, bunkers, and PC&S Program, when appropriate, either directly or through the appropriate DLA Energy regional office.

(b) Coordinates disposition actions or instructions with the SCP, DLA Energy regional office, DLA Energy or other DLA Energy offices, DFSP Management, Supply Chain Operations Division, Tanker Operations Branch, MSC, and JPO; and when appropriate, provide all parties involved an information copy.

(c) Coordinates with the contracting officer and the respective SCP or DLA Energy regional office to provide prompt disposition instructions, which may include product rejection.

(d) Forwards copies of all correspondence to MSC, DLA Energy regional office, JPO, Sub-area Petroleum Office, SCP, and appropriate DLA Energy offices, as required.

(e) Recommends claim action, when appropriate, and provides related documents to the contracting officer.

(4) DFSPs and customers immediately notify the contracting officer and DLA Energy-DQA upon identification of off-specification product before receipt.

(5) QARs that discover off-specification tanker or barge cargoes will immediately notify DLA Energy-DQA, DLA Energy regional office, JPO, and SCP, and provide:

- (a) Fuel product grade.
- (b) Quantity of off-specification product.
- (c) Cargo number and tanker or barge name.
- (d) Characteristics not within specification or intra-governmental receipt limit.
- (e) Recommended corrective action.

4.3. STOCK ROTATION PROGRAM.

a. Bulk Petroleum Stocks.

- (1) DLA manages the stock rotation program for DWCF bulk petroleum stocks by:
 - (a) Approving consolidated regional stock rotation plans.
 - (b) Selecting the most economical and practical rotation solutions based on operational, technical, procurement, and budgetary factors.
 - (c) Designating the organization responsible to execute product movement in coordination with the appropriate DLA Energy regional office, SCP, and JPO.
 - (d) Maintaining oversight of and make recommendations to quality manpower levels, locations, and rotations of DLA Energy regional office quality personnel.
- (2) DFSPs rotate bulk petroleum stock on a first-in or first-out basis.
- (3) DFSPs may determine rotation is necessary when:
 - (a) Products show signs of aging or deterioration.
 - (b) Facility operation or maintenance is required.

b. Long-term Bulk Petroleum Storage. DFSPs will rotate long-term storage based on product quality, unless circumstances dictate otherwise according to the long-term storage sampling and testing frequencies in MIL-STD-3004.

c. Stock Rotation Plan.

(1) DFSPs rotate long-term storage for budgetary and planning purposes based on probable shelf life of major bulk petroleum categories and the recommended maximum time limits for product rotation:

- (a) Gasoline every year.
- (b) Fuel oils every 2 years.
- (c) Diesel fuel every 3 years.
- (d) Military specification aviation fuel and residuals every 5 years; F-24 every 2 years.

(2) DFSPs that have long-term storage submit annual product rotation plans to the appropriate SCP or DLA Energy regional office for review and consolidation, using Department of Defense (DD) Form 2512, "Bulk Fuel Stock Rotation Plan," located on the DoD Forms Management Program Website at <http://www.esd.whs.mil/Directives/forms/>.

(3) The SCP or DLA Energy regional office:

- (a) Approves stock rotation plans that provide the basis for near term budget and procurement planning, but do not constitute final authority to rotate stocks.
- (b) Bases the final decision on quality, facility, and funding parameters that may accelerate or delay projected stock rotations.
- (c) Uses special and separate fund authorizations based upon stock rotation plan approval and budgeting.

(4) Aerospace energy products stored at DFSPs do not require a formal stock rotation plan due to product stability, storage, and handling considerations. DFSPs will nevertheless attempt to rotate products on a first-in and first-out basis.

SECTION 5: LABORATORY SUPPORT

5.1. PURPOSE. This section prescribes the procedures for energy commodities laboratory support at all DLA Energy, military, and commercial laboratories (collectively known as “DoD laboratories”) that test U.S. Government-procured or owned energy commodities managed under the DWCF or provide other related services. DoD’s objective is to ensure that DWCF energy commodities are tested at critical points throughout the supply chain and meet the minimum quality requirements established in MIL-STD-3004 when delivered to the customer.

5.2. PROCEDURES.

a. The DoD Component or Participating Agency:

(1) Establishes and maintain military area, intermediate, base, and tactical laboratories necessary to provide laboratory support to DFSPs where the Military Department has control of the facilities.

(2) Establishes testing capability that meets the minimum requirements of MIL-STD-3004.

(3) Provides laboratory support to:

(a) Other DFSPs, upon request.

(b) Fulfill Military Department testing requirements called for in DLA Energy contracts, such as under the Into-Plane Program.

(4) Negotiates, when appropriate, a written agreement with DLA Energy to transfer the control of laboratory facilities, or the responsibility for laboratory support at DFSPs.

(a) Bases the transfer on budget, personnel, or facility depending on the circumstances and location.

(b) Completes a business case analysis when required before the acceptance of any transfer by DLA Energy. Written agreements negotiated with DLA Energy take precedence over the other requirements of this volume.

(5) Provides consolidated laboratory fee schedules to DLA Energy-DQA, when appropriate, by July 1 for the next fiscal year.

(6) Provides testing services based upon rates shown on the last fee schedule provided to DLA Energy if a current year fee-for-service schedule is not in place.

(7) Provides testing services without charges to DLA Energy if no laboratory fee schedule exists.

b. DLA Energy-DQA:

(1) Establishes contracts with commercial laboratories where laboratory support from other DoD laboratories is either unavailable or not in the best interests of the government.

(2) Establishes procedures for laboratory support at all DoD laboratories and provides direct support by:

(a) Establishing and maintaining DLA Energy area laboratories when deemed practical and cost-effective.

(b) Categorizing commercial laboratories into two general categories:

1. QA laboratories that:

a. Comply with the requirements of the latest edition of the quality management standards in the International Standards Organization 9001.

b. Have a written QS Plan in place that meets the requirements of International Standards Organization and International Electrotechnical Commission 17025.

2. Research laboratories that:

a. Have extensive experience in identifying specific chemical or physical components of energy commodities.

b. Are capable of providing complete state of the art qualitative and quantitative analyses of energy commodities.

(3) Provides for the performance of base-level and intermediate-level QS testing at DFSPs where DLA Energy has control of the facility. Provides testing that meets the minimum requirements of MIL-STD-3004 as part of a terminal operations contract or by any authorized DoD laboratory, when needed.

(4) Negotiates, when appropriate, with the Military Department to transfer the responsibility for laboratory support at DFSPs where DLA Energy has control of the facility. Base the transfer on budget, personnel, or facility, depending on the circumstances and location.

(5) Manages laboratory correlation programs involving DoD laboratories that test DWCF energy commodities.

5.3. FUNDING FOR MILITARY LABORATORIES.

a. The DoD Component funds laboratory infrastructure in accordance with the guidance found in Volume 8 of this manual.

b. When there is a fee-for-service agreement for laboratory testing between DLA Energy and any of the DoD Components and DLA Energy is already providing infrastructure funding, those infrastructure costs will not be included as part of the fees in that agreement.

SECTION 6: STANDARDIZATION

6.1. PURPOSE. This section prescribes the policies and procedures for implementing the Defense Standardization Program (DSP), in accordance with DoD Instruction 4120.24, at DLA Energy.

- a. The DSP is mandated by Sections 2451 and 2452 of Title 10, United States Code to standardize management, policies, and procedures for supplies across DoD.
- b. The goal of the DSP is to standardize items used throughout DoD by developing and using single specifications in order to eliminate duplication and enhance item interoperability, e.g., between joint and coalition forces.
- c. DLA Energy is responsible for the standardization of documents related to the federal supply groups (FSGs) and federal supply classes (FSCs) that it manages.

6.2. STANDARDIZATION DOCUMENT MANAGEMENT.

a. Types of Document Coordination. The DoD Component or Participating Agency manages documentation for the energy commodities using fully coordinated documents, limited coordinated documents, and interim documents, as specified in this section.

b. ASSIST. DLA uses ASSIST to manage the documentation for the DLA Energy Standardization Program by:

- (1) Appointing a lead standardization activity (LSA) representative to manage the DoD standardization program for FSG 91GP and FSCs 91GP, 9110, 9130, and 9140.
- (2) Appointing a preparing activity, custodian, and adopting activity (AA) representative for standardization management activity (SMA) code PS for DLA Energy.
- (3) Appointing an item reduction activity representative for FSCs or FSGs 91GP, 9110, 9130, and 9140.

6.3. STANDARDIZATION DOCUMENT PUBLICATION.

- a. The LSA representative:
 - (1) Queries the ASSIST database to ensure all assigned documents are updated and reviewed by the preparing activity at least every 10 years.
 - (2) Approves or disapproves project initiation requests based on the merits of the justification data provided.
 - (3) Comments on the content and format of draft documents.

- (4) Resolves disputes that cannot be solved at the preparing activity level.
 - (5) Forwards unresolved standardization issues to DLA Departmental Standardization Office (DepSO) for resolution.
 - (6) Ensures the final document is technically sound. The LSA may unilaterally cancel the document if the preparing activity does not take corrective action on a technically incorrect document.
 - (7) Serves as the DoD-wide technical focal point for FSG 91GP and FSC 9110, 9130, and 9140 products and SMA code PS.
 - (8) Approves the preparing activity's requests to develop, change, or cancel standardization documents within the assigned FSGs or FSCs.
 - (9) Reviews standardization documents to ensure compliance with DSP policies and procedures.
 - (10) Mediates standardization issues, and elevates essential standardization comments within the assigned FSGs or FSCs to DLA DepSO when essential issues remain unresolved.
- b. The preparing activity representative:
- (1) Ensures all assigned documents have been updated (e.g., revised, amended, cancelled.) or reviewed at least every 5 years or more often as necessary.
 - (2) Initiates a standardization project by entering a request for LSA approval into the ASSIST Project Maintenance Module.
 - (3) Initiates a project when new information warrants an update.
 - (4) Assigns adequately trained standardization personnel and provides sufficient standardization funding to avoid project start up delays.
 - (5) Upon receiving project approval from the LSA, prepares a new base document or updates an existing one (by revision, amendment, or change notice) as outlined in DoD Manual 4120.24.
 - (6) Enters the draft document into the ASSIST database, when the document is ready for review. An electronic copy is forwarded by ASSIST to the LSA and each custodian or reviewing activity (RA) identified in the system for their review.
 - (7) Coordinates within 30 days for electronically distributed documents.
 - (8) Considers each comment received to incorporate or resolve essential comments.
 - (9) Settles unresolved essential comments, whenever possible.
 - (10) Forwards unresolved standardization issues to DepSO for resolution.

(11) Submits approved document for publishing via the ASSIST electronic document submission module.

(12) Acts as the DoD-wide point of contact for assigned DoD and federal standardization documents.

(13) Develops, coordinates, issues, and maintains assigned standardization documents for all DoD Components.

(14) Resolves, when possible, suggested DoD Component comments on assigned documents.

c. The DoD AA representative, when and to the extent authorized by the DoD Component or Participating Agency:

(1) Represents the DoD Component or Participating Agency in the review, development, and standardization of documentation for the management of DWCF energy commodities.

(2) Whenever possible, participates on technical committees of non-government standards bodies (NGSBs) that develop applicable standards to:

(a) Ensure proper consideration of DoD requirements.

(b) Enhance the technical knowledge of DoD personnel.

(c) Allow DoD personnel to contribute their technical capabilities to the development of standards.

(3) Adheres to the NGSB's policies and rules governing standards creation and change.

(4) Requests a standardization project number from the LSA via the ASSIST Project Maintenance Module.

(5) Enters the draft NGS document into the ASSIST database, which electronically distributes a copy to the LSA and each custodian or RA identified in the system to review as part of the normal NGSB coordination process.

(6) Reviews the comments received from the LSA, custodians, and RAs, and submits a consolidated DoD response to the NGSB technical committee.

(7) Adopts the document without further coordination when comments are satisfactorily resolved.

(8) Prepares an adoption notice for the NGS and submits it for publishing via the ASSIST electronic document submission module.

(9) Acquires DoD copyrighted copies of adopted NGSs from the NGSB or other licensed source as needed.

(10) Reviews and adopts NGS (e.g., ASTM International) for DoD.

(11) Provides the consolidated DoD position and comments on NGS to the owning NGSB.

d. The custodian, when and to the extent authorized by the DoD Component or Participating Agency:

(1) Represents the DoD Component or Participating Agency in the review, development, and standardization of documentation for the management of DWCF energy commodities.

(2) Consolidates comments to provide the preparing agency or AA with a unified position from the DoD Component or Participating Agency.

(3) Acts as the DoD Component or Participating Agency point of contact for all matters concerning overall policy, planning, and administration of the item reduction function under DLA Energy's Standardization Program.

(4) Only contributes to a document when their DoD Component or Participating Agency is a document stakeholder.

(5) Consolidates its RAs comments and provides the preparing agency or AA with a unified DoD Component or Participating Agency position.

(6) Resolves all essential and, when possible, suggested comments submitted by its DoD Component or Participating Agency's RA.

e. The RA representative:

(1) Reviews the draft document received through ASSIST.

(2) Submits comments to his or her DoD Component or Participating Agency custodian, or AA, for resolution and consolidation.

(3) Reviews all proposed actions and documents the technical or procurement implications of the actions.

(4) Forwards comments to the relevant custodian, marking the comments essential or suggested, as applicable.

f. The DLA Energy-Product Technology and Standardization Division (DLA Energy-DQT) representative acts as:

(1) LSA or preparing activity, custodian, or AA when SMA code PS appears on standardization documents.

(2) The point of contact for all matters concerning overall procedures, planning, and administration of the item reduction function under the DLA Energy Standardization Program.

SECTION 7: CATALOGING

7.1. PURPOSE. This section describes catalog expansion, streamlining, maintenance, and duties of DLA Energy for cataloging items of supply under the Federal Catalog Program, which is a government-wide program established by Section 2451 of Title 10, United States Code, and implemented by DoD Manual 4100.39.

a. The Federal Catalog Program allows for items of supply that are bought, stocked, distributed, or used on a recurring basis to be uniquely identified with a national stock number (NSN).

b. A key purpose of the central registration of item descriptions and creation of associated NSNs in the Federal Catalog System is to minimize the number of items essential to support military operations.

c. All issues relating to the cataloging of DLA Energy products will be directed to DLA Energy-DQT for action.

7.2. CATALOG EXPANSION. As emerging technologies are introduced in the commercial marketplace, products that do not fit existing definitions may become available to DoD. Anticipated or actual recurring requirements for new items are the most common reason for creating a new NSN. Differentiating characteristics of each newly defined item are documented at the time of catalog expansion. Historically, additional NSNs are assigned in support of:

a. Government Regulation. An example is the marketplace response to government mandates for low sulfur diesel and ultra-low sulfur diesel that resulted in diesel product differentiation. Several grades of diesel fuel became available simultaneously.

b. Cost Recovery. Delivery of products accompanied by the provision of a service (for example, refueling of an aircraft at a commercial airport) may require a unique pricing structure. Currently, each individual NSN bears a single standard price. Delivery of product without the service may be uniquely priced and delivered via a separate NSN.

c. Inventory Management Requirements. Distribution of products via multi-product pipeline systems creates interface material that must be accounted for as inventory. Tracking these materials, that can only be defined as a percentage of two products existing as a blend, may be accomplished by creation of a new NSN.

d. Catalog Streamlining. Some items of supply become obsolete as more advanced replacement items become widely available. Items of supply that are no longer bought, stocked, distributed, or used by DoD are identified and the NSN associated with the item are deleted from the Federal Catalog System.

e. Catalog Maintenance. When an item of supply is changed due to previously unavailable technical data, the NSN will be retained. One type of catalog maintenance activity is insertion of updated specification references, such as test methods, while the composition or performance of

the product remains unchanged. Other types of catalog maintenance activity include insertion of additional customer information and addition of updated pricing information.

SECTION 8: NGOS

8.1. PURPOSE. This section prescribes the policies and benefits of DoD collaboration with NGOs. To provide interoperable, reliable, and technologically superior materiel and services, DLA Energy:

- a. Promotes continued cooperation with NGOs.
- b. Develops mutually beneficial standards.
- c. Promotes research and resolves a wide range of issues.

8.2. STANDARDIZATION.

- a. The DoD Component or Participating Agency:

- (1) Promotes the standardization of like products and technologies to improve military operational readiness, reduce total ownership costs, and decrease acquisition cycle time.

- (2) States requirements in performance terms, whenever practical, and maximize the use of NGS and other commercial practices, products, and technologies.

- (3) Provides comments on standards and specifications created within NGSBs.

- (4) Ensures DoD requirements are addressed within the NGSBs.

- (5) Establishes active partnerships with NGSBs to develop standards that are viable for both government and commercial use.

- (6) Partners with NGSBs to ensure:

- (a) Product modifications do not adversely affect end user applications.

- (b) Interoperability between the Military Services and U.S. allies (e.g., North Atlantic Treaty Organization) is maintained.

- b. DLA establishes partnerships with NGOs, whenever feasible, by:

- (1) Identifying and approving NGO forums that require DLA Energy participation to further DLA Energy's mission to support the warfighter.

- (2) Ensuring communication of DoD requirements, plans, and intended outputs to industry and affected NGOs to allow them to align their investments and transition capabilities necessary to meet DoD needs.

(3) Establishing a coordinated approach between the Military Services and DoD Components to identify and provide long-range funding for technology and product research project areas with the potential to resolve problems throughout the supply chain.

(4) Implementing mechanisms that effectively circulate quality and technical information obtained at NGO, industry, and academic forums throughout DLA Energy and to affected DoD Components.

(5) Providing feedback to industry on the value of particular independent research and development (R&D) projects as they relate to DoD needs.

(6) Identifying technology challenges to motivate and focus government and industry efforts to resolve energy-related issues.

(7) Using cooperative R&D agreements, where feasible, as a method for industry and government collaboration on development of capabilities, and as a method to better inform both parties about the potential value of new technologies and new operational concepts.

(8) Promoting collaboration with NGOs and industry to increase competition for products and services solicited by DLA Energy and to expand the supplier base.

(9) Using information from various forums to identify evolving risks and issues, and to proactively resolve problems.

8.3. QUALITY OPERATIONS. The DoD Component or Participating Agency:

- a. Participates in NGSB forums responsible for establishing quality operations guidelines.
- b. Assesses the effect of adopting NGSB guidelines on the DoD mission.
- c. Takes NGSB guidelines into consideration when establishing quality operations policies and procedures related to DoD-procured and -managed energy commodities and related services.
- d. Exchanges test data and other quality information with the NGOs to determine best practices.
- e. Participates in inter-laboratory correlation programs with NGOs and industry.
- f. Resolves operational issues before they can affect warfighter preparedness.

8.4. RESEARCH PROJECTS.

- a. The DoD Component or Participating Agency:

(1) Uses information obtained at NGO, industry, and academic forums to initiate research projects for products, technologies, and methodologies that meet DoD requirements.

(2) Initiates DoD-funded studies that affect DLA Energy's current inventory or new DoD energy initiatives, such as specification and operational issues and integration of products and technologies.

b. DLA Energy-DQT:

(1) Proposes and initiates requests to attend NGO, industry, and academic forums relating to technical and specification issues, such as:

(a) NGSBs, including:

1. ASTM International.
2. American Petroleum Institute (API).
3. International Air Transport Association.

(b) Technical forums.

(c) Industry conferences.

(2) Distributes information obtained from NGO, industry, and academic forums throughout DLA Energy and to affected DoD Components and Participating Agencies.

(3) Uses information to proactively resolve technical issues and standardize requirements, thereby reducing costs within the supply chain and increasing interoperability.

(4) Proposes and initiates requests to attend NGO and industry forums relating to quality operations issues, such as:

(a) NGSBs, including:

1. Airlines for America.
2. Joint Inspection Group.
3. Coordinating Agency for Supplier Evaluation.
4. ASTM International.
5. API.

(b) Technical forums.

(c) Industry conferences.

(5) Distributes information obtained from NGO, industry, and academic forums throughout DLA Energy and to affected DoD Components and Participating Agencies.

(6) Uses information to proactively resolve quality operations issues and standardize requirements, thereby reducing operational costs and ensuring product quality.

SECTION 9: ALTERNATIVE ENERGY MANAGEMENT

9.1. PURPOSE. This section provides procedures for the procurement and management of alternative energy for non-tactical vehicles in compliance with governing energy policy acts, Executive Orders, statutory requirements, and congressional mandates.

9.2. PROCUREMENT AND MANAGEMENT.

a. The DoD Component or Participating Agency procures and uses alternative fuels for non-tactical vehicles, as specified in federal legislation and mandates that require:

(1) A reduction in the usage of petroleum-based fuels, for the purposes of reducing dependence on foreign oil.

(2) A decrease in pollution and greenhouse gas emissions, such as those specified in Executive Order 13693.

(3) A promotion of the usage of non-petroleum based fuels.

b. DLA will identify all processes required for alternative energy initiatives and ensure that documentation is available to adequately explain each process.

c. The DoD Component or Participating Agency:

(1) Researches and procures new and existing alternative energy commodities that are commercially available and are similar to other commercial commodities. Develops new pricing and coding requirements, as needed for new items.

(2) Considers the adequacy of existing government infrastructure to accommodate alternative energy commodities, such as the commercial grades of fuel ethanol (ethanol-gasoline blends containing 51-85 percent ethanol (E85)) in accordance with ASTM D5798-15 and biodiesel blend 20 percent (B20) in accordance with ASTM D7467-17. Uses existing infrastructure that is compatible with alternative energy commodities before considering additional construction projects. Considers the adequacy of the existing commercial supply infrastructure to meet any alternative energy commodity requirements that are developed.

(3) Undertakes initiatives supporting the R&D of new alternative energy commodities and processes.

(4) Uses synthetic fuels in lieu of conventional petroleum fuels in accordance with current Federal Government and DoD guidance.

(a) **Consolidating Efforts Among Agencies.** Government goals for the development and use of alternative energy products can be facilitated and enhanced through cooperative agreements between agencies. DoD efforts to develop and procure alternative fuels from

biomass feedstocks can be assisted by U.S. Department of Agriculture initiatives to promote the production of non-food cellulosic vegetation that would be available for such fuels.

(b) **Partnering with Industry.** In many instances, industry enterprises create programs and initiatives on alternative energy that mirror or exceed similar efforts by DoD and other government agencies. Opportunities for agencies to work with and share resources with these enterprises can greatly benefit both parties by making new technologies more widely available in the commercial sector, and increasing the acquisition base for the government.

(c) **Broad Agency Announcement Requests.** Industry enterprises may respond to broad agency announcements for R&D proposals on alternative energy technologies covering areas of interests established and funded through congressional earmarks, government regulations, or military programs.

d. The responsible DLA Energy contracting office, after receiving specific alternative energy requirements from customers, ensures that all unique requirements are included in any solicitation.

e. DLA Energy-DQT:

(1) Provides technical guidance to DLA Energy staff elements, contracting officers, DoD Components, and federal agencies on all alternative fuel procurement matters.

(2) Maintains liaison with DoD R&D activities to determine impact and provide guidance on the availability, acquisition, logistics, and specifications of proposed alternative energy commodities.

(3) In accordance with Part 246 of the Defense Federal Acquisition Regulation Supplement, maintains liaison with environmental and alternative fuel groups (e.g., Interfuels Working Group or Hazardous Minimization Working Group) to provide DoD input regarding pollutants, new alternative energy commodities, and draft regulatory documents affecting DLA Energy.

(4) Coordinates all specification matters related to the acquisition of existing and new alternative energy commodities for consumption and R&D purposes.

(5) Consults and coordinates with the Military Services to meet the needs of DLA Energy customers when evaluating the viability of various R&D projects.

(6) Provides input to strategies and policies related to alternative energy within DLA.

f. DLA Energy-DQA:

(1) Coordinates with DoD Components on the implementation of all projects that support R&D efforts and alternative energy strategy development.

(2) Coordinates with DLA Energy program leads to accomplish all initiatives identified by the DLA Energy Corporate Board.

g. DLA Energy:

(1) Coordinates with customers on the accuracy and viability of acquisition requirements for solicitations for alternative energy commodities and services.

(2) Determines, as necessary, the adequacy of the supplier base and infrastructure to meet the desired acquisition requirements.

(3) Manages the proper proposal and bid requirements and items, incorporating special considerations, as necessary, to ensure proper segregation of products until delivery.

(4) In coordination with DoD Components, supports R&D projects by:

(a) Performing the initial project review, evaluating the project proposal, and establishing the funding obligation.

(b) Identifying key performance indicators to ensure that project performance targets are met.

(c) Providing required reports to the program management office and interfacing with the contracting officer to ensure that the contracting process is executed.

(d) Participating on source selection teams, when requested by the contracting officer.

9.3. SPECIAL CONSIDERATIONS.

a. Biodiesel-diesel Blends.

(1) The DoD Component or Participating Agency will not order B20 where projected consumption and product storage duration exceeds 3 months due to extended and unresolved product stability concerns.

(2) DoD Components may store biodiesel-diesel blends up to B20 in tanks and handle with equipment used for diesel service, if:

(a) No order is submitted for biodiesel-diesel blends where projected consumption and product storage duration exceeds 3 months due to extended and unresolved product stability concerns.

(b) DFSPs clean tanks before converting existing storage tanks from diesel to accommodate B20 in accordance with standard Service procedures and directives.

(3) If fuel quality management problems occur, or are anticipated, the DoD Component or Participating Agency will follow industry recommendations for the specific fuel type and may:

(a) Coordinate with the contracting officer to facilitate the ordering of more frequent, smaller B20 quantities.

(b) Reduce the effects of seasonal cloud point adjustments.

(c) Minimize potential vehicle and equipment cold weather operation problems.

(d) Reduce deposits by cleaning of diesel tanks before filling them with B20.

(e) Increase filter changes due to fuel system cleansing of deposits attributed to B20.

(f) Monitor for microbial growth or films. Regularly take a bottom sample from B20 tanks and visually assess the sample for water and microbial deposits.

(g) Develop a tank cleaning schedule to prevent excessive microbial induced corrosion.

(4) DoD Components and Participating Agencies may use the National Biodiesel Board Website at <http://nbb.org> or call (800) 841-5849 to find the most current public statements regarding biodiesel from major engine manufacturers.

(5) DoD Components will apply appropriate supplier volume correction methods for B20:

(a) Some suppliers create the B20 blend by loading the biodiesel 100 percent (B100) component and the petroleum diesel component separately, and providing the DFSP with two separate delivery tickets as receipt documents. The suppliers volume correct the petroleum diesel to 60 degrees Fahrenheit (net volume), while the B100 ticket will generally not be volume corrected (gross volume). If the supplier does volume correct the B100 component to 60 degrees Fahrenheit, add the two delivery ticket volumes (B100 and diesel) together to reflect the total receipt quantity.

(b) Other suppliers load a premixed B20 blend and provide a single meter ticket to the DFSP. The B20 delivery quantity is volume corrected using the appropriate API Manual of Petroleum Measurement Standards conversion table for petroleum diesel. DoD Components and Participating Agencies may contact DLA Energy-DQT with any questions related to biodiesel blend quantity measurement.

(6) Suppliers blend B20 before delivery due to product quality considerations. Loading B20 blending components (i.e., B100 and diesel fuel) in separate delivery truck compartments for blending at time of delivery, either through the truck manifold or in the receiving system, is prohibited.

b. E85.

(1) The DoD Component or Participating Agency will ensure the material compatibility of E85 with storage tanks and dispensing equipment before converting facilities to E85 service. Follow the special materials requirements described in U.S. Department of Energy/Government

Report 102013-3861. Pre-1992 fiberglass tanks may not be suitable to convert to E85 service. DoD Components and Participating Agencies may use the U.S. Department of Energy Government Report 102016-4854 as a guide to assist in the management of E85 and for handling, storing, and dispensing E85 and other ethanol-gasoline blends.

(2) DoD Components use four vapor pressure classes of E85 with ethanol content varying between 51 and 83 percent, for different seasonal conditions in accordance with commercial standards and geographic regions, to ensure proper vehicle operation throughout the year in all locations.

(3) DoD Components may:

(a) Use the high ethanol content of E85 to reduce lubricating properties, as well as increase water tolerance.

(b) Monitor water content closely to minimize performance degradation.

(4) DoD Components will ensure E85 is blended before delivery due to product quality considerations.

(5) DoD Components will not accept E85 blend components (i.e., denatured ethanol and unleaded gasoline) in separate delivery truck compartments for blending at time of delivery.

c. Other Alternative Energy Commodities and Fuel Blends. DoD Components and Participating Agencies:

(1) Follow DoD or industry guidelines for the use of alternative energy commodities and fuel blends (e.g., from ASTM, Unit Level, API).

(2) Ensure DoD storage tanks, dispensing equipment, and other equipment are certified or properly converted to accommodate alternative energy commodities and fuel blends.

(3) Then proceed with contracts for other alternative energy commodities (other than ethanol-gasoline and biodiesel-diesel blends).

(4) Ensure that a QS program is implemented to address any unique requirements for the other alternative energy commodity.

GLOSSARY

G.1. ACRONYMS.

AA	adopting activity
API	American Petroleum Institute
ASSIST	Acquisition Streamlining and Standardization Information System
B100	biodiesel (100 percent)
B20	biodiesel blend (20 percent)
CQA	contract quality assurance
DepSO	DLA Departmental Standardization Office
DFSP	defense fuel support point
DLA	Defense Logistics Agency
DLA Energy-DQ	DLA Energy-Quality Operations Division
DLA Energy-DQA	DLA Energy-Quality
DLA Energy-DQT	DLA Energy-Product Technology and Standardization Division
DSP	Defense Standardization Program
DWCF	Defense Working Capital Fund
E85	ethanol-gasoline blends containing 51-85 percent ethanol
FSC	federal supply class
FSG	federal supply group
JPO	Joint Petroleum Office
LSA	lead standardization activity
MIL-STD	military standard
MSC	Military Sealift Command
NGO	non-government organization
NGS	non-government standards

NGSB	non-government standards body
NSN	national stock number
PC&S	posts, camps, and stations
PS	SMA code that stands for DLA Energy
QA	quality assurance
QAR	quality assurance representative
QS	quality surveillance
RA	reviewing activity
R&D	research and development
SCP	service control point
SMA	standardization management activity

G.2. DEFINITIONS. Unless otherwise noted, these terms and their definitions are for the purposes of this volume and will serve as standard terminology for DoD supply chain materiel management of energy commodities and services.

AA. The activity responsible for adopting NGS, when and to the extent authorized by the DoD Component or Participating Agency, represent the DoD Component or Participating Agency.

acceptance. The act of an authorized government representative assuming ownership, on behalf of the government, of supplies or services from a contractor.

alternative energy. Any source of energy, including fuel and renewables, that is not derived from fossil fuels.

afloat pre-positioning force. Vessels provided by the MSC that carry the required afloat prepositioned war reserve stock of dry and liquid cargo. Various grades of DWCF fuel are stored aboard these vessels in support of military operations around the world.

ASSIST. The life-cycle document management and digital library providing web access to all current military and federal specifications and standards referenced in DoD contracts. The ASSIST database resides at the DSP Automation Office located at Document Automation and Production Service Philadelphia. It provides tools allowing standardization activities to track, manage, and execute their standardization functions.

The Document Management Module allows SMAs to perform various sorts on documents of interest and to track their documents' status.

The Project Maintenance Module allows SMAs to perform all actions required to initiate, update, or cancel a standardization document.

The Qualified Products Database serves as the official repository for all product qualification information.

ASTM International. An international standards organization that develops and publishes voluntary consensus technical standards for energy commodities as well as for a wide range of materials, products, systems, and services. Previously known as the American Society for Testing and Materials.

catalog maintenance. Updating the information for a specific NSN, such as revised test methods or additional pricing data, that doesn't change the composition or performance of the product associated with that NSN.

catalog streamlining. The removal of NSNs from the Federal Catalog System that are no longer bought, stocked, distributed, or used by the government.

CQA. The aggregate of functions, including inspection, performed by the government to ensure a contractor fulfills the contract requirements with regard to quality and quantity of products and services. CQA may be performed at origin or destination, or at any other point before acceptance.

custodian. The activity responsible for resolving and consolidating coordination comments for a standardization document for its department or agency and submitting these comments to the Preparing Activity.

custody transfer point. The point at which possession and control of product passes from one party to another, such as from a contractor to the government. Title (ownership) normally passes between the parties involved at this point also.

customer or depot complaint system. An automated system used to track the receipt and resolution of quality deficiencies reported by end users (customers), and storage and distribution locations (depots).

deviation. A written authorization, granted after contract award and before manufacture of an item, to depart from a particular requirement of a contract for a specific quantity or period of time, normally the duration of the contract.

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

disposition instructions. Any response to a customer that details what they should do with DWCF product in their custody.

DSP. A comprehensive, integrated standardization program aimed at improving military operational readiness, enhancing interoperability, reducing total ownership costs, and cutting cycle time associated with acquisition, support, and use of defense systems and materiel

throughout the entire product life cycle. The DSP identifies, develops, manages, and provides access to standardization processes and products for the Military Departments, DoD and government agencies, U.S. allies, and non-government activities.

DSP Automation Office. Defined in DoD Instruction 4120.24.

fully coordinated document. Any federal specification or standard; DoD specification, standard, or handbook; commercial item description; or NGS that includes a combination of Military Departments, Defense Agencies, federal agencies, or private sector stakeholders in the review and evaluation process.

FSG. The two-digit code of each FSC uses to group associated standardization documents in logical families for standardization management.

fee-for-service. When one organization has a written agreement, normally in the form of a fee schedule, with another organization to provide individual services for an established fee.

Hazardous Minimization Working Group. A cross-functional team chartered to manage contracting and procurement actions in compliance with pollution prevention requirements.

inspection. The examination or testing of supplies and services offered to the government to determine whether they conform to contract requirements.

Interfuels Working Group. An interagency committee organized in 1991 by federal employees working to implement provisions for alternative energy commodities and low emission vehicles.

interim document. A temporary document that allows for quick changes to be made to coordinated document(s) when time does not permit the normal coordination process. Interim documents must be superseded by a coordinated document within 2 years of the former's approval date, or the DSP Office will cancel it. Interim documents follow the same procedures as coordinated documents, except as outlined in DoD Manual 4120.24.

Into-plane Program. The program that provides aviation fuels at commercial airports. Each into-plane contract establishes specific program product quality and service performance requirements, which include MIL-STD-1548, into-plane servicing of fuels, and DoD-adopted commercial requirements.

intra-governmental receipt limits. Acceptable deviations to physical and chemical requirements of the applicable specification that still permit use of the product in consuming equipment. These limits are agreed upon between DLA Energy and the Military Services and are contained in MIL-STD-3004.

item reduction activity. An activity that reduces the number of sizes and kinds of items in the Federal Supply System that are generally similar in form, fit, and function. The Item Reduction Program employs the use of item reduction studies that result in non-standard items no longer being procured and any remaining stock being used to satisfy requisitions until that stock is depleted. Once the non-standard stock is depleted, any requisitions for that item are fulfilled automatically by the standard item. Benefits of a successful item reduction study include

increased material availability and cost savings associated with the elimination of the non-standard items.

laboratory correlation program. A testing program established among a group of laboratories, government and commercial, to compare results on a regular basis in order to ensure that both equipment and personnel are performing within accepted norms.

laboratory infrastructure. The real property associated with the operation of a laboratory, including any permanent structures and any fixed system that are a part of or permanently attached to those structures.

long-term storage. A period beginning when a new product has not been added to the existing product tank for 6 months or more.

LSA. A management activity assigned a DoD-wide responsibility for ensuring the optimal degree of standardization in a FSG, FSC, or standardization area.

limited coordinated document. Any document used by only one Military Department or Defense Agency. Unlike fully coordinated documents, they have limited applicability and don't promote standardization. They are the exception and require strong justification for approval.

NSN. A unique number in the Federal Catalog System that identifies a specific item of supply with specific characteristics and has a specific price. Each NSN is composed of 13 digits. The first and second digits identify the FSG or major commodity area. The third and fourth digits comprise the FSC. The seventh through thirteenth digits constitute the non-significant serial number assigned to the item of supply.

NGS. National or international standardization documents developed by a private sector association, organization, or technical society that plans, develops, establishes, or maintains standards, specifications, test methods, handbooks, or related documents.

NGSB. A private sector association, organization, or technical society that plans, develops, establishes, maintains, or coordinates NGS.

nonconformance. A state when supplies or services provided under a contract do not meet the requirements of that contract.

off-specification. Petroleum products that fail to meet the requirements of the applicable specifications.

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.

personally identifiable information. Defined in DoD Instruction 5400.11.

preparing activity. The activity that prepares, coordinates, issues, and maintains DoD standardization documents associated with FSGs/FSCs: 91GP, 9110, 9130, 9135, 9140, or 9150.

QA. A system of activities, the purpose of which is to provide to the producer and user of a product, measurement or service the assurance that it meets the defined standards of quality with a stated level of confidence and includes quality planning and quality control. A planned and systematic pattern of all actions necessary to ensure that adequate technical requirements are established; that products, quantity accountability, and services conform to these established technical requirements; and that satisfactory performance is achieved. It includes: quality planning during specification development and review; quality support to contracting and acquisition teams; quality oversight of product and service providers to assure compliance to contracts and agreements; quality control operations for products and services incoming or in the Government supply chain; and quantity measurement and control activities. CQA is a method the U.S. Government uses to determine if products or services or both that a supplier provided fulfilled its contractual obligations and includes all actions required to ensure compliance to contractual or agreement terms and conditions. Generically the term QA refers to all processes and procedures encompassing quality planning, development, QA, QS, and quality control.

QAR. A generic title encompassing all personnel performing QA and QS functions. These include all General Schedule-1910 civilian series personnel and their military counterparts.

qualitative. The characterization of a product or service using only descriptive language, without the use of numerical data.

quality deficiency. A defect in a product that causes it to not meet specified requirements. For products procured and managed by DLA Energy, those requirements may be found in the contract or in MIL-STD-1548.

quality hold. The suspension of product issue from a particular batch or location due to quality concerns (mechanical failure, operational problems, off-specification test results).

quality manager. The supervisor for all QARs in a particular DLA Energy regional office, who is responsible for the successful execution of the QA and QS missions with that DLA Energy regional office.

quality representative. A government individual, military or civilian, who possesses sufficient knowledge of QA or QS processes to verify that fuel quality-related procedures, conditions of government fuel facilities, and fuel-related equipment are in compliance with MIL-STDs and policy. These quality representatives may also accept product on behalf of the U.S. Government.

QS. A subset of QA encompassing the program of inspections, sampling, testing, quantity measurement and control, and documentation established to monitor the quality and quantity of product being received, stored and issue within the U.S. Government supply chain.

quantitative. The characterization of a product or service based on numerical data derived from laboratory testing or other scientific analysis.

R&D. Work undertaken on a systematic basis to increase knowledge and the application of that knowledge for the development of new products or processes.

RA. An SMA with a technical or procurement interest in a standardization document, required to review all proposed actions affecting the document.

sampling. The act of taking a small portion of a product that is representative of an entire batch or delivery, normally for inspection or testing purposes.

SCP. An office designated by each Military Service to function as the focal and screening point for all issues related to the products and services they purchase from DLA Energy, including the development of requirements and the reporting of product quality problems.

SMA. A generic term used to describe any Military Department or Defense Agency organizational element listed in the current Standardization Directory (SD)-1 that acts as an LSA, document management activity, or item reduction activity. The execution of the DSP is assigned to these DoD Components that are collectively referred to as SMAs.

specification. A formal written description of an item that provides the physical or performance characteristics of that item in sufficient detail for it to be used as the basis for that item to be produced by one party for another party, usually by means of a contract.

standard price. A unique price established for each NSN that DoD customers pay for products and services provided by DLA Energy. Each price includes all procurement, storage, distribution, and quality control costs, and provides a stable, delivered price that can be used for budgeting and planning purposes.

stock rotation. The systematic issuing of DWCF products, using established inventory and quality criteria, to minimize the deterioration of products in the DoD storage and distribution system. Products are normally issued on a first-in and first-out basis, but mission and quality considerations, separately or in combination, have priority.

tactical laboratory. Mobile laboratory that provides direct support for a deployment mission.

testing. The element of inspection that determines the properties of supplies, including their functional operation, by the application of accepted scientific principles and procedures.

waiver. A written authorization, granted after contract award, to accept specified supplies or services which, during production or after having been submitted for inspection, are found to depart from the requirements of a contract. Approval is on a case-by-case basis and is only for the nonconforming supplies or services being offered at the time of the request.

REFERENCES

- American Petroleum Institute Manual of Petroleum Measurement Standards, current edition
- ASTM D5798-15, “Standard Specification for Ethanol Fuel Blends for Flexible-Fuel Automotive Spark-Ignition Engines”¹
- ASTM D7467-17, “Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20)”¹
- Defense Federal Acquisition Regulation Supplement, Part 246, current edition
- Defense Logistics Agency Regulation 4155.24/Army Regulation 702-7/Air Force Instruction 21-115/Secretary of the Navy Instruction 4855.5A, “Product Quality Deficiency Report Program,” July 20, 1993
- Deputy Secretary of Defense Memorandum, “Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment,” July 13, 2018
- DoD 5400.11-R, “Department of Defense Privacy Program,” May 14 2007
- DoD Directive 5101.08E, “DoD Executive Agent (DoD EA) for Bulk Petroleum,” September 19, 2017, as amended
- DoD Directive 5134.12, “Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD(L&MR)),” May 25, 2000, as amended
- DoD Instruction 4120.24, “Defense Standardization Program (DSP),” July 13, 2011, as amended
- DoD Instruction 4140.01, “DoD Supply Chain Materiel Management Policy,” December 14, 2011, as amended
- DoD Instruction 4140.25, “DoD Management Policy for Energy Commodities and Related Services,” June 25, 2015, as amended
- DoD Instruction 5400.11, “DoD Privacy and Civil Liberties Programs,” January 29, 2019
- DoD Manual 4100.39, “Federal Logistics Information System (FLIS) Procedures,” March 8, 2017, as amended
- DoD Manual 4120.24, “Defense Standardization Program (DSP) Procedures,” September 24, 2014, as amended
- DoD Manual 4140.01, Volume 3, “DoD Supply Chain Materiel Management Procedures: Materiel Sourcing,” February 10, 2014, as amended
- DoD Manual 8910.01, “DoD Information Collections Manual,” June, 30, 2014, as amended
- Executive Order 13693, “Planning for Federal Sustainability in the Next Decade,” March 19, 2015
- Federal Acquisition Regulation, Part 46, current edition
- International Standards Organization 9001:2015, “Quality Management Systems,” current edition
- International Standards Organization and International Electrotechnical Commission 17025:2005, “General Requirements for the Competence of Testing and Calibration Laboratories,” May 15, 2005

¹ Available at www.astm.org

Joint Publication 4-03, “Joint Bulk Petroleum and Water Doctrine,” January 11, 2016
Military Standard 1548, “Department of Defense Standard Practice: Into-Plane Servicing of Fuels at Commercial Airports,” July 31, 2009
Military Standard 3004, “Department of Defense Standard Practice: Quality Assurance/Surveillance for Fuels, Lubricants, and Related Products,” current edition
U.S. Department of Energy Government Report 102016-4854, “Handbook for Handling, Storing, and Dispensing E85 and Other Ethanol-Gasoline Blends,” current edition²
United States Code, Title 5, Section 552a (also known as the “Privacy Act of 1974,” as amended)
United States Code, Title 10

² May be found on the internet at www.afdc.energy.gov/uploads/publication/ethanol_handbook.pdf