

C5. CHAPTER 5

BLENDED GASOLINE: GASOHOL AND E10

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C5.1. GENERAL

This chapter provides guidelines to procure blended gasoline with up to 10 percent ethanol for use in DoD-owned and -leased motor vehicles.

C5.1.1. This policy implements the following Executive orders (EOs):

C5.1.1.1. EO 12261, “Gasohol in Federal Motor Vehicles.” Section I-105 of EO 12261 requires DoD gasohol use to the maximum extent feasible and consistent with overall defense needs and sound vehicle management practices, and to make contracts to purchase gasohol for use in DoD-owned or -operated motor vehicles where it is available at reasonable prices and in reasonable quantities. The EO defines gasohol as “motor fuel which has an octane rating of not less than 87 ((R+M)/2) and which consists of approximately 90 percent unleaded gasoline and approximately 10 percent anhydrous (199 proof or above) ethyl alcohol derived from biomass.”

C5.1.1.2. EO 13423, “Strengthening Federal Environmental, Energy, and Transportation Management.” Section 2(g) of EO 13423 requires the Department of Defense and Federal agencies to reduce petroleum consumption in fleets with greater than 20 motor vehicles by 2 percent annually through the end of fiscal year (FY) 2015 relative to an FY 2005 baseline. EO 13423 further increases total non-petroleum-based fuel consumption by 10 percent annually.

C5.1.2. Gasohol and E10 description is as follows:

C5.1.2.1. Gasohol. A blend of gasoline with ethanol that satisfies the requirements of EO 12261.

C5.1.2.2. E10. The commercial designation for a blend of 10 percent ethanol and 90 percent unleaded gasoline used primarily to satisfy reformulated gasoline requirements in specific geographic ozone nonattainment areas. E10 meets the definition of gasohol contained in EO 12261 as well as the statutory requirements of section 2922c of title 10, United States Code (U.S.C.), and therefore is generally an appropriate gasohol substitute where available. American Society for Testing and Measurements (ASTM) D 4814, “Standard Specification for Automotive Spark-Ignition Engine Fuel,” provides detailed discussion of gasoline-ethanol blends and ozone nonattainment area requirements.

C5.2. POLICY. DoD policy governing gasohol and E10 is as follows:

C5.2.1. DoD-procured gasohol and E10 shall be interchangeable and compatible with unleaded gasoline for use in all DoD-owned or -leased motor vehicles with spark-ignition engines and other equipment designed for gasoline combustion in all U.S. climatic conditions.

C5.2.2. The guidelines in subparagraphs C5.2.2.1. and C5.2.2.2. shall govern unleaded gasoline motor vehicles owned and/or operated by the Department of Defense and refueled through the Post, Camps, and Stations (PC&S) Program or other local procurement authority:

C5.2.2.1. DoD installations located within carbon monoxide nonattainment areas or ozone nonattainment areas shall use oxygenated or reformulated gasoline to refuel DoD-owned and -leased motor vehicles and equipment in compliance with regional environmental regulations and directives.

C5.2.2.2. DoD installations located in all other geographical regions shall use unleaded gasohol/E10 whenever available and when priced the same or lower than standard unleaded gasoline to refuel DoD-owned and -leased motor vehicles and equipment. Depending on specific regional environmental requirements, gasohol may or may not be classified as oxygenated gasoline as defined by the Clean Air Act. Therefore, approval to exempt mandatory gasohol use may occur, with the exception of DoD installations in carbon monoxide nonattainment areas that require oxygenated gasoline, when gasohol/E10 satisfies local environmental oxygenated gasoline requirements and is the only oxygenated gasoline available to use in that control area.

C5.3. RESPONSIBILITIES

C5.3.1. DESC

C5.3.1.1. DESC Direct Delivery Fuels (DESC-P) shall procure gasohol and E10 through the PC&S Program for the Department of Defense and other Federal agencies as prescribed by governing laws and directives.

C5.3.1.2. DESC-P shall require DoD and Federal agency reporting installations to identify oxygenated or reformulated gasoline requirements in compliance with regional area requirements governing the respective installation and to notify DESC immediately of product specification requirement changes.

C5.3.1.3. DESC-P shall confirm the information in subparagraphs C5.3.1.3.1. and C5.3.1.3.2. regarding DoD and Federal agency installations that report gasoline requirements through the PC&S Program:

C5.3.1.3.1. DoD and Federal agency installations located within carbon monoxide control areas and ozone nonattainment areas that require oxygenated or reformulated gasoline are able to store and consume these products in compliance with seasonal environmental regulations for the geographical areas in which they are located.

C5.3.1.3.2. DoD and Federal agency installations located in all other areas can store and use gasohol/E10 unless installations submit appropriate requests for exception to gasohol and E10 use, as necessary. DESC-P shall otherwise automatically solicit an installation gasoline requirement for either unleaded gasoline or unleaded gasohol/E10. DESC-P shall review each exception request to ensure inclusion of all required information such as an authorized exemption citation and properly formatted justification statements.

C5.3.1.4. DESC-P shall procure unleaded gasohol or E10 against a gasoline requirement when available at the same or lower price than gasoline. DESC establishes the Working Capital Fund Standard price for gasohol and E10 in accordance with DoD 7420.12-R. Current standard prices are located on the DESC Webpage.

C5.3.1.5. DESC-P shall notify potential suppliers of areas where the commercial fuel distribution system is adequate to promote competition in fulfillment of Federal Government gasohol/E10 requirements. For example, in addition to posting regular solicitation notices on the Federal Business Opportunities (FedBizOpps) Web Site, DESC-P requests national and regional fuel marketing associations to include in membership newsletters a notice of Government gasoline requirements for which gasohol and E10 is a suitable substitute.

C5.3.1.6. The DESC Product Technology and Standardization Division (DESC-BP) shall provide technical guidance, educational training and material, and liaison with commercial petroleum and automobile and/or engine manufacturing industries regarding production and use of gasohol and gasoline-ethanol blended fuels.

C5.3.2. DoD Components and Federal agencies shall:

C5.3.2.1. Ensure reporting installations submit gasoline requirements as required by DESC-P. Due to the nature of the PC&S Program, DoD and Federal agency installations may receive no more than a 30- to 60-day notice before commencement of a scheduled fuel delivery period, and the final contract award date may be changed or delayed for various reasons any time prior to the delivery period. Installations shall prepare to respond accordingly by having fuel-handling facilities ready to accommodate delivery of oxygenated, reformulated gasoline or gasohol/E10 in lieu of standard gasoline products.

C5.3.2.2. Identify and submit written requests, if any, for exception to gasohol/E10 use under the PC&S Program by line item to DESC-P. DoD and Federal agency installation requests for exception to gasohol/E10 use shall satisfy criteria in section C5.4. of this Volume.

C5.3.2.3. Ensure DoD and Federal agency installations comply with the local purchase guidance in chapter 2 of Volume II of this manual and satisfy gasoline requirements by purchasing the following prescribed products:

C5.3.2.3.1. Oxygenated or reformulated gasoline for use within established carbon monoxide control areas or ozone nonattainment areas that require oxygenated or reformulated gasoline use to comply with governing environmental regulations. These fuels will usually also meet the gasohol and E10 requirement.

C5.3.2.3.2. Gasohol or E10 in carbon monoxide control areas when these will satisfy the oxygenated gasoline requirement and where these products are available at the same price as or lower than the oxygenated gasoline price.

C5.3.2.3.3. Gasohol or E10 in all other areas where available at the same price or lower than the unleaded gasoline price.

C5.3.2.4. Ensure that DoD and Federal agency installations satisfy the criteria in section C5.4. of this Volume when employing exceptions for local purchase of gasohol/E10.

C5.3.2.5. Ensure civilian employees and Military Service members refuel DoD-owned or -leased administrative motor vehicles with the following gasoline products:

C5.3.2.5.1. Oxygenated or reformulated gasoline for use within established carbon monoxide control areas or ozone nonattainment areas that require oxygenated or reformulated gasoline use to comply with governing environmental regulations.

C5.3.2.5.2. Gasohol or E10 in carbon monoxide control areas when these products satisfy the oxygenated gasoline requirement and where these products are available at the same price or lower than the oxygenated gasoline price.

C5.3.2.5.3. Gasohol or E10 in all other areas where available along the normal vehicle travel route and at the same price or lower than the unleaded gasoline price.

C5.3.2.6. Contact the U.S. Army Petroleum & Water Business Area regarding all technical matters pertaining to handling, use, and ground fuel standardization, including blended gasoline at:

Petroleum & Water Business Areas
U.S. Army TACOM
Attn: AMSTA-TR-D/210
Warren, MI 48397-5000

C5.3.2.7. The U.S. Army Tank-Automotive Research, Development, and Engineering Center (TARDEC) serves as the lead DoD activity for all technical matters related to ground fuel products including blended gasoline.

C5.4. EXCEPTION CRITERIA FOR GASOHOL USE

C5.4.1. Under the PC&S Program and local purchase programs:

C5.4.1.1. DoD and Federal agency reporting installations shall submit written requests for exception to gasohol or E10 use by separate line item when the installation reports unleaded gasoline requirements to DESC-P. DESC-P shall not accept or approve blanket waivers based upon memorandums describing problems generally associated with gasohol/E10 handling or use, regardless if published by reporting installations, major commands, or headquarters organizations. DoD and Federal agency reporting installations shall submit requests for waivers to Federal, State, and local environmental regulations to the applicable regulatory agency, and provide copy of the responses and/or resolutions to the requests to DESC-BP.

C5.4.1.2. DESC-BP and DESC-BQ, in consultation with TARDEC, shall evaluate requests for exception when not based on exemptions listed in paragraph C5.4.2. of this Volume.

Approval shall be given only when the reporting installation conclusively demonstrates and certifies that acceptance of gasohol or E10 for an individual line item requirement shall cause either of the following:

C5.4.1.2.1. An adverse mission impact, or

C5.4.1.2.2. A net cost increase to the Government.

C5.4.2. Basis for exception to gasohol or E10 use includes the following:

C5.4.2.1. Exception 1. Fuel support is required for motor vehicles used in operational or experimental programs to convert to a clean alternative fuel or to a test fuel. The exception is valid only for specific storage and dispensing facilities that support clean alternative fuel operations or fuel testing. Exception requests shall identify facilities involved and duration of the operational or experimental program.

C5.4.2.2. Exception 2. Fuel support is required for a partial fleet of the excepted motor vehicles described in subparagraphs C5.4.2.1. and C5.4.2.2., and the petroleum product supply system is incapable of maintaining two separate product grades consistent with sound motor vehicle management practices.

C5.4.2.3. Exception 3. The only available gasoline storage tanks contain water bottoms that cause alcohol and gasoline phase separation unless completion of tank replacement or modification enables water removal. Exception requests shall indicate the estimated date for permanent water bottom elimination or correction.

C5.4.2.4. Exception 4. The only available gasoline storage tanks have internal sealant resin systems coating that is incompatible with alcohol or gasoline-alcohol blends. Exception requests shall indicate the projected tank(s) inspection and repair schedule. Coating system applications for interior storage tank surfaces shall demonstrate compatibility with gasoline and gasoline-alcohol blend products.

C5.4.2.5. Exception 5. Carbon monoxide control or ozone nonattainment areas that require oxygenated or reformulated gasoline use and where gasohol or E10 is not considered an oxygenated or reformulated gasoline by Clean Air Act and chapter 85 of title 42, U.S.C.