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Supply



**MANAGEMENT OF RECOVERABLE/
REUSABLE LIQUID PETROLEUM PRODUCTS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes local policy and procedures for the segregation and recovery of on specification petroleum products drained from aircraft or fuel storage and dispensing equipment. This instruction implements AFD 23-5, *Reusing and Disposing of Material* and procedures for segregation and disposition of off-specification fuels is addressed in McConnell AFB Instruction 32-7002 and T.O. 42B-1-23. This publication applies to all base organizations creating recoverable and reusable liquid petroleum products.

SUMMARY OF REVISIONS

Updated location for receipt of fuel bowsers and manning requirements, paragraph **1.1.1**, and paragraph **5.1**, updated equipment and filtering requirements, paragraph **3**. A bar (|) indicates a revision from the previous edition.

1. Responsibilities. All organizations are responsible for the proper segregation and safe keeping of recoverable or waste petroleum products generated or collected within the organization. The Fuels Management Flight is responsible for verifying the quality of on-specification products returned to active storage and periodic inspection of bowsers used for collection and segregation of recoverable aviation fuels. Collection and disposition of petroleum products determined to be unsuitable for use, waste oils, waste hydraulic fluids, and other waste petroleum products is the responsibility of the generating/collecting organization and must comply with the provisions of MAFBI 32-7002.

1.1. Aircraft Maintenance Organization. Aircraft maintenance organizations must maintain a sufficient number of portable bowsers to allow for the segregation and collection of each grade of aviation fuel. Aviation fuel bowsers must meet the criteria specified in T.O. 42B-1-23. The owning organization will:

1.1.1. Mark fuel bowsers with serial numbers and organization symbol to aid in tracking quality control and inspection data.

1.1.1.1. Ensure bowsers are clean internally and externally to prevent contamination of the product.

1.1.1.2. Ensure aviation fuel is segregated from other fuels, oils, hydraulic fluids, and other substances to avoid having to dispose of the fuel as hazardous waste.

1.1.1.3. After coordination through the Fuels Resource Control Center, extensions 4116/4119, deliver full fuel bowsers, which require emptying to the Fuels Storage area (bldg 963). Bowsers meeting criteria of T.O. 42B1-23 will be emptied immediately and returned to active storage. Owning organizations will remain with the bowser until completed.

1.1.1.4. Coordinate with the Hazardous Waste Manager at Civil Engineering Environmental Flight (CEV) to properly dispose of a product that is determined to be unsuitable for returning to active storage or downgraded for ground use.

2. Fuels Management Flight. The Fuels Management Flight will maintain test equipment and defueling equipment necessary to recover on-specification aviation fuel. Using guidelines specified in T.O. 42B-1-1, a qualified fuels technician will inspect the bowser and analyze a sample of the product from the bowser sump. If water is present, the organization will be required to remove water. After removal, a re-sample will be taken and analyzed. The Fuels laboratory will be notified to perform further analysis any time a visual analysis fails color or solids. Product disposition will be determined based on the criteria contained in T.O. 42B-1-23, Table 3-1. Product that cannot be recovered will be turned back over to the generating/collecting organization for disposal.

3. Returning Recoverable Aviation Fuel to Active Storage. Bowser will need to be equipped with a 3” male cam lock coupling. Quantity in the receiving tank will be checked prior to the transfer to ensure the ten-to-one blending ratio is met and this also ensures the minimum number of filtration’s required in T.O. 42B-1-23 is met prior to the fuel being issued to an aircraft.

4. Inspection and Cleaning of Aviation Fuel Bowsers.

4.1. Fuels Laboratory personnel will inspect the internal compartment of aviation fuel bowsers following a laboratory analysis in which the product in a bowser was not suitable for returning to active storage.

4.2. Bowsers that fail an internal inspection will be cleaned by the owning organization and re-inspected by Fuels Laboratory personnel prior to being used to collect and store recoverable fuel. Bowsers may be steam cleaned or flushed with water and/or dry cleaning solvents. All residue from cleaning must be collected and disposed of IAW T.O. 42B-1-23. The bowser must be free of all water and/or residual dry cleaning solvent before it can be used for collecting/storing fuel.

5. Credit for Recovered Aviation Fuel. Petroleum products drained from aircraft, vehicles, and storage tanks represent a significant economic resource. A conscientious effort must be made to collect and segregate these products so they can be used for their intended purposes. Downgrading of off-specification product to a product of less stringent quality standards or resale through DRMO channels are optional, but should only be considered when it is not possible to use the product for its intended purpose.

5.1. Fuel returned to active storage will be credited back to the AVPOL program at the standard stock fund price.

CATHY C. CLOTHIER, Colonel, USAF
Commander, 22d Air Refueling Wing

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

29 CFR 1910.134, *Respiratory Protection*

AFOSH Standard 48-137, *Respiratory Protection Program*

AFOSH Standard 48-8, Controlling Exposures to Hazardous Materials

T.O. 42B-1-22, Quality Control of Compressed and Liquid Breathing Air

Abbreviations and Acronyms

AFB—Air Force base

AFOSH—Air Force Occupational Safety and Health

AFPD—Air Force Policy Directive

AFR—Air Force Regulation

BEE—Bioenvironmental Engineer

BE—Bioenvironmental Engineering

CFR—Code of Federal Regulations

HEPA—High Efficiency Particulate Air

IDLH—Immediately Dangerous to Life and Health

IEX—Issue Exception

LEL—Lower Explosive Limit

MAJCOM—Major Air Command

MSHA—Mine Safety and Health Administration

NIOSH—National Institute of Occupational Safety and Health

NSN—National Stock Number

OEL—Occupational Exposure Limit

OI—Operating Instruction

OIC—Officer-In-Charge

OSHA—Occupational Safety and Health Administration

PPM—Parts Per Million

RPP—Respiratory Protection Program

SCBA—Self-Contained Breathing Apparatus

TO—Technical Order

TWA—Time Weighted Average

Terms

Aerodynamic Diameter—Diameter of a unit density sphere having the same terminal settling velocity as the particle in question.

Air-Purifying Respirator—A respirator that removes contaminants from the ambient air.

Approved Respirator—An approved device designed to provide the wearer with respiratory protection against inhalation of harmful atmospheres. Also, the following conditions shall be met: The respirator shall be tested and listed by the National Institute for Occupational Safety and Health (NIOSH) or the Mine Safety and Health Administration (MSHA). Refer to the latest NIOSH Certified Equipment List for approved respirators. If a tight-fitting respirator is used, the respirator shall have a design that allows the following tests to be performed: positive and negative pressure tests and a Fit-Test.

Emergency-Response Respirator—Respiratory protection which is reserved and maintained solely for emergency or disaster response (e.g., spill response and containment).

Escape-Only Respirator—intended only for use during emergency egress from an atmosphere which is or may become immediately dangerous to life or health.

Facial Hair—Any hair on the face of an individual which interferes with a normal face to respiratory seal. This includes beards, sideburns, mustache, goatees, stubble, or more than one days' facial hair growth.

May—indicates an acceptable or satisfactory method of accomplishment.

Shall —indicates a mandatory requirement.

Should—indicates a preferred method of accomplishment.

Will—indicates a mandatory requirement that expresses a declaration of intent, probability or determination.