

FORT CAMPBELL ENVIRONMENT HANDBOOK
Guidance and Instructions
FUEL TANK AND TANKER PURGING

1. Purpose and Scope:

To provide the necessary information-required for the purging of fuel tankers and fuel pods at Fort Campbell. This document also is needed to ensure compliance with U.S., Tennessee, and Kentucky Environmental Protection Agency (EPA) regulations and Department of Army regulations. This guidance/instructions is written in nontechnical language for use by unit maintenance personnel. The primary purpose for purging a fuel tanker is to remove residual amounts of fuel and fuel vapor that would otherwise cause health and safety hazards during tank testing, inspection, or mechanical repair or which would contaminate higher grade fuels. Whenever a tanker truck requires maintenance, is to be prepared to handle a higher grade fuel, or is being readied for deployment, it is purged. This part of the mission brings concerns for the health, safety, and environmental into consideration.

2. Reference:

- a. 40 CFR part 110
- b. Tennessee Department of Environment and Conservation 1200-5-1

3. Definitions:

None

4. General: Scheduling

The Tanker Purging Request and scheduling of purging activities will be issued as requested. If heavy maintenance or purging activities is anticipated the unit or activity should coordinate in advance with PWBC Environmental Division to limit inconvenience in accomplishing assigned missions. No delays are anticipated for purging activities if preparation procedures are followed and prior notification to PWBC Environmental is given. A log of purging activities will be maintained by PWBC from purging requests as to the amount of fuel and water entering the oil/water separator. The purpose of the Tanker Purge Request is to ensure that no overloading of the oil/water separator occurs which could result in disastrous compliance effects.

5. Responsibilities:

- a. Commander shall designate Environmental Quality Officer (EQO).
- b. EQO shall be familiar with environmental regulations and provide guidance to unit personnel in issues associated with tank purging.
- c. PWBC shall make training available to EQO personnel as they are assigned. Conduct bi monthly EQO update meetings.
- d. Unit shall monitor the need to have tanks purged. They shall provide the minimum training of the guidance to personnel involved with tanker operations and the maintenance associated with the tanks.

6. Instruction:

- a. Units must pump or drain all fuel from the tanks. If there is residual fuel exceeding the following limits that remains in the tank, the tank will be rejected for purging.

TANKER SIZE
5000

ACCEPTABLE LIMIT FOR PURGING
20 Gal

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2500
600

15 Gal
1 Gal

1) Tanks should be emptied according to guidance in appropriate technical manuals. For tanks which have fuel filters and on board separators, units must ensure that these have been emptied prior to preparation for purging.

2) The current purging process at Fort Campbell is manual and a check list of the protocol is provided in Appendix A

b. Location for Purging Activities:

Fuel tankers will be purged at 311th MI Bn oil/water separator #7085, located on Desert Storm Av. and 47th Street, or other oil/water separator as designated by PWBC Environmental Division.

c. Tank purging request:

1) An example of a Tanker Purging Request along with a petroleum vehicle purging checklist is provided in Appendix A. Any purging of any size fuel tanker will require a tanker purging request that can be obtained from PWBC Environmental Division. (The purging request may be copied from the Environmental Handbook section 20 appendix A.) Dates and times of purging will be scheduled by PWBC to avoid direct overloading into the oil/water separators. The following steps will be followed for tanker purging request:

2) After Step 1 through 3 of the Petroleum Tanker Purging Checklist (Appendix A) has been completed, Unit/Activity brings tank or tanker to PWBC Environmental Division, building 2182, 13 1/2 Street phone 9633/9601, along with signed purging request.

3) Unit/Activity personnel completes their required portion of the Purging Request Form IAW the vehicle preparation procedures.

***NOTE:** EQO, Unit commander or directorate certifies that vehicle preparation procedures has been performed to standards by signing at the appropriate space of the purging request form.*

4) PWBC Environmental Division will check fuel tank or tanker to ensure that the preparation procedure has been followed. PWBC Environmental Division completes their portion of the tanker purging request and schedules date and time of purging. A representative from PWBC Environmental Division will accompany unit requesting purging to the purging facility (Oil/Water Separator).

7. Additional Guidance: SAFETY

a. Personnel involved in purging of fuel tanks or tankers into oil/water separators should be aware of the safety considerations with these facilities as listed below:

1) The petroleum products removed by the separators are flammable and in some cases explosive.

2) There is a potential for the units to contain toxic gases from the decomposition of organic materials, or from the spillage of toxic materials which have entered the separators. In addition, conditions in the separators may result in the depletion of oxygen in the tanks. Either of the above situations are harmful or possibly fatal to personnel

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entering these spaces. Under no circumstances are personnel designated for purging activities to enter these spaces.

3) It should be noted that the current procedures depend upon manual processes and controls. It is possible for the tanker truck operators to inadvertently or accidentally discharge substantial amounts of pure fuel into the purge tank. In some cases, this could overload the oil/water separator and result in substantial quantities of fuel entering the sewer system. Under such conditions, it is possible for some fuels or fuel mixtures to form explosive mixtures within the sewer collection system.

b. PROCEDURES: The following safety procedures should be followed for protection of personnel:

1) *NO SMOKING* is permitted by personnel working around separators and purge tanks. In addition, no open flame is to be used and extreme care should be exercised to prevent striking up sparks around the oil/water separators.

2) In the event that the separator exhibits a strong odor of any flammable material it is strongly recommended that the PWBC Environmental Division be contacted for appropriate action.

3) Any cuts or open wounds received while working in areas around separators and surge tanks should be attended to by medical personnel as soon as practical. Due to the wide range of potential chemicals and materials that can enter these facilities, medical personnel should be informed of the circumstances under which any such accident occurs.