

Form B8U - Non-Permitted Equipment Emissions from Bulk Loading

Note 1: Please include only **non-permitted** emissions on this form. **Please note that, under Rule 301(e), non-permitted emissions are subject to emission fees beginning with the 2001-2002 reporting cycle.** Please refer to the General Instruction Book for the definition of non-permitted equipment under Frequently Asked Questions. Under Rule 301 (e), you must keep separate records for your non-permitted equipment which would allow the determination of emissions from such equipment.

Note 2: **If the fuel loaded contains TACs or ODCs which are considered VOCs (e.g., benzene), you must report the total VOC on this form and the TAC/ODC content on Form TAC.**

Facility Name and ID No.: Please fill in your facility name and facility ID number in the designated spaces, exactly as indicated on Form X (Signature Sheet) in your package.

Type of Operation and Fuel Code: Select the appropriate codes for the type of operation and fuel from the lists and enter the codes in columns (a) and (b), respectively. If you use Fuel Code '999', please describe the fuel in the provided space. **Do not use Fuel Code 999 unless the product is not listed.**

TAC/ODC (Y/N): In column (c) enter "Y" (for Yes) or "N" (for No) to indicate whether the specific bulk loading activity reported in each row emits any toxic air contaminants or ozone depleting compounds.

Volume Loaded: Enter the total volume loaded or fueled in thousands of gallons for each operation (for six-month transitional reporting period 7/1/07-12/31/07) in column (d).

Emission Factor: Enter the appropriate emission factor (E.F.) for your loading operation (or use the uncontrolled default factor from the table below) in column (e). If you use emission factors other than the default factors you must provide supporting documentation (e.g., source test summary report). If the emission factor for your product is not listed, use the equation listed below to determine E.F.:

$$E.F._{(loading\ loss)} = (12.46) \times (S) \times (P) \times (M) / T$$

where E.F. = Loading Loss Emission Factor, lbs/1000 gallons loaded
 S = Saturation factor (EPA Document AP - 42, Table 5.2-1) (if not known use 1.45)
 P = Vapor pressure of loaded material, psia
 M = Molecular weight of loaded material, lbs/lbs mole
 T = Loading Temperature, °R (°F + 460)

Vapor Recovery Control Efficiency (V. R. Control Efficiency): Enter the efficiency of the vapor recovery system in column (f) as a decimal fractions (e.g. 0.85 for 85%). If your loading system is not equipped with control equipment, enter 0.00.

Emissions: To calculate the loading losses, multiply column (d) by (e) and by [1-column (f)]; enter the result in column (g). Total all loading losses in column (g) and enter the total on Line 1. To convert to tons, divide the total in pounds by 2000 and round off to two (2) decimal places. Enter the total (tons) on Line 2 and transfer the total (tons) to Form R1U, Line 2. Report benzene or other TAC/ODC emissions from bulk loading operations on Form TAC.

Uncontrolled Emission Factors for Bulk Loading Operations (EPA AP-42)

Product	Filling Operation	E.F. (lbs/1000 gal)	Product	Filling Operation	E.F. (lbs/1000 gal)	Product	Filling Operation	E.F. (lbs/1000 gal)
Gasoline (10 RVP)	Tank Trucks	5.0	Kerosene	Tank Trucks	0.016	No. 6 Fuel Oil	Tank Trucks	0.0001
	Rail Cars	5.0		Rail Cars	0.016		Rail Cars	0.0001
	Barges ¹	3.4		Barges ¹	0.013		Barges ¹	0.0001
	Ships/Ocean Barges ²	1.8		Ships/Ocean Barges ²	0.005		Ships/Ocean Barges ²	0.00005
Aviation Fuels	Tank Trucks	3.2		Distillate	Aircraft		0.02	Crude Oil (5.0 RVP)
	Rail Cars	3.2	Tank Trucks		0.014	Rail Cars	2.0	
	Barges ¹	2.3	Rail Cars		0.014	Barges ¹	1.0	
	Ships/Ocean Barges ²	1.45	Barges ¹		0.012	Ships/Ocean Barges ²	0.61	
Jet Fuel (Jet A & Jet B)	Tank Trucks	1.5	Ships/Ocean Barges ²		0.005			
	Rail Cars	1.5						
	Barges ¹	1.2						
	Ships/Ocean Barges ²	0.5						

¹ Barges with compartment depth of about 12 feet (shallow depth)

² Ocean Barges with compartment depth of about 40 feet