

Supporting information including quantity of gas sold, emission factors and emission calculations for Gas Station Registration example

List of all emission units and air pollution generating activities.

Three 10,000 gallon capacity underground fuel storage tanks.
Eight fuel dispensing pumps located on two pump islands.
Emission release points above grade is 4ft. for gas pumps and 10 ft for UST's.

Plot Plan.

See attached.

Narrative.

The gas is transported to the gas station in bulk tankers and unloaded in to the underground storage tanks. Fuel is then pumped in to customer vehicles from the pumps on the two pump islands.

Type and quantity of raw materials used or final product produced on a daily, annual and maximum hourly basis.

Total gas sold during 2006 was 655,000 gallons consisting of the following.
Premium – 205,000 gallons
Unleaded – 450,000 gallons

Typical operating schedule, including number of hours per day, number of days per week and number of weeks per year.

Daily schedule is 6 am to 11pm and 7 days per week for a total of 52 weeks per year.

List of estimated efficiency of air pollution control equipment under present or anticipated operating conditions.

Not applicable.

Estimates of the total actual emissions from the air pollution source.

AP 42 emission factors were taken from the attached table 5.2-7

Filling underground tank (stage I).
Submerged Filling – 7.3 lbs/1000 gallons

Underground tank breathing and emptying – 1.0 lb/1000 gallons

Vehicle refueling operations (Stage II)

Displacement losses (uncontrolled) – 11.0 lbs/1000 gallons

Spillage – 0.7 lb/1000gallons

Total emission factor is 20 lbs per 1000 gallons of gas sold.

Total emission = 20 x 655 lbs

13100/2000 tons

Total emissions = 6.55 tons