Tank Type[1]	Evaporative Emission Losses
openings and because fuel clings to the tank walls as the liquid level and roof are lowered. [4] Domed external floating roof tanks usually result from retrofitting an external floating roof tank with a fixed roof.	

A5.3.1.1 Methodology

Evaporative emissions from fuel storage tanks at airports can be estimated using FAA's EDMS/AEDT or EPA's TANKS program. Both models are based on the emission estimation procedures detailed in Chapter 7, *Liquid Storage Tanks,* of EPA's *AP-42*[28].

The general methodology for calculating storage tank evaporative emissions is expressed by **Equation A5-9** (*Evaporative Emissions for Storage Tanks*).

$$E_{HC} = EB + EW$$

Where:

E_{HC} *= total hydrocarbon emissions from a single tank over a given time period.*

EB = breathing emissions from the tank.

EW = working emissions from the tank.

Equation A5-9. Evaporative Emissions for Storage Tanks

The methodologies for calculating breathing emissions and working emissions is different for each tank type (e.g., fixed, horizontal, floating, etc.) and is dependent on data inputs, such as physical tank dimensions, fuel type being stored, meteorological data, fuel throughput, and other tank-specific characteristics that are further detailed in Chapter 7.1, *Organic Liquid Storage Tanks*[29], of EPA's AP-42. An overview of these data inputs and the likely sources of obtaining this information are given in **Table A5-4** (*Data Inputs for Fuel Storage Tanks*).

Table A5-4. Data Inputs for Fuel Storage Tanks

Data Inputs	Description	Source
Tank Type	Refer to **Table A5-3** (*Evaporative Emission Losses of Fuel Storage Tanks*).	Information may be obtained from the airport operator, fueling contractor, or by visual inspection of the tank(s).
Tank Dimensions	Tank dimensions (e.g., shell diameter, and height) are necessary to calculate emission losses.	Information may be obtained from the airport operator, fueling contractor, or by visual inspection of the tank(s).
Fuel Type	Specification of the type of fuel stored in	Information is given in Section 7.1, *Organic*

[28] EPA, AP-42, Chapter 7, *Organic Liquid Storage Tanks,* http://www.epa.gov/ttnchie1/ap42/ch07/.
[29] EPA, AP-42, Chapter 7.1, *Organic Liquid Storage Tanks*, http://www.epa.gov/ttn/chief/ap42/ch07/final/c07s01.pdf.