

# Engines and Air Regulations

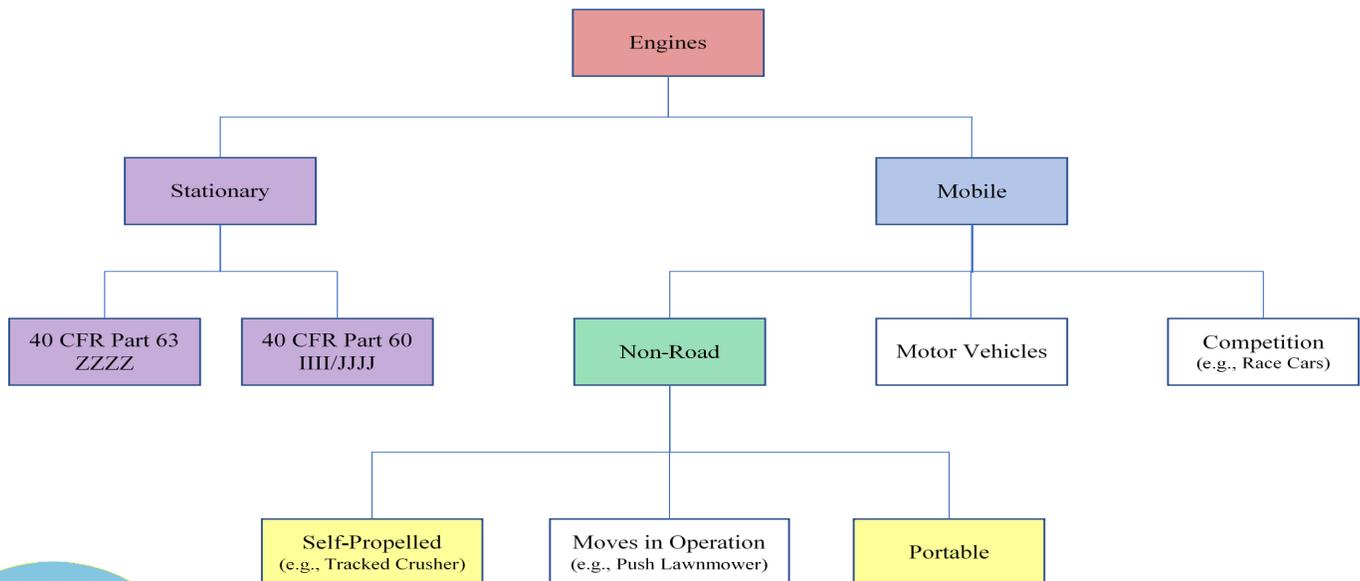
With continued focus on federal air regulations for engines, those used in the mineral processing industry are a particular focus. There are a vast array of federal rules and regulations covering the operation of engines in all their various forms and uses. The responsibility for complying with the Environmental Protection Agency's (EPA's) regulations falls on the engine manufacturer for many types of engines. For example, a driver is not responsible for ensuring the engine in a passenger car meets federal fuel efficiency standards; that responsibility falls to the car manufacturer.

However, owners/operators of stationary engines do have significant obligations for complying with federal rules. The requirements for operation of stationary engines vary depending on the age of the engine and how it is used. They can be as simple as performing regular tune-ups to as complex as adding expensive pollution control equipment, operating continuous monitors, and

performing stack tests regularly to demonstrate compliance with emission rates.

## What is a stationary engine? Does any of this apply to you?

A **stationary engine** is any engine that is not mobile. Mobile engines include those in on-road motor vehicles and non-road engines. Non-road engines include self-propelled equipment such as front-end loaders, excavators, and tracked crushers. None of this equipment is subject to the requirements for stationary engines. The category of non-road engines also includes some engines which power generator sets which are considered portable (a subset of non-road mobile engines). The following chart provides an overview of the classifications of engines found in federal rules.



Whether or not your engine is considered portable is not a straight-forward matter. Some engines commonly considered portable are determined by the EPA to be stationary engines.

Simply being capable of moving is not enough for an engine to be considered portable. Just because an engine is mounted on a trailer does not make it portable. To be portable, the engine must actually move and do work in a different location at least once per year or season. That movement can take place within the same address, i.e., movement within one gravel pit is enough to classify the engine as portable.

However, federal definitions also state that any engine that replaces another engine in the same place doing the same function as the engine it replaces is considered the same engine. For example, if an asphalt plant sits in the same place for more than a year and is used intermittently, it doesn't matter if it is powered by the same engine each time or by several different engines, the engine that powers it is considered stationary (because the asphalt plant is stationary). Essentially, any engine that powers equipment that isn't operated in different locations often enough is considered a stationary engine. Engines which are likely to be considered stationary are those that power asphalt plants, stationary crushers, and stationary screens. Recordkeeping of engine movement and use is essential to document the accurate classification of each engine.



These regulations are complicated and confusing even to those who work with them on a regular basis. Generalized guidance is difficult to give as requirements vary significantly depending on the engine's age, size, and use. Staff at Maine's Department of Environmental Protection's Bureau of Air Quality are happy to meet with you and work through the requirements for your specific equipment and needs. For more information, contact an Air Licensing Engineer at (207) 287-7688.



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