Environmental Protection Agency

§ 87.21 Exhaust emission standards for Tier 4 and earlier engines.

This section describes the emission standards that apply for Tier 4 and earlier engines as well as certain engines exempted under §87.50. Note that the tier of standards identified for an engine relates to NO\textsubscript{X} emissions and that the specified standards apply independent of the changes to the NO\textsubscript{X} emission standards.

(a) Exhaust emissions of smoke from each new aircraft gas turbine engine of class T8 manufactured on or after February 1, 1974, shall not exceed: Smoke number of 30.

(b) Exhaust emissions of smoke from each new aircraft gas turbine engine of class TF and of rated output of 129 kilonewtons thrust or greater, manufactured on or after January 1, 1976, shall not exceed:

\[ \text{SN} = 83.6 (r_0)^{0.274} \]

(c) Exhaust emission of smoke from each new aircraft gas turbine engine of class T3 manufactured on or after January 1, 1978, shall not exceed: Smoke number of 25.

(d) Gaseous exhaust emissions from each new commercial aircraft gas turbine engine shall not exceed:

(1) Classes TF, T3, T8 engines greater than 26.7 kilonewtons rated output:

(i) Engines manufactured on or after January 1, 1984:

Hydrocarbons: 19.6 grams/kilonewton rO.

Carbon Monoxide: 118 grams/kilonewton rO.