## §610.32

data or other information are insufficient to support claims for a device in any of these areas:

- (1) Degree of improvement in fuel economy
  - (2) Effect on exhaust emissions
  - (3) Vehicle applicability
- (b) The Administrator may determine that, in certain cases, tests using engine dynamometers are adequate for determining the effect of a device. Examples of such cases are given below.
- (1) Long-term effects. In some cases, it may be necessary for the engine to operate for several thousand miles before the effectiveness can be adequately measured. In such cases an engine dynamometer will permit a less expensive and better controlled durability and economy test than one in which a vehicle must be driven on a durability route and then tested on a chassis dynamometer or test track.
- (2) Durability requirements. Aspects of engine durability can be efficiently determined using specialized engine testing rather than through durability mileage accumulation in a vehicle. A number of standard engine tests are presently used which can be incorporated into this requirement.
- (c) When in the judgment of the Administrator a device cannot satisfactorily be evaluated using either dynamometer or track versions of the City Fuel Economy Test and the Highway Fuel Economy Test, the Administrator will select or design other procedures.

## § 610.32 Test fleet selection.

- (a) The composition and size of the test fleet will be determined by the Administrator. In a device evaluation program initiated at the request of the FTC, the composition and size of the test fleet will be determined by the Administrator in consultation with the FTC.
- (b) The goal of the test fleet selection will be the provision of a data base adequate to give the Administrator reasonable confidence in the conclusions to be reached.
- (c) Once the number of vehicles to be tested has been determined, the Administrator will specify the test fleet makeup by make, model, model year, engine displacement and carburetor, transmission type, and such other fac-

tors as he may deem relevant to the testing program.

## §610.33 Durability tests.

The Administrator may determine that a device under evaluation will require durability testing in addition to the basic evaluation testing for device effectiveness. This requirement may be necessary for several reasons:

- (a) A retrofit device manufacturer may claim that some mileage accumulation may be needed before the full effectiveness of the device can be obtained. If such claims are made, durability testing as described in subpart E may be performed. To determine whether the effectiveness change during the mileage accumulation is a function of the device or of the mileage accumulation alone, in some durability tests it may be necessary to run the mileage accumulation on vehicles with and without the device. Due to the high cost of durability testing and in particular of such duplicate testing, it will be used only where it is judged by the Administrator to be necessary
- (b) A device may have a limited life expectancy or be such that it requires replacement or adjustment at a prescribed mileage interval. Confirmatory durability tests may be run to assess whether such mileage intervals are proper and effective.
- (c) A device may be suspected of having an adverse effect on the durability of the engine to which it is applied. After identification of a potential failure mode, durability tests may be conducted to investigate any changes in engine characteristics associated with that failure mode. Examples are valve problems, deterioration in spark plug life, increase in carburetor or combustion chamber deposits, or increased engine wear. If it is not possible to directly measure the change in the suspect characteristic, then a durability run may be made as described in subpart E, in which fuel economy and experiodically haust emissions are checked during the accumulation of up to 15,000 miles.
- (d) A critical item which can influence fuel economy is vehicle maintenance. Any durability test program used in evaluation of the effectiveness