You must meet the numerical emission standards for hydrocarbons in this section based on the following types of hydrocarbon emissions for off-highway motorcycles powered by the following fuels:

1. Natural gas-fueled off-highway motorcycles: NMHC emissions.
3. Other off-highway motorcycles: THC emissions.

(c) Your off-highway motorcycles must meet emission standards over their full useful life. For off-highway motorcycles with engines that have total displacement greater than 70 cc, the minimum useful life is 10,000 kilometers or five years, whichever comes first. For off-highway motorcycles with engines that have total displacement of 70 cc or less, the minimum useful life is 5,000 kilometers or five years, whichever comes first. You must specify a longer useful life for the engine family in terms of kilometers if the average service life of your vehicles is longer than the minimum value, as follows:

1. Except as allowed by paragraph (c)(2) of this section, your useful life (in kilometers) may not be less than either of the following:
   i. Your projected operating life from advertisements or other marketing materials for any vehicles in the engine family.
   ii. Your basic mechanical warranty for any engines in the engine family.
2. Your useful life may be based on the average service life of vehicles in the engine family if you show that the average service life is less than the useful life required by paragraph (c)(1) of this section, but more than the minimum useful life (10,000 kilometers). In determining the actual average service life of vehicles in an engine family, we will consider all available information and analyses. Survey data is allowed but not required to make this showing.

§ 1051.107 What are the exhaust emission standards for all-terrain vehicles (ATVs) and offroad utility vehicles?

This section specifies the exhaust emission standards that apply to ATVs. As is described in §1051.1(a)(4), offroad utility vehicles that are subject to this part are subject to these same standards.

(a) Apply the exhaust emission standards in this section by model year. Measure emissions with the ATV test procedures in subpart F of this part.

1. Follow Table 1 of this section for exhaust emission standards. You may generate or use emission credits under the averaging, banking, and trading (ABT) program for HC+NO\(_X\) emissions, as described in subpart H of this part. This requires that you specify a family emission limit for each pollutant you include in the ABT program for each engine family. These family emission limits serve as the emission standards for the engine family with respect to all required testing instead of the standards specified in this section. An engine family meets emission standards even if its family emission limit is higher than the standard, as long as you show that the whole averaging set of applicable engine families meets the applicable emission standards using emission credits, and the vehicles within the family meet the family emission limit. Table 1 also shows the maximum value you may specify for a family emission limit. Calculate this compliance percentage based on a simple count of your U.S.-directed production units within each certified engine family compared with your total U.S.-directed production that must comply with the emission standards for those model years.

Calculate this compliance percentage based on a simple count of your U.S.-directed production units within each certified engine family compared with a simple count of your total U.S.-directed production units. This applies to your total production of ATVs and offroad utility vehicles that are subject to the standards of this part; including both ATVs and offroad utility vehicles subject to the standards of this section and ATVs and offroad utility vehicles certified to the standards of other sections in this part 1051 (such as §1051.615, but not including vehicles certified under other parts in this
Table 1 of §1051.107—Exhaust Emission Standards for ATVs (g/km)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Model year</th>
<th>Phase-in (percent)</th>
<th>Emission standards</th>
<th>Maximum allowable family emission limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>HC+NOₓ</td>
<td>CO</td>
</tr>
<tr>
<td>Phase 1</td>
<td>2006</td>
<td>50</td>
<td>1.5</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>2007 and later</td>
<td>100</td>
<td>1.5</td>
<td>35</td>
</tr>
</tbody>
</table>

(2) You may certify ATVs with engines that have total displacement of less than 100 cc to the exhaust emission standards in §1051.615 instead of certifying them to the exhaust emission standards of this section. Count all such vehicles in the phase-in (percent) requirements of this section.

(b) The exhaust emission standards in this section apply for ATVs using the fuel type on which they are designed to operate. You must meet the numerical emission standards for hydrocarbons in this section based on the following types of hydrocarbon emissions for ATVs powered by the following fuels:

1. Natural gas-fueled ATVs: NMHC emissions.
2. Alcohol-fueled ATVs: THCE emissions.
3. Other ATVs: THC emissions.

(c) Your ATVs must meet emission standards over their full useful life. For ATVs with engines that have total displacement of 100 cc or greater, the minimum useful life is 10,000 kilometers, 1000 hours of engine operation, or five years, whichever comes first. For ATVs with engines that have total displacement of less than 100 cc, the minimum useful life is 5,000 kilometers, 500 hours of engine operation, or five years, whichever comes first. You must specify a longer useful life for the engine family in terms of kilometers and hours if the average service life of your vehicles is longer than the minimum value, as follows:

1. Except as allowed by paragraph (c)(2) of this section, your useful life (in kilometers) may not be less than either of the following:
   - Your projected operating life from advertisements or other marketing materials for any vehicles in the engine family.
   - Your basic mechanical warranty for any engines in the engine family.

(ii) Your basic mechanical warranty may be based on the average service life of vehicles in the engine family if you show that the average service life is less than the useful life required by paragraph (c)(1) of this section, but more than the minimum useful life (10,000 kilometers or 1,000 hours of engine operation). In determining the actual average service life of vehicles in an engine family, we will consider all available information and analyses. Survey data is allowed but not required to make this showing.


§1051.110 What evaporative emission standards must my vehicles meet?

Your new vehicles that run on a volatile liquid fuel (such as gasoline) must meet the emission standards of this section over their full useful life. Note that §1051.245 allows you to use design-based certification instead of generating new emission data.

(a) Beginning with the 2008 model year, permeation emissions from your vehicle’s fuel tank(s) may not exceed 1.5 grams per square-meter per day when measured with the test procedures for tank permeation in subpart F of this part. You may generate or use emission credits under the averaging, banking, and trading (ABT) program, as described in subpart H of this part.

(b) Beginning with the 2008 model year, permeation emissions from your vehicle’s fuel lines may not exceed 15 grams per square-meter per day when measured with the test procedures for fuel-line permeation in subpart F of this part. Use the inside diameter of the hose to determine the surface area of the hose.