§ 1051.101 What emission standards and other requirements must my vehicles meet?

(a) You must show that your vehicles meet the following:

(1) The applicable exhaust emission standards in §1051.103, §1051.105, §1051.107, or §1051.145.

(i) For snowmobiles, see §1051.103.

(ii) For off-highway motorcycles, see §1051.105.

(iii) For all-terrain vehicles and offroad utility vehicles subject to this part, see §1051.107 and §1051.145.

(2) The evaporative emission standards in §1051.110.

(3) All the requirements in §1051.115.

(b) The certification regulations in subpart C of this part describe how you make this showing.

(c) These standards and requirements apply to all testing, including certification, production-line, and in-use testing.

(d) Other sections in this subpart describe other requirements for manufacturers such as labeling or warranty requirements.

(e) It is important that you read §1051.145 to determine if there are other interim requirements or interim compliance options that apply for a limited time.

(f) As described in §1051.1(a)(4), offroad utility vehicles that are subject to this part are subject to the same requirements as ATVs.

[67 FR 68347, Nov. 8, 2002, as amended at 70 FR 40487, July 13, 2005]

§ 1051.103 What are the exhaust emission standards for snowmobiles?

(a) Apply the exhaust emission standards in this section by model year. Measure emissions with the snowmobile 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 and CO 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. The phase-in values specify the percentage of your 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. Table 1 also shows the maximum value you may specify for a family emission limit, as follows:
§ 1051.103

Table 1 of § 1051.103—Exhaust Emission Standards for Snowmobiles (g/kW-hr)

<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</td>
<td>CO</td>
</tr>
<tr>
<td>Phase 1</td>
<td>2006</td>
<td>50</td>
<td>100</td>
<td>275</td>
</tr>
<tr>
<td>Phase 1</td>
<td>2007–2009</td>
<td>100</td>
<td>100</td>
<td>275</td>
</tr>
<tr>
<td>Phase 2</td>
<td>2010 and 2011</td>
<td>100</td>
<td>75</td>
<td>275</td>
</tr>
<tr>
<td>Phase 3</td>
<td>2012 and later</td>
<td>100 (¹)</td>
<td>(¹)</td>
<td>150</td>
</tr>
</tbody>
</table>

¹ See § 1051.103(a)(2).

(2) For Phase 3, the HC and CO standards are defined by a functional relationship. Choose your corporate average HC and CO standards for each year according to the following criteria:

(i) Prior to production, select the HC standard and CO standard (specified as g/kW-hr) so that the combined percent reduction from baseline emission levels is greater than or equal to 100 percent; that is, that the standards comply with the following equation:

\[
\left(1 - \frac{HC_{\text{STD}}}{150}\right) \times 100 + \left(1 - \frac{CO_{\text{STD}}}{400}\right) \times 100 \geq 100
\]

(ii) Your corporate average HC standard may not be higher than 75 g/kW-hr.

(iii) Your corporate average CO standard may not be higher than 275 g/kW-hr.

(iv) You may use the averaging and banking provisions of subpart H of this part to show compliance with these HC and CO standards at the end of the model year under paragraph (a)(2)(i) of this section. You must comply with these final corporate average emission standards.

(b) The exhaust emission standards in this section apply for snowmobiles 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 snowmobiles powered by the following fuels:

(1) Natural gas-fueled snowmobiles: NMHC emissions.

(2) Alcohol-fueled snowmobiles: THCE emissions.

(3) Other snowmobiles: THC emissions.

(c) Your snowmobiles must meet emission standards over their full useful life. The minimum useful life is 8,000 kilometers, 400 hours of engine operation, or five calendar years, whichever comes first. You must specify a longer useful life in terms of kilometers and hours for the engine family if the average service life of your vehicles is longer than the minimum value, as follows:

(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 (8,000 kilometers or 400 hours of engine operation). In determining the actual average service life of vehicles in an engine family, we will consider all available information and...
§ 1051.105 What are the exhaust emission standards for off-highway motorcycles?

(a) Apply the exhaust emission standards in this section by model year. Measure emissions with the off-highway motorcycle 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\textsubscript{X} and CO 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. The phase-in values specify the percentage of your 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. Table I follows:

<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+NO\textsubscript{X}</td>
<td>CO</td>
</tr>
<tr>
<td>Phase 1</td>
<td>2006</td>
<td>50</td>
<td>2.0</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>2007 and later</td>
<td>100</td>
<td>2.0</td>
<td>25</td>
</tr>
</tbody>
</table>

(2) For model years 2007 and later you may choose to certify all of your off-highway motorcycles to an HC+NO\textsubscript{X} standard of 4.0 g/km and a CO standard of 35 g/km, instead of the standards listed in paragraph (a)(1) of this section. To certify to the standards in this paragraph (a)(2), you must comply with the following provisions:

(i) You may not request an exemption for any off-highway motorcycles under §1051.620.

(ii) At least ten percent of your off-highway motorcycles for the model year must have four of the following features:

(A) The absence of a headlight or other lights.

(B) The absence of a spark arrester.

(C) The absence of manufacturer warranty.

(D) Suspension travel greater than 10 inches.

(E) Engine displacement greater than 50 cc.

(F) The absence of a functional seat.

(iii) You may use the averaging and banking provisions of subpart H of this part to show compliance with this HC+NO\textsubscript{X} standard, but not this CO standard. If you use the averaging or banking provisions to show compliance, your FEL for HC+NO\textsubscript{X} may not exceed 8.0 g/km for any engine family. You may not use the trading provisions of subpart H of this part.

(3) You may certify off-highway motorcycles with engines that have total displacement of 70 cc or less 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 off-highway motorcycles using the fuel type on which they are designed to operate.