

# Emissions Requirements for Diesel Heavy Duty Vehicles<sup>1</sup>

Standard <sup>2</sup>	Date Introduced <sup>3</sup>	Emission Limits of Source Standard <sup>4</sup> (g/kWh - unless otherwise specified)				Source Standard / Emissions Test	Alternative Standards
		CO	HC	NOx	PM		
ADR70/00	1/1/95 – 1/1/96	4.5	1.1	8.0	0.36	UN ECE Reg 49/02 13 mode ESC test (Euro 1)	US EPA 91 and Japan 94 accepted as alternative standards. Superseded by ADR79/00 and ADR80/00
ADR80/00 <i>ESC Limit</i> <i>ETC Limit</i>	1/1/02 – 1/1/03	2.1 5.45	0.66 0.78 <sup>5</sup>	5.0 5.0	0.10 <sup>6</sup> 0.16 <sup>7</sup>	Directive 1999/96/EC (Euro 3): Euro Stationary Cycle (ESC); Euro Transient Cycle (ETC)	US EPA 98 (model year 2000) accepted as alternative standard.
ADR80/02 <sup>8</sup> <i>ESC Limit</i> <i>ETC Limit</i>	1/1/07 – 1/1/08	1.5 4.0	0.46 0.55 <sup>9</sup>	3.5 3.5	0.02 0.03	Directive 2005/55/EC, 2005/78/EC & 2006/51/EC (Euro 4): Euro Stationary Cycle (ESC); Euro Transient Cycle (ETC)	US EPA 2004 and Japan JE05 Long Term accepted as alternative standard
ADR80/03 <i>ESC Limit</i> <i>ETC Limit</i>	1/1/10 – 1/1/11	1.5 4.0	0.46 0.55 <sup>10</sup>	2.0 2.0	0.02 0.03	Directive 2005/55/EC, 2005/78/EC & 2006/51/EC (Euro 5): Euro Stationary Cycle (ESC); Euro Transient Cycle (ETC)	US EPA 2007 <sup>11</sup> and Japan JE05 Long Term accepted as alternative standards.

<sup>1</sup> ADR80/00, /02 and /03 also set emission limits for LPG, NG and petrol heavy duty vehicles, but only the emission limits for diesel are listed in the table.

<sup>2</sup> To find the ADRs (except ADR70/00 which is now obsolete) on the Federal Register of Legislative Instruments (FRLI) follow these steps:

1. Go to [www.frli.gov.au](http://www.frli.gov.au)

2. In the "Browse for" list, choose "Legislative Instruments - As made - by title".

3. Wait for the alphabetical list to come up, scroll down to "V" and then click on "Ve" (for Vehicle).

The ADRs will be listed on the screen and you can open each of them individually to get the details.

<sup>3</sup> where a date range is specified, first date applies to vehicle models first produced on or after that date, with all new vehicles required to comply by the second date.

<sup>4</sup> emission limits for alternative standards may differ from that specified for the source (EC) standard

<sup>5</sup> non-methane hydrocarbons

<sup>6</sup> smaller engines are subject to more relaxed PM limits of 0.13 (ESC)

<sup>7</sup> Smaller engines are subject to more relaxed PM limits of 0.21 (ETC).

<sup>8</sup> ADR80/02 has effectively replaced ADR80/01

<sup>9</sup> non-methane hydrocarbons

<sup>10</sup> non-methane hydrocarbons

<sup>11</sup> full NOx requirements of US2007-10 standards not mandated (refer to ADR for details)

## Smoke Requirements for All Diesel Vehicles

<b>Standard</b>	<b>Date Introduced</b>	<b>Source Standard / Emissions Test</b>	<b>Other Comments</b>
<i>ADR30/00</i>	1/7/76	UN ECE Reg 24/00	US EPA 74 and British Standard 141a:1971 accepted as alternative standards
<i>ADR30/01</i>	1/1/02 – 1/1/03	UN ECE Reg 24/03	US EPA 98 accepted as alternative standards.