

## LAND ROVER GROUP LTD.

EXECUTIVE ORDER A-277-0028
New Passenger Cars, Light-Duty Trucks
and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515-39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

| MODI            |     | TEST GROUP       |   | Р  | VEHICLE TYPE<br>(PC=passenger car; LDT=light-duty<br>MDV=medium-duty vehicle; LVW=lc<br>vehicle weight; ALVW=adjusted L | truck; CATE<br>paded veh | UST EMISSION STAI<br>GORY (LEV=low e<br>licle; TLEV= transitional<br>-ultra LEV; SULEV=supe | mission<br>LEV:   |   | FUEL TYPE<br>(CNG/LNG=compressed/<br>liquefied natural gas;<br>LPG=liquefied petroleum gas) |  |  |  |  |
|-----------------|-----|------------------|---|----|---|--------------------------|---|---|---|---|--|--|--|--|
| 2003 3LRXT02.50 |     |                  |   | 1  | LDT: 3,751-5,750 pounds LV  | w                        | LEV   |   | 100K / 100K   | Gasoline  |  |  |  |  |
| No.             |     | NPORA<br>IILY (E |   | No | SPECIAL FEATO<br>EMISSION CONTROL S   |                          | * = not applica   | ble C   | OC/TWC=oxidizing/3-way                                    | cat. ADSTWC=adsorbing TWC   |  |  |  |  |
| 1               | 3LR | RXR0124002       |   |    |   | 102S(2), SFI, O          |   | NFS/HAFS=air-fuel ratio s   | O2S=oxygen sensor/heated O2S ensor/heated AFS EGR=exhaust |   |  |  |  |  |
| 2               |     | *                |   |    |   | *                        |   | -igas recirculation AIR/PAIR=secondary air injection/pulsed   |   |   |  |  |  |  |
| 3               |     | •                |   |    |   | *                        | — Пт  | AIR MFI/SFI= multiport fuel injection/sequential MFI TBI= throttle body injection TC/SC=turbo/super charger CAC=Charge air cooler OBD (F) / (P)=full /partial on-board diagnostic prefix 2=parallel (2) suffix=series |   |   |  |  |  |  |
| 4               |     | *                |   |    |   | *                        |   |   |   |   |  |  |  |  |
| EVAF<br>No.     |     | No. SIZE (L)     |   |    | VEHICLE<br>MAKES & MODELS   | VEHICLES STANDARDS       | SUBJECT TO SFTP   | 13  | BREVIATIONS:  |   |  |  |  |  |
| 1               |     | 1 2.5            |   |    | Land Rover Freelander   |                          |   |   |   |   |  |  |  |  |
| *               |     | *                | * |    | *   |                          |   |   |   |   |  |  |  |  |
| *               |     | *                | * | T  | *   |                          |   |   |   |   |  |  |  |  |
| *               | * * |                  |   |    |   | *                        |   |   |   |   |  |  |  |  |

The exhaust and evaporative emission standards (STD) and certification emission levels (CERT) for the listed vehicles are as follows (compliance with the 50 °F testing requirement (for TLEV, LEV, ULEV, SULEV) may have been met based on the manufacturer's submitted compliance plan in lieu of testing). Any debit in the manufacturer's "NMOG Fleet Average" (PC and LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required. (For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

| NMOG FLEET<br>AVERAGE [g/mi] |                      |         | NMOG @ RAF=0.94<br>CH4 RAF = * |              | NMOG or                    |           |   |            |           |        |                  | 4 hydrocart<br>AF=reactivit |             |                      |                             |        |  |
|------------------------------|----------------------|---------|--------------------------------|--------------|----------------------------|-----------|---|------------|-----------|--------|------------------|-----------------------------|-------------|----------------------|-----------------------------|--------|--|
| CER                          | CERT STD             |         | NMOG                           | NMHC         | NMHC<br>STD<br>[g/mi]      | mg=millig | ram mi=                                   | mile K=1   | 000 miles | URVRIS | g/gallon (       | iispenseaj=                 | on-board re | efueling var         | or recovery<br>deral test p | g≡gram |  |
| 0.10                         | 0.100 0.093          |         | CERT<br>[g/mi]                 | /mi] [g/mi]  |                            | CO [g/mi] |   | NOx [g/mi] |           |        | ICHO [n          | ng/mi]                      | PM (g       | /mi]                 | Hwy NO                      |        |  |
| and the same                 |                      |         |                                |              |                            | CERT      | STD                                       | CERT       | STI       | D CI   | ERT              | STD                         | CERT        | STD                  | CERT                        | STD    |  |
| 4.0                          |                      | @ 50K   | 0.038                          | *            | 0.100                      | 0.6       | 4.4                                       | 0.1        | 0.4       | 1 (    | 0.5              | 18                          | *           | *                    | 0.02                        | 0.5    |  |
|                              | f K d                | @ UL    | 0.038                          | *            | 0.130                      | 0.6       | 5.5                                       | 0.1        | 0.5       | 5 (    | 0.5              | 23                          | *           | *                    | 0.02                        | 0.7    |  |
|                              | @ 50                 | °F & 4K | 0.119                          | *            | 0.200                      | 1.1       | 4.4                                       | 0.04       | 0.4       | , (    | 0.3              | 36                          | *           | *                    | *                           | *      |  |
| @ 20                         | [g/mi]<br>°F &       | L!      | = @ 4K (SUL<br>EV) or 50K (T   | ier 1, TLEV) | NMHC+NC<br>(compo          |           | CO [g/mi] NMHC+N<br>composite) [g/mi] [US |            |           |        |                  | NMHC+NOx<br>[g/mi] [SC03]   |             | CO [g/mi]<br>[SC03]  |                             |        |  |
| 50                           | 50K                  |         | = @ UL (Tier                   | 1, TLEV)     | CERT                       | STD       | CERT                                      | STD        | CERT      | STD    | CER              | T STD                       | CERT        | STD                  | CERT                        | STD    |  |
| CERT                         | 8.0                  | 1 表 数   |                                | SFTP 1       | *                          | *         | *   | *          | 0.07      | 0.25   | 8.2              | 10.5                        | 0.04        | 0.27                 | 0.4                         | 3.5    |  |
| STD                          | 12.5                 |         |                                | SFTP 2       | *                          | *         | *   | *          | *         | •      | *                | *                           | •           | *                    |                             |        |  |
| @ UL                         | EVAPORATIVE FAMILY 1 |         |                                |              | EVAPORATIVE FAMILY 2 EVAPO |           |   |            |           | PORATI | DRATIVE FAMILY 3 |                             |             | EVAPORATIVE FAMILY 4 |                             |        |  |
|                              | 3-D                  | 2-[     | RL.                            | ORVR         | 3-D                        | 2-D       | RL  | ORVR       | 3-D       | 2-D    | RL               | ORVR                        |             | 2-D                  | RL                          | ORVR   |  |
| CERT                         | 0.7                  | 0.8     | 0.001                          | 0.04         | *                          | *         | •   | •          | *         | *      | *                | *                           | + +         | +                    | *                           | *      |  |
| STD                          | 2.0                  | 2.5     | 0.05                           | 0.20         | *                          | *         | *   | *          | *         | *      |                  | *                           | *           | +                    | +                           | *      |  |

BE IT FURTHER RESOLVED: That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.1 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations. The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this \_\_\_\_\_\_ day of July 2002.

Aller Lyons, Chief

Mobile Source Operations Division