

such vehicles be tested via on-board diagnostic systems checks instead of the two speed idle test. For the State I/M program, "light-duty vehicles" refers to passenger cars and trucks up to 8,500 pounds GVWR; "heavy-duty vehicles" refers to trucks which have a GVWR of 8,500 pounds or more. The network is decentralized and includes both test-and-repair and test-only stations. All 304 stations are privately owned stations, 96 of which are test-only stations.

2. Exhaust Standards for CO and Hydrocarbons (HC)

Standards for exhaust emission testing are specified in 40 CFR part 85, subpart W. Consistent with those standards, the State I/M program establishes, for those vehicles that are subject to emissions testing, maximum exhaust emissions for MY 1981 and newer vehicles of 1.2% for CO and 220 ppm for HC. For older light-duty vehicles (MY 1968 through 1980), maximum CO (%) and HC (ppm) range from 4.0%–2.0% and 800 ppm–500 ppm, respectively. The standards for heavy-duty gasoline-powered trucks MY 1981 and newer are 3.5% for CO and 1000 ppm for HC; for older heavy-duty vehicles (MY 1968 through 1980), maximum CO (%) and HC (ppm) range from 7.0%–4.0% and 1,400 ppm–1,000 ppm, respectively. As stated previously, all light-duty motor vehicles MY 1996 and newer are subject to on-board diagnostic system checks.

Diesel vehicles are tested under separate requirements, and the requirements that relate to diesel vehicles are not being approved into the SIP.

3. Geographic Coverage

EPA's I/M regulations require that state I/M programs be implemented in the entire urbanized area, based on the 1990 census. See 40 CFR 51.350. The designation for the low enhanced I/M areas are the boundaries of Hydrographic Basin 212, as established by the State Engineer, and the city limits of Boulder City.

4. Vehicle Coverage

The performance standard for low enhanced I/M programs assumes coverage of all MY 1968 and later light-duty vehicles and trucks up to 8,500 pounds GVWR. Other levels of coverage may be approved if the necessary emission reductions are achieved. See 40 CFR 51.356.

As mentioned above, the Nevada low enhanced I/M program applies to light-duty, gasoline-powered vehicles up to 8,500 pounds GVWR, and heavy-duty,

gasoline-powered vehicles within the CO nonattainment area of Clark County and Boulder City. While still subject to annual vehicle registration requirements, new vehicles are exempt from emissions inspections under the Nevada I/M program until the third registration cycle. Subsequent annual registration or re-registration will require proof of compliance with emission testing. Vehicles MY 1967 and older, and motorcycles are also exempt from the I/M testing. The two-year exemption of newer model year vehicles from emissions testing results in a relatively small loss in emission benefit since newer vehicles are generally anticipated to be cleaner than older vehicles. Furthermore, recent data suggest that newer vehicles stay cleaner longer due to the slower rate of emission control system deterioration.

The federal regulations also require basic and enhanced I/M programs to include inspection of all 1996 and later motor vehicles equipped with on-board diagnostic (OBD) systems. EPA has required that I/M programs begin OBD checks on January 1, 2002 (OBD mandatory start-up dates were delayed for one year). See 40 CFR 51.373. OBD consists of a computer which performs checks of a number of different vehicle systems for malfunctions or deterioration which could result in the vehicle exceeding its emissions standards and a malfunction indicator light which is required to be illuminated when the system detects a problem.

Some inspection stations in Las Vegas began OBD testing MY 1996 and newer OBD-equipped light-duty vehicles in February 2002 using the NV2000 analyzer (Nevada's previous I/M emissions analyzer, referred to as the "Nevada 94" analyzer, was not programmed to conduct OBD testing). By May 1, 2002, all inspection stations in Las Vegas Valley were conducting OBD tests for MY 1996 and newer OBD-equipped vehicles. Vehicles which receive an OBD inspection do not receive a two speed idle tailpipe test.

5. Emission Control Device Inspections

The low enhanced I/M performance standard assumes visual inspection of the positive crankcase ventilation valve on all 1968 through 1971 MY vehicles, inclusive, and of the exhaust gas recirculation valve on all 1972 and newer MY vehicles. Nevada's program requires visual inspection of the presence of a properly installed gas cap on all gasoline-powered vehicles MY 1968 through 1980, and on heavy-duty gasoline-powered MY 1968 and newer. For light-duty, gasoline-powered vehicles MY 1981 through 1995 vehicles

visual inspections include: (1) Determining the presence of an exhaust gas recirculation valve, (2) examining the catalytic converter, air injection system and fuel inlet restrictor; and (3) determining whether that equipment appears to be operating in accordance with the specifications of the manufacturer of the vehicle.

6. On-Road Testing

EPA regulations require on-road testing in enhanced I/M programs; on-road testing is optional for basic I/M programs. The on-road testing requirement may be met by measuring on-road emissions through the use of remote sensing devices or through roadside pullovers including tailpipe or evaporative emission testing or a check of the OBD system. The federal regulations require on-road testing to evaluate annually the emission performance of 0.5% of the subject fleet statewide or 20,000 vehicles, whichever is less, per inspection cycle. See 40 CFR 51.371.

Nevada's legal authority for on-road testing was adopted by its Legislature in Senate Bill 570, which was signed into law by the Governor on July 5, 1995. This legislation added a new section to Chapter 445B of the Nevada Revised Statutes (NRS) providing authority to implement a remote sensing program as part of the vehicle I/M program (*i.e.*, NRS 445B.798). In the June 2002 SIP Submittal, Nevada submitted a copy of the executed contract between the State and MD Laser Tech for on-road testing services, effective through June 30, 2003. DMV has contracted with MCI Worldcom to develop and maintain the vehicle information emission database (VID). The MCI Worldcom VID communicates with the DMV registration database. All emission test results are transmitted from the vehicle information emission database to the DMV's registration database. The MCI Worldcom system (VID) also maintains the licensee and administrative programs which are used to identify emission stations and produce program statistical reports. On-road testing is located in the administrative program which can be used to store statistical records for vehicles tested through this process. Letters can also be generated to vehicle owners when regulatory action is determined to be proper. The MD Laser Tech contract calls for the contractor to perform remote sensing of motor vehicle exhaust emissions for a specified time period at specified locations within Clark County. The primary operational objective is to obtain information concerning gross emitting vehicles and use this