

REVISIONS TO THE STATE IMPLEMENTATION PLAN (SIP)  
FOR THE CONTROL OF OZONE AIR POLLUTION

INSPECTION/MAINTENANCE SIP FOR DALLAS/FORT WORTH,  
EL PASO, AND HOUSTON/GALVESTON  
OZONE NONATTAINMENT AREAS

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION  
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L Texas Natural Resource Conservation Commission and Texas Department of Public Safety  
“Memorandum of Understanding”, dated December 13, 1996. (New.)

## B. OZONE CONTROL STRATEGY

1. - 7. (No change.)

8. SIP REVISIONS FOR MOBILE SOURCES (Revised.)

a. Vehicle Inspection and Maintenance (I/M) Program (Revised.)

1) - 3) (No change.)

4) Network Type and Program Evaluation (Revised)

a) Network Type

The State of Texas has chosen to implement a Motorist's Choice I/M network in the core I/M program area. This program will allow motorists a choice of test and repair or test-only facilities that offers either an annual, two-speed idle test or a biennial, loaded-mode test. The test-only facilities may offer other services for the convenience of their customers, such as oil changes, oil filter, or safety-related items. A motorist may select a test-and-repair facility that offers either an annual, two-speed idle test or a biennial, loaded-mode test. These facilities may offer a wide range of repairs and services for the convenience of their customers. The commission will monitor test results by facility type. Program evaluation will be conducted using EPA's definition of test-only facilities, i.e., those that do not perform oil changes. This will allow motorists a choice of testing facilities offering a variety of services. There will be no difference in test fees based on facility type. The commission has developed

an innovative program design which allows motorists to choose either an annual (idle test) or biennial (loaded test) subject to availability.

Vehicles are subject to an emissions test as a result of failing a remote sensing test. DPS currently does not have the desired authority to enforce remote sensing. However, authority may be granted by future legislation.

b) National Highway System Designation Act of 1995 (NHSDA) Good Faith Estimates

The commission is claiming full credit for the vehicle emissions testing program described in this revision to the State Implementation Plan (SIP). NHSDA allows states to design and implement vehicle emissions testing programs that have test-and-repair components that do not receive an automatic 50 percent (or greater) discount. Previously, EPA had assumed that decentralized vehicle emissions testing programs (allowing test-and-repair to be done at the same location) were not as effective in reducing pollution from vehicles. The MOBILE model developed by EPA reduced the credits available for test-and-repair programs by 50 percent.

Based upon recent data collected by Radian Corporation, a gas cap integrity test should receive credit equivalent to the intrusive full pressure test estimated by MOBILE5a. Data from the Maine, Delaware, and Ontario, Canada I/M Programs shows that the failure rates from the full pressure tests were more than twice the MOBILE5a assumed failure rate and that failure rates for the purge test were much lower than the pressure test. The data also indicated that the gas cap integrity check (non-intrusive pressure test) fails approximately 5 percent of the vehicles while accounting for at least half of the pressure test

failures. In Maine's I/M Program, the overall failure rate for the purge test was 2.3 percent, while 6.4 percent failed the pressure test. In the Ontario pilot program, only 1.4 percent of the vehicles failed the purge test and 10 percent of the vehicles failed the pressure test. Delaware's pilot pressure test program indicates that half of the vehicles that failed the pressure test (approximately 5 percent of the vehicles tested), fail because of a leaking gas cap. Benefits for the pressure test should be twice as high as the current MOBILE model indicates. Therefore, the commission is adjusting the credit downwards for the intrusive MOBILE5a full pressure test by half and is accounting for the 50 percent pressure test failures identified by the gas cap integrity check. When these issues are taken into account, the gas cap integrity check would appear to be equivalent to the full pressure test.

NHSDA requires EPA to grant interim approval if good faith estimates of credits are made. The commission commits to implement the following program enhancements:

(1) Target high-emitting vehicles for testing - vehicles that fail a remote sensing scan shall be required to submit to an out-of-cycle inspection in Dallas, Tarrant, or Harris Counties.

(2) Centralized on-line data communications system that shall assist in the prevention of "shopping around" for vehicle emissions tests.

(3) Extensive data analysis for anomalies.

The commission commits to developing an acceptable evaluation of the I/M program to meet the NHSDA requirements.

c) Program Evaluation

The commission shall institute a continuous, ongoing evaluation of the I/M program consistent with EPA requirements to quantify the emissions reduction benefits for the Texas Motorist's Choice Program.

The commission also commits to reporting the results of the evaluation to EPA on a biennial basis. The initial report will be submitted to EPA by January 1, 1999. The evaluation shall consist of at least the following:

(1) surveys that assess the effectiveness of repairs performed on vehicles that failed the tail pipe emissions test and the gas cap integrity test;

(2) measurement of tampering rates, their change over time, and the change attributable to finding and fixing such tampering as opposed to deterrence effects; and

(3) results of undercover surveys of inspector effectiveness as it relates to identifying vehicles that need repair.

The program shall evaluate a random sample of mass emissions test data of at least 0.1% of subject vehicles as required in 40CFR51.353(c). That sample shall be required to receive a DPS-administered or monitored exhaust gas test and gas cap integrity test. Such vehicles shall receive a state administered or monitored IM240 mass emission test or equivalent at the time the initial test is due as required in 40CFR51.353(c)(3).

The special testing shall take place at the time that the vehicle is scheduled to have an initial inspection, prior to any repair. A computer generated random number may be used to select testing locations for the vehicle emissions test. Special testing shall also be conducted on vehicles that have been inspected as a part of the I/M program. The commission shall then evaluate the data by model year and vehicle type to determine program effectiveness. A contractor(s) may be utilized to assist in collecting, reviewing, or evaluating program data.

The inspection data that is collected shall be submitted to EPA and used by the commission to calculate local fleet emissions factors, to assess the effectiveness of the I/M program, and to determine if the performance standard is being met.

DPS shall conduct testing, and the commission shall provide data, for the biennial evaluation program. Resources and personnel for the evaluation of the I/M program are described in previous subsections.

#### 5) Test Frequency and Convenience (Revised)

##### a) Test Frequency

An annual or biennial emissions inspection shall be required for all subject gasoline powered motor vehicles that are between two and twenty-four years old. Subject vehicles in Dallas, Tarrant, and Harris Counties shall have the choice of testing on an annual basis utilizing TX96 equipment, or on a biennial basis utilizing a loaded mode test type. Subject vehicles in El Paso County shall test on an annual basis utilizing TX96 gas analyzers. Modeling runs show that emission targets are achieved under this program type.

Vehicle emissions testing shall be performed as an integrated part of the annual safety inspection.

Vehicle owners choosing to have vehicles tested by a loaded emissions test on a biennial basis shall present the vehicle for an emissions test as part of the vehicle inspection every other year. The vehicle inspection certificate shall differentiate between vehicles receiving an annual emissions test and those receiving a biennial emissions test. The safety certificate remains with a vehicle upon resale; therefore, the testing cycle may not change. The license plate may also remain with the vehicle. Therefore, the registration cycle may not change.

An initial vehicle emissions test will be given to each vehicle presented for inspection and a test fee will be charged to the motorist. If the vehicle passes the inspection, an inspection certificate will be issued. Should the initial vehicle emissions test result in a failure, then after repairs have been made, the motorist's vehicle may be reinspected at the same facility for no charge if the test is within 15 days after the initial test was conducted. The motorist may also choose to go to a different facility for reinspection if repairs have been made and annotated on the Vehicle Repair Form (VRF). The motorist will be charged the full price of an inspection. An inspection certificate will be not be issued until after successful completion of the reinspection. If after the fifteenth day, the motorist returns to the same facility for reinspection or any other facility for reinspection, a full test fee will be charged to the motorist. Repair information is required for all vehicles presented for retest after a failure.

At least 10% of the vehicle population located within the entire program area is targeted to be subject to remote sensing. Failing vehicles shall be required to have an emissions test within 30 days of notification. Approximately one percent of the overall vehicle population is expected to fail follow-up verification emissions tests after having been identified as being high-emitters through remote sensing.

Vehicle inspection stations shall test any subject vehicle presented for a test during the facility's operating hours. Vehicle inspection stations shall perform vehicle inspections at least eight hours per day, five days per week, for a minimum of 40 hours per week as discussed in Appendix J of the June 1996 submittal. Enforcement of the vehicle inspection program is further discussed in Section 11, regarding motorist compliance enforcement.

b) Testing Convenience

The Texas I/M program utilizes existing, local businesses for the performance of emissions testing. It is anticipated that over 2,000 facilities will elect to participate in the I/M program. Many of the same facilities that are currently performing idle emissions tests in Dallas, Tarrant, and El Paso Counties are expected to upgrade their equipment in order to continue to participate in the new I/M program. This element of the Texas I/M Program supplies the greatest amount of testing convenience for the motorist; as motorists in Dallas, Tarrant, and El Paso Counties will be able to have emissions tests performed on their vehicles at the same facilities that they have been accustomed to utilizing.

In Harris County, many facilities currently performing vehicle inspections, repair, and/or maintenance, are expected to elect to participate in the I/M program by purchasing and/or leasing emissions testing equipment. Since these facilities are already established in vehicle inspections, repair, and/or maintenance, Harris County residents are already familiar with their locations. This element of recognition will aid in the convenience of implementing emissions testing in Harris County.

Vehicles registered and primarily operated in the core I/M program area shall be required to have an emissions test as part of their safety inspection. Subject vehicles shall have the choice of testing on an

annual basis at a facility utilizing TX96 equipment, or on a biennial basis at a facility utilizing a loaded test type. Incorporating the emissions test with the safety inspection is an added convenience for the motorist, as it alleviates the need for separate tests. Implementation of test frequency issues are detailed in 30 TAC §114.3.

6) - 10) (No change.)

#### 11) Motorist Compliance Enforcement (Revised)

Compliance shall be ensured through a sticker-based enforcement system with additional enhancements, such as comparing the registration data base with the inspection data base and some elements of registration denial. The program being proposed will achieve a compliance rate of 96 percent. Results from a safety inspection compliance survey in Dallas, Tarrant, Harris and El Paso Counties indicates a 95 percent compliance without the additional program enhancements. Results are located in Appendix K of the June 1996 submittal.

The safety inspection program utilizes a windshield certificate indicating the subject vehicle is in compliance with the emissions testing program. In the future, the license plate “tab” indicating current renewal will have a special identification for core counties. Law enforcement officials will be able to visually compare the county of registration and the county of inspection.

Inspection certificates have a state seal, a unique number, and tear when removed. Additional security features have been added, which have not been utilized by counterfeiters. The Gas Analyzer Specifications (Appendix G of the June 1996 submittal) and the vehicle identification data base (VID)

will assist the Texas Department of Public Safety (DPS) in tracking inspection certificate numbers. DPS may continue to change the inspection certificate to prevent counterfeiting.

In addition to these requirements, the commission will compare the registration data base and the inspection data base. Letters may be sent to registered owners of vehicles that meet the “subject” criteria and (1) register in a core area without a vehicle emissions inspection; (2) fail an initial inspection and do not appear for a retest and subsequently register out of the county; or (3) make changes to the registration data base which would change testing criteria - changing fuel types or weight classification. Legislation is needed to bar re-registration of vehicles that fail to respond to required testing.

Motorists shall be issued citations by local and state law enforcement officials for driving a vehicle with an expired or invalid state inspection certificate. These violations of the Texas Transportation Code, Sections 548.602 and 548.603 are punishable by a fine of up to \$200 for each occurrence. Every time the vehicle is driven, the owner shall be subject to an additional citation. Violators shall be given notification that they must comply with the I/M program requirements. Noncompliance shall result in delivery of additional citations and fines which may accumulate to more than the expense of a minimum expenditure waiver. Continual noncompliance shall result in denial of re-registration dependent upon legislative approval.

Fines for motorists involved in bribery or fraud are substantially higher, and may result in incarceration. Motorists charged with obtaining an inspection certificate in a neighboring county to avoid the emissions portion of the inspection may be charged with willful purchase

of a fraudulent inspection certificate. Pursuant to Texas Transportation Code, Section 548.603, this is a Class C misdemeanor.

A comparison of the Texas Department of Transportation (TxDOT) registration data base and the VID shall be used to identify subject vehicles that are registered in the core I/M program area but have failed to comply with the I/M program. Those vehicles shall be flagged in the TxDOT registration data base, and, after legislation, shall be denied re-registration until the vehicle has complied with I/M program requirements.

The commission shall use vehicle identification number decoder software to search for vehicles that have changed their fuel type designation from “gasoline” to “diesel” on their vehicle registration record to escape emissions testing requirements. In addition, records that have had the fuel type designation changed shall be flagged in the VID. The commission shall analyze this data for abuse.

Owners of subject gasoline powered vehicles twenty-four years old or less, which are identified as failing the emissions standards set for remote sensing, shall be required to comply with the vehicle emissions testing requirements of the core program area. Registered owners shall be given notification that they must submit their vehicle for emissions testing within 30 days. Noncompliance shall result in delivery of citations, and continual noncompliance shall result in denial of re-registration dependent upon legislative approval.

The ultimate enforcement shall be denial of vehicle re-registration for those vehicles registered in the core I/M program area that do not comply with vehicle testing requirements. DPS has the authority to

issue misdemeanor citations to motorist operating a vehicle in violation of Chapter 548, Texas Transportation Code, which includes emission related inspections.

12) - 23) (No change.)

b. - c. (No change.)

9. - 14. (No change.)

## APPENDIX L

Texas Natural Resource Conservation Commission and Texas Department of Public Safety

“Memorandum of Understanding,” dated December 13, 1996. (New.)