

The Texas Natural Resource Conservation Commission (commission) adopts amendments to §114.2 (Inspection and Maintenance (I/M) Definitions); §114.50 (Vehicle Emissions Inspection Requirements), §114.51 (Equipment Evaluation Procedures for Vehicle Exhaust Gas Analyzers), §114.52 (Waivers and Extensions for Inspection Requirements), and §114.53 (Inspection and Maintenance Fees). The commission adopts these revisions to Chapter 114 (Control of Air Pollution from Motor Vehicles), and to the State Implementation Plan (SIP) in order to control ground-level ozone in the Dallas/Fort Worth (DFW), Houston/Galveston (HGA), and El Paso (ELP) ozone nonattainment areas. Sections 114.2, 114.50, 114.51, and 114.53 are adopted with changes to the proposed text as published in the December 31, 1999 issue of the *Texas Register* (24 TexReg 11905). Section 114.52 is adopted without changes to the proposed text and will not be republished.

The adopted amendments are one element of the DFW Attainment Demonstration SIP. The purpose of these adopted rules is to establish a vehicle emissions testing program as part of the control strategy to reduce emissions of oxides of nitrogen (NO_x) and other pollutants necessary for the counties included in the DFW nonattainment area to be able to demonstrate attainment with the national ambient air quality standard (NAAQS) for ozone.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

The DFW ozone nonattainment area, an area defined by Collin, Dallas, Denton, and Tarrant Counties, was originally designated “moderate” under the Federal Clean Air Act (FCAA) Amendments of 1990 (42 United States Code (USC)) and thus was required to attain the one-hour NAAQS for ozone by November 15, 1996. As required by the FCAA, the state submitted an attainment demonstration plan

in 1994 which projected attainment of the ozone NAAQS by 1996. This plan was based on a volatile organic compound (VOC) reduction strategy. DFW did not attain the ozone NAAQS in 1996. The United States Environmental Protection Agency (EPA) is authorized to redesignate an area to the next higher classification (“bump up”) if the area fails to attain by the required date. In March 1998, in accordance with 42 USC, §7511(b)(2), the EPA reclassified the DFW area from moderate to serious, based on monitored exceedances of the ozone NAAQS between 1994 and 1996. The reclassification required the state to submit a revised SIP that demonstrates that the ozone NAAQS will be met in DFW by November 15, 1999. Because the DFW area continued to exceed the ozone NAAQS in 1999, the EPA may bump up the area to the severe classification. Regardless, the EPA and 42 USC, §7410 and §7502(a)(2), require the state to submit a revised SIP which demonstrates that the area will attain the ozone NAAQS as expeditiously as practicable. The rules adopted for DFW in this notice are one element of the ozone attainment demonstration SIP for DFW being adopted concurrently in this issue of the *Texas Register*. The commission plans to submit this SIP to the EPA in April, 2000.

In 1996, the commission began to develop new modeling for the DFW area and now is using newer air quality models with improved meteorological and emission inputs. The newer modeling since 1996 shows that reductions of NO_x in the DFW area and regionally will be necessary to attain the ozone NAAQS. The current modeling also shows that achieving the ozone NAAQS in the DFW area will require strenuous effort because the area’s rapid growth has resulted in increasing amounts of emissions due to increased levels of activity in the area. The emissions from increased activity are offsetting the emission reductions being achieved from new emission standards applicable to the on-road and non-road engine source categories which dominate the emissions inventory in the DFW area.

The emission reduction requirements adopted as part of this SIP package are the outcome of a development process which involved the EPA, the commission, local elected officials, citizens, industrial stakeholders, air quality researchers, and hired consultants. Local officials from the DFW area have formally submitted a resolution to the commission requesting the inclusion of many specific emission reduction strategies, including the one contained in these rules.

The NO_x reductions required for the area to attain the ozone NAAQS have been estimated by extensive use of sophisticated air quality grid modeling which, because of its scientific and statutory grounding, is the chief policy tool for designing emission reductions. Title 42 USC, §7511a(c)(2), requires the use of photochemical grid modeling for ozone nonattainment areas designated serious, severe, or extreme.

The modeling has been conducted with input from a technical advisory committee. Hundreds of emission control strategies were considered in developing the modeling. Varying degrees of reductions from point sources and mobile sources were analyzed in at least forty modeling iterations, to test the effectiveness of different NO_x reductions. The attainment demonstration modeling submitted for public hearing and comment concurrently with these rules shows that, in order for DFW to achieve the ozone NAAQS by 2007, almost all of the practicably achievable NO_x reductions are necessary from each emission source category, including reductions from counties surrounding the DFW nonattainment area. Therefore, each strategy, including the reductions required by this rulemaking, is crucial to meet federal requirements for the DFW nonattainment area.

The North Texas Clean Air Steering Committee (steering committee) representing the DFW ozone nonattainment area counties requested an air pollution control strategy involving emissions testing of

vehicles to reduce NO_x and other emissions necessary for the counties included in the DFW nonattainment area to be able to demonstrate attainment with the ozone NAAQS. These amendments are one element of the control strategy for the proposed DFW Attainment Demonstration SIP.

At the request of the steering committee as well as certain counties surrounding the DFW nonattainment area, the commission is adopting an air control strategy for NO_x reductions which requires emissions testing of motor vehicles that are registered and primarily operated in the DFW area. The testing would utilize on-board diagnostic (OBD) technology and acceleration simulation mode (ASM-2), or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA. Modeling, performed for the steering committee assessing the benefits of this NO_x emissions reduction strategy, demonstrated that significant emissions reductions could be achieved from implementing a vehicle emissions testing, i.e., I/M program. This I/M program was modeled to cover nine counties in the DFW area.

In its effort to ensure that the SIP strategies impose no more burden than necessary to protect health and welfare, the commission decided not to include the counties of Hunt, Hood, and Henderson as affected counties of these rules due to their limited impact on the air quality within the DFW nonattainment area. Due to the relatively low population, percentage of commuters, and growth rate of these counties the commission has reevaluated the need for implementing this rule in these three counties. The reevaluation included new photochemical modeling runs which applied these rules in the nine remaining counties only. The results of these runs indicated a minor impact of including Hunt, Hood, and Henderson counties in this rule but also showed that the area could demonstrate attainment of the

NAAQS without those reductions in emissions. Additionally, these three counties have not submitted resolutions requesting inclusion in the I/M program. However, other control measures which were proposed for these counties do have measurable benefits for attainment of the NAAQS.

These amendments will modify the vehicle emissions testing program by implementing ASM-2 testing, or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA, in nine counties of the DFW area. Unlike the current two-speed idle (TSI) test, ASM-2 technology has the ability to detect NO_x emissions. Because NO_x is a precursor to ground-level ozone formation, reduced NO_x and VOC emissions will result in ground-level ozone reduction.

The rule amendments addressed in this rule change include: adding counties opting into the I/M program; changing the testing technology to ASM-2, or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA, in the DFW program area; an update to the minimum expenditure waiver; increase to the emissions inspection fee; incorporation of new technical specifications for emissions test equipment (TSI and ASM-2) by reference; new requirements regarding the servicing and maintenance of emissions test equipment; and the addition of OBD testing requirements to go into effect by January 1, 2001. In addition, the rule and SIP revisions deleted outdated language throughout Subchapter C.

The amendments detail vehicle emissions inspection and maintenance requirements in counties not subject to a specific federal I/M requirement (Ellis, Johnson, Kaufman, Parker, and Rockwall Counties)

in response to resolutions submitted to the commission by each individual county and the most populous municipality within each county.

EPA stated that before SIP measures could be determined complete the state must have underlying legal authority to implement the rules. Texas statutes mandate that Texas must receive resolutions requesting inclusion in the program from each county and municipality not specifically subject to a federal requirement. All comments regarding opt-in will be addressed in the ANALYSIS OF TESTIMONY section of this preamble.

The revisions establish an I/M program utilizing ASM-2 vehicle emissions testing equipment or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA beginning May 1, 2002, in Dallas, Denton, Collin, and Tarrant Counties, and beginning May 1, 2003, in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties. The commission solicited comments on implementing the ASM-2 and OBD testing program on January 1, 2002, in the surrounding eight-county attainment area. This phase-in approach may make for a smoother implementation of the proposed I/M program while still providing significant air quality improvements. These revisions will also require as of January 1, 2001, an OBD check of all 1996 and newer model year vehicles subject to the I/M program at that time. The I/M program being adopted involving ASM-2 testing of vehicles, or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA, will reduce NO_x and other emissions necessary for the counties included in the DFW nonattainment area to be able to demonstrate attainment with the ozone NAAQS. In addition, the inclusion of OBD in the I/M program satisfies a federal mandate. These amendments

to the rules and SIP were in response to a request from the steering committee representing the DFW ozone nonattainment area counties for an air pollution control strategy involving emissions testing of vehicles, EPA regulations in Title 40 Code of Federal Regulations (CFR) Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans), Subpart S (Inspection/Maintenance Program Requirements), and the FCAA (42 USC, §§7401, et seq.) as amended on November 15, 1990.

The commission received no comments in response to implementing ASM-2 and OBD testing in the surrounding eight-county attainment areas beginning January 1, 2002.

The commission solicited comments regarding conducting OBD-only vehicle emissions testing for 1996 and newer vehicles in the counties surrounding the DFW ozone nonattainment area (Ellis, Henderson, Hood, Hunt, Johnson, Kaufman, Parker, and Rockwall Counties) should they collectively or individually submit a resolution requesting such a program. This would eliminate the ASM-2 requirements in those counties upon adoption.

The commission received six comments in response to conducting OBD-only vehicle emissions testing on 1996 and newer vehicles in those counties surrounding the DFW ozone nonattainment area. All comments are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

The commission solicited comments on raising the minimum expenditure waiver amount from \$450, adjusted by the Consumer Price Index (CPI), to an amount of \$750 if the steering committee in the

local program area can establish a repair assistance program to provide financial assistance to qualifying motorists.

The commission received no comments on raising the minimum expenditure waiver amount from \$450 to \$750. However, the commission did receive four comments in response to raising the minimum expenditure waiver amount to \$450, adjusted by the Consumer Price Index (CPI). All comments are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

The commission also solicited comments on establishing a market-driven vehicle emissions test fee instead of a set fee for the I/M Program areas upon adoption.

The commission received six comments in response to market-driven fees. All comments are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

SECTION BY SECTION DISCUSSION

Section 114.2 incorporates numerous editorial changes to ensure that the definitions are consistent with the guiding principles and policies of the commission, and are consistent in format, style, and tone per commission guidelines. New and amended definitions are renumbered to be consistent with *Texas Register* rules, as published in the February 13, 1998 issue (23 TexReg 1289). Several new definitions, modifications to existing definitions, and deletion of existing definitions are adopted in §114.2 to define terms specific to the state I/M program. These new definitions include “acceleration simulation mode (ASM-2) test,” “Consumer Price Index,” and “on-board diagnostic (OBD) system.” Modified

definitions include “on-road test,” “primarily operated,” “program area,” and “testing cycle.” The definition for “program area” was modified to include the DFW program area to which are added Denton and Collin Counties, adding the ELP program area, the HGA program area, and a new definition was added for the “extended Dallas Fort Worth Program (EDFW) area.” Finally, five definitions were deleted because they were no longer necessary. These deleted definitions include “adjusted annually,” “basic program area,” “core program area,” “emissions tune-up,” and “enhanced program area.”

Revisions to Subchapter C incorporate numerous editorial changes to ensure the language is consistent with the guiding principles and policies of the commission, and is consistent in format, style, and tone per commission guidelines. Revisions to specific sections in Subchapter C are discussed in the following paragraphs.

Amendments to §114.50 establish revised program requirements for the state I/M program for vehicle testing and inspection. The amendments to the program concern the applicability, the control requirements, the frequency of testing, the recognized emissions repair technicians requirements, and the certified emissions inspection station requirements.

Subsection 114.50(a) is amended by adding some vehicle classes to be excluded from the program. For the DFW, ELP, and HGA areas, the inspection frequency option for biennial testing is deleted.

Subsection (a) is further modified by deleting paragraphs (1), (2), and (3) concerning testing cycles and previous program start-up dates in Dallas, Tarrant, Harris, and El Paso Counties and by adding new

paragraphs (1) - (5) for clarification of program areas, model year vehicles to be tested, types of equipment to be utilized, and implementation dates. New paragraph (1) defines model year vehicles to be tested using only the current TSI test in Dallas, Tarrant, El Paso, and Harris Counties through December 31, 2000. Paragraph (2) applies to all vehicles registered and primarily operated in the DFW program area. Paragraph (2)(A) defines model year vehicles to be tested using OBD and TSI test equipment beginning January 1, 2001. Paragraph (2)(B) defines model year vehicles to be tested using TSI beginning January 1, 2001, and clarifies that testing stations must offer both OBD and TSI test. Paragraph (2)(C) defines model year vehicles to be tested using OBD in conjunction with ASM-2 test equipment, or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA, instead of the TSI test, beginning May 1, 2002. Paragraph (2)(D) defines model year vehicles to be tested using ASM-2, or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA, instead of the TSI test, beginning May 1, 2002 and clarifies that testing stations must offer both OBD and ASM-2 test. Paragraph (3) applies to all vehicles registered and primarily operated in the EDFW program area. Paragraph (3)(A) defines model year vehicles to be tested using OBD and ASM-2 test equipment, or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA, beginning May 1, 2003. Paragraph (3)(B) defines model year vehicles to be tested using ASM-2, or a vehicle emissions testing program that meets SIP emissions reduction requirements and is approved by EPA, beginning May 1, 2003. Paragraph (3)(B) also clarifies that testing stations must offer both OBD and ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by EPA. Paragraph (4) applies to all vehicles registered and primarily operated in Harris county of the HGA program area. Paragraph (4)(A) defines model year vehicles to be tested using OBD in conjunction

with TSI test equipment beginning January 1, 2001. Paragraph (4)(B) defines model year vehicles to be tested using a TSI test beginning January 1, 2001 and clarifies that testing stations must offer both OBD and TSI tests. Paragraph (5) applies to all vehicles registered and primarily operated in El Paso County. Paragraph (5)(A) defines model year vehicles to be tested using OBD in conjunction with TSI test equipment beginning January 1, 2001. Paragraph (5)(B) defines model year vehicles to be tested using TSI beginning January 1, 2001, and clarifies that testing stations must offer both OBD and TSI tests.

Section 114.50(b) specifies control requirements for motorists, state and governmental entities, and certain federal employees. The affected vehicles are required to comply with the air pollution emissions control related requirements included in the annual vehicle safety inspection administered by the Department of Public Safety (DPS), the vehicle emissions inspection and maintenance requirements contained in the revised Texas I/M SIP, and the on-road emissions test requirements. Paragraph (1) is amended by incorporating editorial changes; deletion of paragraph (2) which is incorporated into paragraph (1); addition of new paragraph (2) concerning certifying federal vehicles; addition of “or appointed designee,” after executive director; addition of EDFW program area in paragraphs (1), (3), and (6); and renumbering of the subsection. Paragraph (6)(B) is amended by adding a period after SIP, and deleting “within 60 days of written notice by the DPS.”

In order to maximize NO_x emissions reductions, the biennial testing requirements in §114.50(d) are deleted to put the I/M inspection cycle on an annual basis. Section 114.50(e) is renumbered to §114.50(d). New subsection (e)(3) is amended by deleting “revised Texas I/M SIP” and adding “Texas

Transportation Code, Sections §§548.401 - 548.404.” This subsection also establishes that inspection stations and repair technicians in the program must be designated by the DPS.

Subsection (f), Requirements for Recognized Emissions Repair Technician of Texas, and subsection (g), Certified Emissions Inspection Station Requirements, are deleted because the requirements of both subsections are contained in DPS rules found in 37 TAC §23.93.

Section §114.51 is amended to update the equipment evaluation procedures for vehicle emissions test equipment. This section currently specifies application, certification, maintenance, and service requirements for manufacturers or distributors of vehicle emissions testing equipment seeking approval of an exhaust gas analyzer or analyzer system for use in the Texas I/M program. Section 114.51(a) previously specified a date of April 26, 1996 for the exhaust analyzer technical specifications known as “Specifications for Preconditioned Two Speed Idle Vehicle Exhaust Gas Analyzer Systems for use in the Texas Vehicle Emissions Testing Program.” In order to incorporate new and updated specifications into the program, the rule amendment specifies a date of March 15, 2000 for both the TSI exhaust analyzer technical specifications, and the “Specifications for Acceleration Simulation Mode Vehicle Exhaust Gas Analyzer System for use in the Texas Vehicle Emissions Testing Program.” This subsection will also require manufacturers to resubmit certification to the commission stating that their existing units meet the requirements of the new specifications. Subsection (a) has been updated to reflect the new date for both TSI and ASM-2 specifications as March 15, 2000.

Section 114.51(e) requires applicants to comply with all special provisions and conditions in the notice of approval and notifies applicants of enforcement consequences for misrepresentation or compliance failure. The amendments to §114.51(e), add paragraph (3) that clarifies the analyzer service requirements for analyzer manufacturers by adding a two-day response time (excluding weekends and holidays) to the rule. This has always been a requirement in the specifications; however, in order to highlight the provision, the commission is adding it to the rule language. Paragraphs (5) and (6) were also added to make clear the on-going service and update requirements for manufacturers. Subsection (f) is deleted because the 1996 start-up date has already passed.

Section 114.52 previously specified two types of waivers and time extensions, along with the associated qualification criteria. Subsection (b)(1)(A) is amended to read that the minimum expenditure waiver amount in any affected county shall be at least \$450 or that amount as adjusted by the CPI. Previously, Dallas and Tarrant Counties had a lower minimum expenditure because the area was classified as a moderate area. However, because the DFW nonattainment area was reclassified as a serious area, the minimum expenditure must be increased to \$450 as adjusted by the CPI. Additionally this language will allow the executive director to adjust the fee by the CPI at any time. Subsection (b)(1)(B) and (D), and (2), and subsection (d)(2) are amended by deleting “after January 1, 1997,” since this date has already passed.

Amendments to §114.53 establish fee schedules for the different counties which must be paid for the vehicle emissions inspection at an inspection station. Subsection (a)(4) is amended by adding counties opting into the I/M program beginning May 1, 2003.

The commission proposed a testing fee increase in Dallas and Tarrant Counties of \$5.00 (from \$13 to \$18) for an inspection using ASM-2 or OBD equipment. Staff re-evaluated the fee proposal based on comments received and adjusted the emissions testing fee to include the costs of labor, training, warranties, insurance, and consumable items used in conducting emissions testing, in addition to the costs of purchasing ASM equipment. Subsection (a) is further amended by deleting paragraphs (1) - (3) and by adding new paragraphs (1) - (4). New paragraph (1) states that through December 31, 2000, emissions inspection stations required to conduct a TSI test in Dallas, El Paso, Harris, and Tarrant Counties will continue to collect \$13 per emissions test. Paragraph (2) states that beginning January 1, 2001, emissions stations required to conduct a TSI and OBD test in Dallas, El Paso, Harris, and Tarrant Counties will collect \$14 per emissions test. Paragraph (3) states that beginning May 1, 2002, emissions stations required to conduct an OBD test and an ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by EPA, in Dallas, Collin, Denton and Tarrant Counties will collect \$22.50 per emissions test. Paragraph (4) states that beginning May 1, 2003, emissions stations required to conduct an OBD test and an ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by EPA, in Ellis, Johnson, Kaufman, Parker, and Rockwall will collect \$22.50 per emissions test.

In subsection (c), after "on-road testing," the comma is changed to a period, the remaining two sentences are deleted, and the following sentence after on-road testing is added; "If the vehicle passes the vehicle emissions inspection, the vehicle owner may request reimbursement from DPS."

In addition to the rule changes, the revisions to the SIP narrative clarify the new program elements such as applicability changes; state resources for the program; new performance standards; emissions testing network type; emissions testing; affected vehicle populations; strategies for quality control and quality assurance; projection of waiver rates; enforcement actions related to vehicles and service providers; data collection, analysis, and reporting; inspector training, licensing, and certification; public information strategies; plans for improving repair effectiveness; on-road vehicle emissions testing; and the implementation schedule.

FINAL REGULATORY IMPACT ANALYSIS

The commission reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225 because it does not meet the definition of a “major environmental rule” as defined in that statute. “Major environmental rule” means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The amendments to Chapter 114 are intended to protect the environment or reduce risks to human health from environmental exposure to ozone. However, the inspection stations in and around nonattainment areas would not normally be considered a sector of the economy. In addition, the commission structured the fees in this program to ensure that most additional costs of equipment can be recovered. Therefore, the adopted rules do not affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The amendments are

intended to establish a vehicle emissions testing program as part of the control strategy to reduce NO_x emissions necessary for the counties included in the DFW nonattainment area to be able to demonstrate attainment with the ozone NAAQS. While the I/M program is mandatory for nonattainment counties, it may be voluntary for attainment counties. The steering committee representing the DFW ozone nonattainment area counties requested an air pollution control strategy, including emissions testing of vehicles, to be established to reduce NO_x emissions necessary to demonstrate attainment with the NAAQS. The amendments are part of the commission response to the request and one element of the SIP. As defined in Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: 1. exceed a standard set by federal law, unless the rule is specifically required by state law; 2. exceed an express requirement of state law, unless the rule is specifically required by federal law; 3. exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4. adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking action does not meet any of these four applicability requirements. Specifically, the emissions testing program within this rulemaking action was developed in order to meet the NAAQS for ozone set by the EPA under 42 USC, §7409, and therefore meet a federal requirement. States are primarily responsible for ensuring attainment and maintenance of NAAQS once EPA has established those standards. Under 42 USC, §7410 and related provisions, states must submit, for EPA approval, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. This rulemaking action is not an express requirement of state law, but was developed specifically in order to meet the air quality standards established under federal law as NAAQS. This rulemaking action is intended to help bring the DFW ozone nonattainment area into

compliance. The amendments do not exceed a standard set by federal law, exceed an express requirement of state law unless specifically required by federal law, nor exceed a requirement of a delegation agreement. The amendments were not developed solely under the general powers of the agency but were specifically developed to meet the air quality standards established under federal law as NAAQS. There were no comments submitted on the draft regulatory impact analysis during the public comment period.

TAKINGS IMPACT ASSESSMENT

The commission prepared a takings impact assessment for these rules in accordance with Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of the rulemaking is to implement a revised I/M program in the ELP and HGA ozone nonattainment areas and in nine counties in the DFW area as part of the strategy to reduce emissions of ozone precursors necessary for the areas to be able to demonstrate attainment with the ozone NAAQS.

Promulgation and enforcement of the rules will not burden private, real property because this rulemaking action does not require the installation of permanent equipment. Although the rule revisions do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial threat to public health and safety and partially fulfill a federal mandate under 42 USC, §7410. Specifically, the emissions limitations and control requirements within this proposal were developed in order to meet the ozone NAAQS set by the EPA under 42 USC, §7409. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once the EPA has established them. Under 42 USC, §7410 and related provisions, states must submit, for approval by

the EPA, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. Therefore, the purpose of the rulemaking action is to implement a revised I/M program which is necessary for the ozone nonattainment areas to meet the air quality standards established under federal law as NAAQS. Consequently, the exemption which applies to these rules is that of an action reasonably taken to fulfill an obligation mandated by federal law. Therefore, this rulemaking action will not constitute a takings under Chapter 2007 of the Texas Government Code.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), and the commission rules in 30 TAC Chapter 281, Subchapter B (Consistency with the CMP). As required by 31 TAC §505.11(b)(2) and 30 TAC §281.45(a)(3) relating to actions and rules subject to the CMP, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission reviewed this rulemaking action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council, and determined that the action is consistent with the applicable CMP goals and policies. The CMP policy applicable to this rulemaking action is the policy (31 TAC §501.14(q)) that commission rules comply with federal regulations in 40 CFR to protect and enhance air quality in the coastal area (31 TAC §501.14(q)). This rulemaking action will have a beneficial effect on SIP emissions reduction obligations relating to reasonable further progress and attainment demonstrations by making additional emissions reductions over those made by

the existing I/M program. Further, no new air contaminants will be authorized by the rule revisions. Therefore, in compliance with 31 TAC §505.22(e), this rulemaking is consistent with CMP goals and policies.

There were no comments submitted on the consistency of the proposed rules with the CMP during the public comment period.

HEARING AND COMMENTERS

The commission held public hearings on this proposal on January 24, 2000, in El Paso; January 25, 2000, in Austin; January 26, 2000, in Longview and Irving; January 27, 2000, in Dallas and Lewisville; January 28, 2000, in Fort Worth; January 31, 2000, in Beaumont and Houston; and February 9, 2000, in Denton. The comment period was originally scheduled to close on February 1, 2000, but was extended until 5:00 p.m. on February 14, 2000 (see the January 21, 2000 issue of the *Texas Register* (25 TexReg 461)).

Twenty-seven persons provided oral testimony at the hearings and 892 persons submitted written testimony. The following 919 commenters, provided both oral and/or submitted written testimony: the American Automobile Association (AAA); Association of International Automobile Manufacturers (AIAM); American Lung Association (ALA); American Lung Association of Dallas (ALA - Dallas); Cities of Dallas, Cleburne, Greenville, Lewisville, Plano, and Waxahachie; Citizens for a Safe Environment (CSE); Dallas Sierra Club (Sierra - Dallas); Department of Defense (DoD); Downwinders At Risk (DAR); Ellis County Judge (Ellis); EPA-Region 6; Fort Worth Chamber of Commerce (CoC -

Fort Worth); Fort Worth Sierra Club (Sierra - Fort Worth); Hood County Commissioner, Precinct 3 (Hood County); KEATING Technologies, Inc. (Keating); League of Women Voters of Tarrant County (LWV - Tarrant); Lone Star Chapter of the Sierra Club (Sierra - Lone Star); Pennzoil-Quaker State Company; Senior Citizens Alliance of Tarrant County (SCATC); Senior Political Action Committee (SPAC); Sustainable Economic and Environmental Development (SEED); Tarrant Coalition for Environmental Awareness (TCEA); Texas Automobile Dealers Association (TADA); Texas Campaign for the Environment (TCE); Texas Public Citizen (TPC); Texas Public Policy Foundation (TPPF); Texas State Inspectors Association (TSIA); Texas Clean Water Action (TCWA), and 892 individuals.

The following commenters generally supported the proposal: Sierra - Dallas, DAR, Sierra - Fort Worth, SEED, TCE, TCWA, TPC, LWV - Tarrant, ALA - Dallas, TCEA, CoC - Fort Worth, SCATC, SPAC, Dallas, EPA-Region 6, Sierra - Lone Star, CSE, and 782 individuals.

The following commenters generally opposed the proposal: Hood County, TADA, TSIA, and ten individuals.

The following commenters suggested changes to the proposal as stated in the ANALYSIS OF TESTIMONY section of this preamble: the cities of Cleburne, Greenville, Lewisville, and Waxahachie, Ellis County, AIAM, Keating, TCEA, TSIA, and eight individuals.

ANALYSIS OF TESTIMONY

Emissions Testing Fee

One individual suggested tying vehicle inspection fees to the fuel efficiency/pollution generation of the vehicle so that vehicles that pollute the air more would bear more responsibility for paying for the clean-up of the air.

The vehicle inspection fees are set to allow the state and inspection stations to recoup the cost of implementing the program. Tying emission inspection fees to fuel efficiency/pollution generation would require legislative authorization and is beyond the scope of this rulemaking.

TADA, TSIA, and three individuals commented that a market-based fee system would be appropriate if ASM testing is adopted. Cleburne feels that the concept of market-driven fees may hurt economically-disadvantaged citizens within rural areas because of the lack of competition.

Concerns surrounding unfair pricing, fraudulent testing, inspection quality, and public perception of the program make it necessary for a fixed fee at this time; however, a market-based fee system will be re-evaluated in future program changes. Implementation of a market-based fee will require consideration of issues of equity.

Plano asked that the commission to consider a testing fee exemption for local governments.

If the commission reduced the test fees for local government vehicles, the overall testing fee would have to be increased to recoup the losses especially for the inspection stations that perform the tests. The commission made no change to the rule language in response to this comment.

One shop owner and state inspector stated that the \$5.00 increase is insufficient and that an emissions testing fee of \$60 is more adequate. Another inspection station owner stated that the emissions testing fee should be \$45.

The commission adjusted the proposed inspection fee to \$22.50 in order to cover additional costs involved in the use of loaded mode test equipment. These increased costs include labor, training, warranties, insurance, and consumable items (such as calibration gases) used in conducting emissions tests. The commission believes that this level of fee is sufficient to allow a majority of inspection stations to recoup their expenses within five years.

Vehicle Coverage

One individual stated that all vehicles should be required to meet the emission standards that they were originally required to meet when manufactured, and that older cars should not be exempted from the test because they are the ones polluting, not the new cars which are subject to tighter emissions standards. Another individual recommended that all vehicles be required to pass emissions testing.

The I/M program will continue to test vehicles 2 - 24 years old. This allows a two-year exemption for the newest vehicles which are less likely to fail an emissions test. Vehicles that are 25 years

and older are exempt for several reasons: many older vehicles were not required to have many of the pollution control devices now required, a large percentage of vehicles in this age group are classified as classics or antiques, and the vehicles in this age group make up a small percentage (approximately 2.5%) of the total fleet and drive fewer miles per year making their overall emissions impact relatively small.

OBD testing will require vehicle emissions to be within 1.5 times the Federal Test Procedure emissions standard to which they were originally certified at the time of manufacture. OBD testing technology became available with 1996 model year vehicles and will be the test required on 1996 and newer model year vehicles equipped with OBD.

Two individuals commented that vintage (antique) cars should be exempted from emissions testing.

Section 114.50(a) excludes antique vehicles registered with the Texas Department of Transportation (TxDOT) from emissions testing. Additionally, the program is designed with a “rolling” 24-year window with the most recent 24 model years being subject to the I/M program. The “rolling” 24-year window option was selected due to the small amount of vehicles that are on the road after 25 years and a large percentage of these vehicles being classified as classics and/or antiques, which are not subject to emissions testing.

DoD expressed concern that the reporting requirements for federal fleets in both the existing and proposed state regulations appear to exceed the waiver of sovereign immunity set forth in the FCAA.

The commission disagrees that the reporting requirements exceed the sovereign immunity waiver of §118 of the FCAA. Currently the commission requires commanding officers or directors of federal facilities to certify annually that all subject vehicles have been tested and are in compliance with the FCAA. EPA distributed a draft document titled “Interim Guidance for Federal Facility Compliance with Clean Air Act Sections 118(c) and 118(d) and Applicable Provisions of State Vehicle Inspection and Maintenance Programs” dated December 1999, to assist facility managers in determining the following: 1) which requirements apply to their government vehicles; 2) which government vehicles are covered; 3) how to approach inspection and reporting requirements; 4) what constitutes compliance with the substantive and procedural requirements of the applicable I/M program for their facility.

The determination whether a state I/M program qualifies as a FCAA §118(a) or §118(c) program will be made by the EPA through notice-and-comment rulemaking in the near future. Once the final EPA rule has been published in the *Federal Register*, the commission will at that time amend the state rule concerning federal facility reporting if necessary.

One individual wanted to know how effective our current emissions testing program is, and also wanted to exempt newer model vehicles up to seven years because he says 99% of these vehicles pass the test. Additionally, one individual wanted to exempt two, three, or even six year old vehicles from auto emissions testing.

The TSI testing program is considered effective in identifying vehicles grossly polluting for hydrocarbons or carbon monoxide. However, idle testing does not allow for the measurement of NO_x because under idle modes the temperature and pressure in the combustion chambers are not high enough to produce a significant amount of measurable NO_x. In order to help the DFW nonattainment areas achieve the necessary NO_x reductions, the current TSI test must be upgraded to an alternative test type, such as ASM-2 with OBD, that can measure NO_x emissions, and therefore achieve significant NO_x reductions.

The emissions testing program tests vehicles 2 - 24 years old. These vehicles account for the vast majority of vehicles on the road and the vehicle miles traveled, which have a direct correlation to the impact on air quality. The failure rate for vehicles less than six years old is approximately 1.0%. Because some newer vehicles do fail the test and because vehicles subject to testing are more likely to be properly maintained, the amount of emissions reduction benefits that can be claimed for an I/M program is reduced as more model years are exempted from the program.

Waivers

Two individuals commented that there should be no minimum expenditure waivers and that all failing vehicles must be required to come into prompt compliance or have their registration revoked.

Waivers are a way to ensure that motorists making every “good faith” effort to comply with I/M program requirements do not incur excessive repair costs and/or are not excessively inconvenienced. Waivers are not extended beyond one test cycle. Vehicle owners must meet all

requirements and reapply, if necessary, the following year to receive a new waiver for that test cycle.

The minimum expenditure waiver is available to those who have made repairs to their vehicle within the established criteria (to include repairs made within sixty days of an inspection) and have met the dollar limits established by the EPA.

The commission committed to limit all waivers to no more than 3.0% in each program area. Since the inception of the current program, the waiver rate has not exceeded 0.4%. The commission will continue to monitor waiver rates in all program areas.

One individual supported raising the minimum expenditure waiver amount, but wanted a local repair assistance program to help those who have trouble coming into compliance.

The minimum expenditure waiver is established by EPA rule. For areas designated as enhanced I/M areas, such as DFW, HGA, and ELP, the minimum expenditure waiver amount is \$450 (which may be adjusted based on the CPI). The commission recognizes that this could be an economic hardship for some individuals. Thus, the commission encourages the local councils of government and the repair community to establish repair assistance programs where possible.

One individual wanted to do away with waivers and extensions by 2004 for model years 1991 and older.

Since implementing the current emissions testing program in July 1996, the overall waiver and extension rate has not exceeded 0.4%, well below the 3.0% waiver limit established by the commission. A waiver rate of no more than 3.0% is sufficient to enable the commission to meet applicable federal program requirements. The commission will continue to monitor waiver rates in all program areas. The commission has made no change to the rule.

One individual stated that for as little as \$75 a vehicle can get a waiver for up to three years and never has to comply.

Under the current emissions testing program, the minimum expenditure waiver amount for vehicles 1980 and older in the DFW area is \$75. This was the case because DFW was formerly classified as a moderate nonattainment area. On March 20, 1998, the DFW area was reclassified as a serious nonattainment area. Because of this reclassification, EPA rules require that the minimum expenditure waiver be brought into line with that for HGA and ELP, which is \$450 for all vehicles. According to §114.52, the minimum expenditure waiver shall only be valid for the remaining portion of the testing cycle. At the next cycle, the vehicle will have to be retested and make new expenditures in order to receive another minimum expenditure waiver. Additionally, the cost of parts for only emissions-related repairs directly applicable to the cause of the failure count toward the waiver amount, unless the repairs are performed by a DPS recognized emissions repair technician/facility, then parts and labor costs count toward the waiver amount. Furthermore, if the vehicle emissions components were found to be tampered with, the repairs to the tampered components may not count toward the waiver.

Public Information

The EPA stated that it is unclear how the public awareness plan will be implemented.

The SIP requires that the commission and the DPS implement public awareness plans that specifically addresses eight subject areas. The commission and DPS plan to accomplish the goals set forth in the public awareness plan through, but not limited to, inspector and technician training, public service announcements, brochures at the inspection stations, media coverage, and the assistance of local councils of government. These commitments can be reviewed in the DFW SIP that is adopted concurrently with this rulemaking.

Remote Sensing

Two individuals wanted to know what happened to the remote sensing vans at the entrance ramps to the freeways.

Currently, remote sensing vans are in operation in the DFW, HGA and ELP program areas. The remote sensing element of the vehicle emissions testing program is operated by the DPS and is used to find high-polluting vehicles commuting in from the outlying counties. Remote sensing vans are randomly moved to monitor commuting traffic. DPS has requested one additional van to meet increased demands in the DFW area.

Dallas, TADA, and 27 individuals supported the expansion of the remote sensing program to target grossly-polluting vehicles.

The I/M program will continue to use remote sensing to identify gross polluters. The commission agrees that remote sensing has a useful role to play in detecting high-emitting vehicles in the I/M program areas. The revisions adopted in this rulemaking would expand the remote sensing program to include vehicles registered in the EDFW area.

One individual suggested bringing any trucks used as passenger vehicles into compliance with standard automobile emissions laws and in addition implementing road-side testing to identify and correct the 10% of the vehicles on the road causing 50% of the mobile pollution.

The current TSI emissions test uses the same emissions standards for all gasoline-powered passenger vehicles and trucks with a gross vehicle weight rating of 8,500 pounds or less. Subject passenger vehicles and light-duty trucks registered and primarily operated in program areas must undergo an annual emissions test. The current on-road testing component of the Texas I/M program uses remote sensing to identify high-emitting vehicles. Owners of vehicles identified as gross polluters receive written notice of the violation instructing them to submit their vehicles to an emissions test at a state-certified emissions testing station for verification of exhaust emissions and to make necessary repairs to bring the vehicle into program compliance. Failure to comply with written notification of an emissions violation is a Class C misdemeanor punishable by a fine of not more than \$350. Repeat violations are punishable by a fine of not more than \$1,000.

TADA recommended that remote sensing be combined with a mandatory smoking vehicle program to ensure that all smoking vehicles are required to be repaired or retired.

The state-wide smoking vehicle program is a voluntary program and relies on conscientious citizens to identify and report vehicles that they observe emitting visible exhaust. Current remote sensing technology does not have the ability to identify the particulate matter and sulfur compounds generally associated with visible exhaust. Future improvements in remote sensing technology, along with enforceable particulate standards for vehicle exhaust emissions, may make possible such a component of the Texas program to control mobile source emissions.

One individual commented that requiring emission testing of vehicles in outlying rural counties that are not in violation of the ozone standards will punish all motorists, and that a more effective method would be to have more extensive use of random roadside testing on commuter highways.

In the DFW metropolitan area, four counties are considered to have failed to attain national ozone standards: Collin, Dallas, Denton, and Tarrant Counties. Participation in a vehicle I/M program for counties besides these four has been decided by local authorities, according to procedures described in the Texas Transportation Code, §548.301(b) and the Texas Health and Safety Code, §382.037(c) in order to reduce the impact of those motorists on air quality in the entire area. The reductions achieved from these outlying counties are necessary to demonstrate attainment within the DFW nonattainment area. Remote sensing on highways in the DFW and HGA areas to identify high-emitting vehicles began in October 1998. Identified high-emitting vehicles may be vehicles either registered in the designated I/M program counties or commuting from surrounding nonattainment counties. Owners of vehicles identified as gross polluters receive written notice of the violation instructing them to submit their vehicles to an emissions test at a state-certified

emissions testing station for verification of exhaust emissions and to make necessary repairs to bring the vehicle into program compliance. Failure to comply with written notification of an emissions violation is a Class C misdemeanor punishable by a fine of not more than \$350. Repeat violations are punishable by a fine of not more than \$1,000.

The EPA expressed concern that the proposed revision appears to describe on-road testing only in the HGA nonattainment area which does not fulfill the on-road testing mandate in the federal rule.

Remote sensing is used to satisfy two requirements for on-road testing in enhanced I/M programs. First, as specified in 40 CFR §51.351(b), on-road testing is to be used to supplement periodic inspections required in a vehicle I/M program, providing continuous monitoring of the effectiveness of the program. Second, on-road testing is to be used to identify high-emitting vehicles being operated in a nonattainment area in situations where the number of vehicles subject to an I/M program is smaller than the estimated fleet in the nonattainment area (i.e., there is a vehicle shortfall due to unregulated commuting vehicles). Since the current proposal adds the vehicle fleets in Collin and Denton Counties to the subject fleet, there will no longer be a vehicle shortfall in the DFW nonattainment area, thereby obviating the need to satisfy the second requirement for on-road testing in DFW. The DPS plans to use remote sensing to evaluate the on-road emissions performance of at least 20,000 of the vehicles subject to emissions testing in the DFW nonattainment area, and Harris and El Paso Counties, which will satisfy the first requirement for on-road testing. While not specifically required by federal law, the rule has expanded the remote sensing program to cover vehicles registered in the EDFW area. This

expansion contributes to the reductions needed for the SIP by capturing vehicles which commute from these outlying counties. Although remote sensing in attainment counties is not specifically authorized under Texas Health and Safety Code, §382.037, the commission has authority to make this expansion under §382.037(c), which gives the commission general authority to design the program as needed to demonstrate attainment and to include attainment counties which have opted in to the program.

One individual in Denton County wanted to see remote sensing data and does not believe Denton County is part of the pollution problem.

Dallas, Tarrant, Denton, and Collin Counties have been designated as the DFW nonattainment area as a result of monitored ambient air quality levels that exceeded the ozone NAAQS. Ozone levels are monitored at designated sites throughout the state using special ambient air monitoring equipment. Remote sensing devices are used to detect individual vehicle tailpipe emissions.

Remote sensing is currently used in program areas to detect high-emitting vehicles registered in or commuting into any of the affected nonattainment counties. Modeling which demonstrates that areas as far away as east Texas can impact the air quality of DFW is included in the SIP which is adopted concurrently with these rules.

TPPF commented that a more effective I/M strategy is to implement a system for cleaning up on-road vehicles which pay attention to incentives for motorists to keep their cars clean. TPPF stated that the DFW SIP takes a strong step forward with its proposed implementation of remote sensing and OBD to

detect high-emitting vehicles. However, an adjunct program that would further refine the focus of I/M on the small number of high emitters should be considered. Beyond the identification of high-emitting automobiles, remote sensors can be used to detect clean cars, which can subsequently be exempted from annual inspection, thus reducing the load on the planned dynamometer test centers, and saving motorists time and money.

The commission agrees that remote sensing has a useful role to play in detecting high-emitting vehicles in the I/M program areas. However, the commission does not feel that “clean-screening” is a viable option at this time for the following reasons. 1. The possibilities of false failures increase dramatically as the cut-points are tightened, thus, a tailpipe test is necessary to verify more accurately vehicle emissions resulting from remote sensing readings. 2. Even though the EPA has collected data regarding the effectiveness of remote sensing for clean-screening and for identification of high- emitting vehicles, and plans to include options to model remote sensing credits in MOBILE6, the model is still under development. Thus, the current MOBILE model does not allocate any credit reductions for remote sensing. 3. The cost of clean-screening depends on many factors, such as market competitiveness, total number of remote sensing measurements, level of automation, economies of scale, and term of contract. According to the “California Inspection and Maintenance Review Committee Report on Remote Sensing of Vehicle Emissions,” dated September 9, 1998, a clean-screening program that exempted 25% of the subject fleet would cost approximately \$34 million per year. Although the commission feels that clean-screening is not a viable option at this time, as technology evolves, the commission will continue to evaluate

technological advances in emissions testing to ensure the best possible testing methodologies and equipment are considered in future program development.

Program Start-up

EPA had two comments regarding the proposed schedule. First, the final DPS rules of April 28, 1998, will not contain changes necessary to implement the ASM-2 test. These rules must be updated to reflect the changes to the I/M program in the DFW nonattainment area and outlying counties. Second, in the DFW program area the full-stringency cut points on January 1, 1997, will not apply in the ASM test. EPA stated that the dates must be revised to reflect implementation of cut points for ASM testing, or full implementation of final cut points must take place at start-up.

The rules for DPS will be amended after the commission adopts these rules. The DPS rule amendment process will take approximately 90 days, and the commission anticipates that the DPS rules will be adopted by September 1, 2000.

The commission revised the schedule contained in the SIP, Chapter 22: State Implementation Plan Submission, to clarify that TSI testing using full stringency cut points were implemented in all program areas on January 1, 1997. Language has also been added to clarify that loaded mode type tests will be implemented using “start-up” cut points on May 1, 2002.

Program Equipment

One individual suggested bringing back IM-240 testing.

Senate Bill (SB) 178, passed by the 74th Texas Legislature in 1995, repealed the commission's legal authority to implement a centralized I/M program using an IM-240 emissions test. Two years later, SB 1856 was passed which gave the commission the authority to establish the current I/M program. The current TSI program improved convenience by providing more than 2,300 testing facilities in the four I/M program counties compared to 60 facilities in the old centralized IM-240 program. The test is significantly less expensive and less time consuming than IM-240, and is also considered effective in identifying grossly polluting vehicles. However, because the DFW nonattainment area now needs to reduce NO_x emissions, modifications to the current emissions testing program are being adopted. The ASM, or similar type test which uses a dynamometer, plus OBD testing is required for the DFW program area. An ASM type test is estimated to achieve VOC and NO_x emission reductions comparable to those achieved by an IM-240 type test, but at less than one-third of the cost, and can be implemented through the current decentralized testing network.

One individual wanted to have the option of testing annually using either the current TSI test or biennially using IM-240.

The current TSI program improved convenience by providing more than 2,300 testing facilities in the four I/M program counties compared to 60 facilities in the old centralized IM-240 program. The test is significantly less expensive and less time consuming than IM-240, and is also considered effective in identifying grossly polluting vehicles. However, because the DFW nonattainment area now needs to reduce NO_x emissions, modifications to the current emissions testing program are

being adopted. The ASM or similar type test, which uses a dynamometer, plus OBD testing is required for the DFW program area. An ASM type test is estimated to achieve VOC and NO_x emission reductions comparable to those achieved by an IM-240 type test, but at less than one-third of the cost, and can be implemented through the current decentralized testing network.

The emission reduction credits achieved by any type of I/M program are reduced when implemented as a biennial rather than annual test. Also, emissions testing is currently conducted as an integrated part of the safety inspection which is required annually. For these reasons, the commission has not made any changes to allow for biennial testing.

The TCEA and one individual supported ASM testing with volume mass sampling (V_{MAS}), and integrated OBD testing in all 12 counties of the DFW area and stated that increased enforcement should be facilitated.

The commission agrees that a loaded mode test like ASM with integrated OBD testing is vital to the success of the I/M program. OBD testing will commence in Dallas, Tarrant, Harris, and El Paso Counties beginning in January 2001. In order to help achieve the NO_x emissions reductions needed for the DFW area to demonstrate ozone attainment, a loaded mode test like ASM testing in conjunction with OBD testing will be implemented in Dallas, Tarrant, Denton, and Collin Counties beginning May 1, 2002 and in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties beginning May 1, 2003.

In its effort to ensure that the SIP strategies impose no more burden than necessary to protect health and welfare, the commission has decided not to include the counties of Hunt, Hood, and Henderson as affected counties of these rules due to their limited impact on the air quality within the DFW nonattainment area. Due to the relatively low population, percentage of commuters, and growth rate of these counties the commission has re-evaluated the need for implementing the rules in these three counties. The re-evaluation included new photochemical modeling runs which applied this rule in the nine remaining counties only. The results of these runs indicated a minor impact of including Hunt, Hood, and Henderson Counties in these rules, but also showed that the area could demonstrate attainment of the NAAQS without those reductions in emissions. However, other control measures which were proposed for these counties do have measurable benefits for attainment of the NAAQS.

The EPA requires the use of the most current version of the MOBILE model to determine the emissions reduction credits that can be claimed for an I/M program. In MOBILE5 the ASM test at start-up cutpoints achieves VOC and NO_x emissions reductions comparable to those achieved by the IM-240 test at start-up cutpoints, but at less than one-third of the cost. There is currently no additional modeled benefit for using V_{MAS}. However, as technology evolves over time, the agency will continue to evaluate technological advances in emissions testing to ensure the best possible testing methodologies and equipment are considered in future program development. The commission is committed to helping enforce the I/M program and will continue to work with the DPS to ensure that the integrity of the program is maintained.

TADA and one individual supported OBD testing, but disagreed with the use of ASM testing and stated that it will be inconvenient and extremely expensive for the driving public.

The DFW area now needs to reduce NO_x emissions in order to achieve the ozone NAAQS. An ASM, or similar test, is estimated to achieve VOC and NO_x emission reductions comparable to those achieved by an IM-240 type test, but at less than one-third of the cost, and can be implemented through the current decentralized testing network, which includes over 2,300 testing facilities in the four I/M program counties. The test fee for a loaded mode test like ASM will not be substantially higher than the current TSI test and will not be above the average of what is currently charged nationwide for a similar test. Additionally, OBD testing is applicable only to 1996 and new vehicles. Another test such as ASM or TSI must be available in conjunction with OBD in order to capture the pre-1996 vehicles as well as vehicles for which the OBD system has failed.

TADA suggested a more equitable method of paying for emissions testing equipment is to provide a tax credit or exemption.

For vehicle emissions testing station owners, participation in the vehicle emission testing program is voluntary. Purchasing new testing equipment is a business decision and is the responsibility of the buyer at any given point in time to determine if an investment in an analyzer is worth the cost.

Provisions for a tax credit or exemption for station owners would require legislative authorization and is beyond the scope of this rulemaking.

TSIA and one individual claimed that ASM equipment will cost between \$74 million and \$88 million based on recent real-world equipment pricing made to the TSIA members by equipment manufacturers, which exceeds the commission estimate of \$60 million. TSIA also commented that there will be additional costs of technical training, higher wages for greater skilled labor, annual warranty costs, building upgrades, and increased insurance and liability claims due to dynamometer testing, and decreased throughput.

Based on information from ASM type testing equipment manufacturers, the commission estimates that roughly 25% of inspection stations in Dallas and Tarrant Counties would be able to upgrade their existing analyzers to ASM capability for \$25,000. The other 75% of stations, plus stations that do not currently have analyzers, would need to purchase new ASM or similar equipment for roughly \$40,000. The total estimated cost for installation of ASM type equipment in all currently operating inspection stations would be roughly \$60 million.

The commission increased the proposed inspection fee from \$18 to \$22.50 to take into account increased operating costs such as equipment installation, higher wages, warranty costs, and other costs of doing business. Of the fee, \$20.50 per test will be retained by the inspection station.

The number of vehicles requiring an annual emissions inspection is not expected to decrease in coming years, while an increasing number of vehicles each year will be inspected using the less time-consuming OBD test, encompassing over 50% of subject vehicles by 2002 and 80% by 2007.

Participation in the I/M program will continue to be a business decision that each station owner will make independently.

The TSIA and two individuals stated that the program needs a guaranteed term of at least five years for return on investment, an escape clause, and an adequate fee.

The commission does not concur that there needs to be a guaranteed term of at least five years for return of investment or an escape clause. An emissions testing program is required by federal law and has been authorized to be implemented through Texas state law. The program is subject to change based on changes that could occur in the federal and/or state laws which authorize the current program. Purchasing new testing equipment is a business decision and is the responsibility of the buyer at any given point in time to determine if an investment in an analyzer is worth the cost. Furthermore, as technology evolves over time, the commission will continue to evaluate technological advances in emissions testing to ensure the best possible testing methodologies and equipment are considered in future program development.

The commission agrees that an adequate test fee should be established. Stations deciding to participate in the emissions testing program will be retaining more income per test than currently collected. This additional income can be used to offset the expenses of equipment upgrades.

Based on internal cost analysis of the loaded mode testing program, the commission has approved a \$22.50 emissions test fee for the new program. The combined annual safety and emissions tests are \$35, which includes \$22.50 for the emissions test, and \$12.50 for the safety test. The station

keeps \$20.50 of the emissions fee and \$7.00 of the safety fee for a total of \$27.50 from the combined test fees. According to the cost analysis study at an emission test fee of \$22.50/test, for a station to break even in five years, based just on equipment cost of \$40,000, a station must perform about 43 emissions test per month. For a station to break even in five years based on equipment cost combined with an average monthly operating cost of \$1,000, a station must perform about 94 tests per month.

Ellis County expressed that the cost of an ASM program stands to be way out of proportion to the benefits over the OBD test.

An OBD test achieves significant NO_x reductions, but it can only be conducted on 1996 and newer model year vehicles that are equipped with an OBD system. Pre-1996 model year vehicles must also be subject to a test capable of achieving NO_x reductions to help attain the necessary NO_x reductions in the DFW nonattainment area. A loaded test, such as ASM or IM-240, is needed to achieve NO_x reductions for pre-1996 vehicles. The ASM test achieves modeled VOC and NO_x reductions comparable to those achieved by an IM-240 test but at less than one-third of the cost.

Keating commented that the state should use V_{MAS} technology because it is more effective than ASM when comparing the cost of each system to the emissions reductions and SIP credits gained.

The EPA requires the use of the most current version of the MOBILE model to determine the emissions reduction credits that can be claimed for an I/M program. The current version,

MOBILE5, has the capability of modeling five test types: an idle test, a TSI test, a loaded idle test, a transient (IM-240) test, and an ASM test. In MOBILE5 the ASM test at start-up cutpoints achieves VOC and NO_x emissions reductions comparable to those achieved by the IM-240 test at start-up cutpoints. There is currently no additional modeled benefit for using V_{MAS}. However, as technology evolves over time, the agency will continue to evaluate technological advances in emissions testing to ensure the best possible testing methodologies and equipment are considered in future program development.

TSIA expressed concern that there is no equity in asking independent businesses to make an investment in equipment without knowing the size of the tested fleet, the frequency of the test, and the number of years the program will last. They commented that few companies will participate in the program without this verification and legislative approval.

The commission does not concur that independent businesses are being asked to make an investment without knowing the size of the tested fleet or the frequency of the emissions tests. The estimated number of vehicles subject to emissions testing (by county) and the frequency of the emissions test are outlined in the approved revisions to the SIP. Section 114.50(a) states that all gasoline-powered motor vehicles 2 - 24 years old are subject to an annual emissions inspection. Military tactical vehicles, motorcycles, diesel-powered vehicles, dual-fueled vehicles which cannot operate using gasoline, and antique vehicles registered with the TxDOT are excluded from the program. In addition, Chapter 6 of the I/M SIP outlines test frequency and convenience and Chapter 7 outlines vehicle coverage.

Although there is no set number of years the vehicle emissions testing program will last, the emissions testing program is required by federal law and has been authorized to be implemented through Texas state law. The program is subject to change based on changes that could occur in the federal and/or state laws which authorize the current program. Purchasing new testing equipment is a business decision and is the responsibility of the buyer at any given point in time to determine if an investment in an analyzer is worth the cost. Furthermore, as technology evolves over time, the agency will continue to evaluate technological advances in emissions testing to ensure the best possible testing methodologies and equipment are considered in future program development.

TSIA expressed concern that equipment suppliers will not have adequate time to manufacture, install, and test equipment prior to program implementation.

The commission believes that 18 - 24 months is sufficient time to manufacture, install, and test equipment. Therefore, beginning on May 1, 2002, a loaded mode test like ASM with integrated OBD testing will commence in Dallas, Tarrant, Collin and Denton Counties. Beginning on May 1, 2003, a loaded mode test like ASM with integrated OBD testing will commence in Parker, Ellis, Johnson, Ellis, Kaufman, and Rockwall Counties. The new program start dates will assist manufacturers in ensuring that enough certified equipment is available. The commission and the DPS staff are working closely with analyzer manufacturers to ensure that sufficient certified emissions testing equipment is available for the program start date.

Repair Program

One individual commented that failing vehicles will have to have repairs conducted at an L1 certified repair shop.

The DPS established the criteria for technicians wanting to participate in, and become a “Recognized Repair Technician.” These technicians must obtain certification in the following four areas offered by the Automotive Service of Excellence (ASE): Engine Repair (Test A1), Electrical Systems (Test A6), Engine Performance (Test A8), and Advanced Engine Performance Specialist (Test L1).

The commission does not require emissions-related repairs to be completed by a recognized repair technician. A motorist has the additional options of completing the repairs himself or herself, or using a technician that is not ASE qualified. However, if the motorist wants the labor expense to count toward a waiver, the repairs must be performed by a recognized repair technician.

Program Convenience

Two individuals expressed hopes that there will be an adequate number of inspection stations so that it will not take all day to get an inspection.

The current decentralized network improved convenience over the previous centralized network by providing more than 2,300 testing facilities in the original four I/M program counties. The amended program will be implemented using the decentralized network. However, continued

participation in the program as it evolves will be a business decision made by each individual station owner.

Program Network

Five individuals stated opposition to the commission reinstating a centralized IM-240-type inspection system.

The commission has no intention of mandating a centralized program. However, in order to achieve equivalent emissions reductions to those modeled for IM-240 testing, modifications to the current emissions testing program are adopted. The steering committee representing the DFW ozone nonattainment area counties, requested that a decentralized program utilizing a loaded mode test, such as ASM, be implemented. An ASM type test is estimated to achieve VOC and NO_x emission reductions comparable to those achieved by an IM-240 test, but at less than one-third the cost, and can be implemented through the same decentralized testing system as is used for the current TSI test.

One individual commented that a plan to have one company administer the test is monopolistic and not in the best interests of the citizens.

The state has no intention of implementing a centralized testing system operated by one company, as was the case with the original IM-240 program. The I/M program will continue to be implemented using the current decentralized network comprised of individual inspection station

owners. Continued participation in the program as it evolves will be a business decision made by each individual station owner.

Two individuals wanted to reinstate the inspection program which was in place five years ago but was canceled.

SB 178, passed by the 74th Texas Legislature in 1995, repealed the commission's legal authority to implement a centralized I/M program using an IM-240 emissions test. Two years later, SB 1856 was passed which gave the commission the authority to establish an I/M program meeting the state's air quality needs. The TSI testing program improved convenience by providing over 2,300 decentralized testing facilities in the four I/M program counties.

Ten individuals supported tougher auto emissions testing and getting the worst polluting trucks and cars off the road.

The commission agrees that a more stringent test is necessary to help achieve the NO_x reductions necessary for the DFW area. The program as adopted is more stringent in that it evaluates NO_x emissions.

One individual recommended a quick tailpipe test to catch vehicles that are out of tune.

There is no quick tailpipe test that can be utilized to determine why a car is out of tune.

However, beginning on January 1, 2001, the current TSI tailpipe test will be replaced with the OBD test for model year 1996 and newer vehicles. OBD utilizes a computer link to download information on a vehicle's malfunctioning emissions system directly from the vehicle computer which can be used as a diagnostic tool to help determine why a vehicle may be operating out of tune. Model year 1995 and older vehicles will be required to submit to the appropriate tailpipe test to ensure compliance with I/M program requirements.

The LWV - Tarrant, ALA, ALA - Dallas, Sierra - Fort Worth, CSE, Sierra - Dallas, DAR, SEED, TCE, TCWA, TPC, and 215 individuals supported ASM testing with integrated OBD testing in all 12 counties of the DFW CMSA (which is included in the Citizen's Implementation Plan).

The commission agrees that a loaded mode test, such as ASM with integrated OBD testing, is vital to the success of the I/M program. OBD testing will commence in Dallas, Tarrant, Harris, and El Paso Counties beginning in January 2001. In order to help achieve the NO_x emissions reductions needed for the DFW area to demonstrate ozone attainment, an OBD test in conjunction with a loaded mode test such as an ASM-2 test, or a vehicle emissions test that meets SIP emission reduction requirements and is approved by EPA, will be implemented in Dallas, Tarrant, Denton, and Collin Counties beginning May 1, 2002 and in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties beginning May 1, 2003.

In its effort to ensure that the SIP strategies impose no more burden than necessary to protect health and welfare, the commission decided not to include the counties of Hunt, Hood, and Henderson as affected counties of these rules due to their limited impact on the air quality within the DFW nonattainment area. Due to the relatively low population, percentage of commuters, and growth rate of these counties the commission re-evaluated the need for implementing the rules in these three counties. The re-evaluation included new photochemical modeling runs which applied these rules in the nine remaining counties only. The results of these runs indicated a minor impact of including Hunt, Hood, and Henderson counties in these rules, but also showed that the area could demonstrate attainment of the NAAQS without those reductions in emissions. However, other control measures which were proposed for these counties do have measurable benefits for attainment of the NAAQS.

One individual supported emissions testing of all vehicles driving into the United States from Mexico.

The regulation of air emissions for international traffic is beyond the scope of this rulemaking; therefore, the commission made no change in response to this comment.

The CoC - Fort Worth strongly expressed that vehicles are the largest source of pollution in the DFW area and that every citizen with a vehicle must make every reasonable effort to reduce the emissions.

The commission agrees that vehicles are a source of pollution in the DFW area. On-road mobile source emissions account for approximately 51% of NO_x emissions, 55% of carbon monoxide (CO)

emissions, and 28% of VOC emissions. The commission therefore, is adopting a package of rules, including the I/M rules, to address emissions from vehicles. In addition, the commission and the DPS plan to implement improved inspector and technician training, public service announcements, brochures at the inspection stations, media coverage, and other outreach projects with the assistance of the local councils of government to inform citizens of the importance of having their vehicles tested.

One individual suggested that vehicle owners report the county in which they work or go to school, and if that county has a more stringent inspection standard, the vehicle must be inspected in the county with higher standards.

The state I/M program does not collect specific vehicle travel or destination data. All 2 - 24 year old gasoline-powered vehicles registered in an I/M program area, as well as vehicles that operate more than 60 calendar days per testing cycle in an I/M program area, are required to comply with emissions standards for such an area. Vehicles must comply with the safety and emissions testing program to be issued a safety certificate. As an additional enforcement mechanism, remote sensing is used to identify high-emitting vehicles operating in an I/M program area. Once a high-emitting vehicle is identified, the owner of the vehicle is instructed by written notice to bring the vehicle in to a state-certified emissions testing station for a verification emissions test and to make necessary repairs to bring the vehicle into program compliance.

One individual supported the annual testing.

The commission agrees. Emission reduction credits achieved by any type of I/M program are reduced significantly when implemented as a biennial rather than annual test. Also, emissions testing currently conducted as an integrated part of the annual safety inspection is more convenient for the motorist.

One individual stated that more stringent testing needs to be started by January 2002.

The commission is adopting an emissions testing system that has the capability to identify NO_x emissions. The current TSI analyzer is not capable of testing for NO_x emissions. The loaded mode type test in conjunction with the implementation of OBD testing will allow for the identification of vehicles emitting excess hydrocarbons (HC), CO, and/or NO_x. In order to establish a proper testing network and ensure equipment availability, the loaded mode test equipment will be phased into the most populous counties of Dallas, Tarrant, Collin, and Denton beginning May 1, 2002. The remaining five counties, Ellis, Johnson, Kaufman, Parker, and Rockwall, will begin loaded mode testing May 1, 2003.

One individual expressed opposition to the proposed program because it will be hugely expensive in both actual cash outlay and in lost time/productivity. The individual also commented that it is based on outdated ideas that cars require periodic inspection of pollution equipment to be sure they are “tuned-up.”

Although implementing the proposed changes to the vehicle emissions testing program may seem inordinately expensive to some individuals, cleaner air provides economic benefits to the community, such as fewer sick days off, lower medical costs, and fewer pollution-associated illnesses. In addition, if federal ozone reduction requirements are not met, businesses attracted by the state's quality of life would be adversely affected by sanctions imposed by the federal government.

Two individuals commented that the commission does not have the will nor the manpower to police rules requiring every vehicle to go in for testing and mandatorily removing super emitters (extremely high-emission vehicles).

Enforcement of the program is the responsibility of the DPS, TxDOT, and the commission. Vehicles registered in an I/M program area must comply with the safety and emissions testing program to be issued a safety certificate. The commission, TxDOT, and DPS implemented a vehicle re-registration denial enforcement element for vehicles that fail to comply with the emissions testing program. Remote sensing is used to identify high-emitting vehicles commuting into an area and as an additional enforcement mechanism to identify high-emitting vehicles that have not complied with the program. Once a high-emitting vehicle is identified, the owner of the vehicle is instructed by written notice from the DPS to bring the vehicle in to a state-certified emissions testing station for a verification emissions test and to make necessary repairs to bring the vehicle into program compliance. Failure to comply with the notice is a Class C misdemeanor.

Local law enforcement officials are responsible for ensuring that vehicles operating on public roads have a valid registration sticker and safety certificate.

TADA and four individuals commented that small business owners will decline to participate in an ASM program because the equipment is more expensive, higher wages will have to be paid for more qualified inspectors, and insurance and liability claims will increase due to dynamometer testing.

The commission adjusted the proposed emissions test fee for the new program in order to cover additional costs involved in the use of loaded mode test equipment. These increased costs include labor, training, warranties, insurance, and consumable items (such as calibration gases) used in conducting emissions tests. Based on internal cost analysis of the proposed loaded mode testing program, the commission approved a \$22.50 emissions test fee for the new program. According to the cost analysis study at a fee of \$22.50/test, for a station to break even in five years, based just on equipment cost of \$40,000, a station must perform about 43 emissions test per month. For a station to break even in five years based on equipment cost combined with an average monthly operating cost of \$1,000, a station must perform about 94 tests per month. Continued participation in the program as it evolves will be a business decision made by each individual station owner. However, staff are in discussion with analyzer manufacturers to devise ways to relieve the economic burden for inspection station operators at the outset of the program.

One individual stated opposition to the proposed vehicle inspection program for the DFW area, because the program has too high of a financial burden on individuals that must drive older, less efficient vehicles for their livelihood.

Vehicles that are properly maintained should have no problem passing the emissions test regardless of their age. In the event that repairs are necessary, the commission acknowledges that these vehicle repairs may be costly, but there are mechanisms in place (waivers and extensions) that help alleviate the cost of emissions repairs for those who need help. The vehicle emissions testing program includes two waiver options: the minimum expenditure waiver and the individual vehicle waiver. The minimum expenditure waiver is available to those who have made repairs to their vehicle within the established criteria and met the dollar limits established by EPA rule. The individual vehicle waiver is for those who cannot meet emissions standards despite every reasonable effort by the motorist. In addition to these two waivers, the low income time extension is available for those who can demonstrate a financial inability to either afford adequate repairs or to meet the applicable minimum expenditure waiver amount. The waivers are a way to ensure that motorists who are making a “good faith” effort to comply with the I/M program requirements do not incur excessive repair costs, are not excessively inconvenienced, or are not denied re-registration of their vehicle.

Cleburne and Greenville supported the use of OBD testing systems on gasoline-powered on-road vehicles; however, along with the Hood County, they commented that the requirements to do ASM testing in an I/M program will be burdensome to the small businesses and citizens of rural counties and

will not be cost effective for an inspection facility due to the relatively low number of vehicles registered in rural counties. Additionally, the commenters stated that ASM testing should be limited to the four designated nonattainment counties. Since those comments were submitted the City of Cleburne has submitted a resolution requesting inclusion in the proposed I/M program which includes ASM testing.

An OBD test will achieve significant NO_x reductions, but can only be conducted on 1996 and newer model year vehicles that are equipped with an OBD system. Pre-1996 model year vehicles must also be subject to a test capable of achieving NO_x reductions to help attain the necessary NO_x reductions in the DFW nonattainment area. A loaded test, such as ASM, is needed to achieve NO_x reductions for pre-1996 vehicles. The ASM test achieves modeled VOC and NO_x reductions comparable to those achieved by an IM-240 test but at less than one-third of the cost.

Based on information from ASM type testing equipment manufacturers, the commission estimates that stations would need to purchase new ASM or similar equipment for roughly \$40,000. Participation in the program as it evolves will be a business decision made by each individual station owner. However, staff is in discussion with analyzer manufacturers to devise ways to relieve the economic burden for inspection station operators at the outset of the program.

Expansion of the program into surrounding CMSA counties is necessary for reduction of NO_x emissions to be able to demonstrate attainment with the NAAQS for ozone for the DFW

nonattainment area. Since they have opted in, the program will cover Johnson County including the City of Cleburne.

One individual commented that the future implementation of OBD III will virtually eliminate vehicle emissions testing before new testing machines required by the proposal have a chance to pay a break-even return on investment.

OBD-III was a pilot program in California that tested the feasibility of using on-vehicle radio transponders in conjunction with roadside readers, station networks, and satellites to monitor and download OBD fault codes directly to regulators. The transmission of fault codes would be in real-time and would decrease the time between fault detection and the repair of the vehicle.

Although the technology is available to support an OBD-III program, there are several legal and public hurdles that would make it difficult for this type of testing system to be supported by the public. While the EPA requires OBD testing for model year 1996 and newer vehicles commencing by January 1, 2001, the commission has no plans to implement an OBD-III type test.

Waxahachie requested that a vehicle I/M program consisting of an OBD test only and not an ASM test be implemented within the City of Waxahachie. Subsequently the city submitted a resolution requesting inclusion in the ASM and OBD program.

The commission believes there is a need to conduct emissions testing on pre-1996 vehicles, to which OBD is not applicable, in order to achieve the necessary NO_x emission reductions for a

program area. The commission does not have the authority to implement an I/M program confined within the boundaries of a single city. The Texas Transportation Code, §548.301(b) and the Texas Health and Safety Code, §382.037(c) allow the commission to establish by rule an I/M program at the county level, provided the county and its most populous municipality adopt a resolution requesting such a program. Since both Waxahachie and Ellis County have submitted such resolutions, the program will be implemented throughout Ellis County.

AIAM supported the proposed ASM/OBD testing program with the following provisions: exempt vehicles for testing until they are five years old (except on change of ownership), test on a biennial frequency, and require change of ownership testing.

The commission appreciates the support for the vehicle emissions testing program. The emissions testing program tests vehicles 2 - 24 years old. These vehicles account for the vast majority of vehicles on the road and the vehicle miles traveled, which have a direct correlation to the impact on air quality. In reference to biennial testing, the emission reduction credits achieved by any type of I/M program are reduced when implemented as a biennial rather than annual test. In order to meet attainment goals by 2007 for the DFW area, maximum emissions reductions are required. Also, emissions testing is currently conducted as an integrated part of the safety inspection which is required annually. For these reasons, the continuation of annual testing is considered an integral part of a successful I/M program. Test on resale is not necessary to meet the I/M program requirements of the FCAA and does not produce additional modeled emissions reduction benefits. The commission does recognize that the test on resale component is an

additional enforcement tool and has consumer protection values, and may consider this component in future program enhancements.

TSIA recommended implementation of their Clean Cars 2000 I/M plan, which includes the following:

(1) upgraded TX96 Two-Speed Idle analyzer; (2) a five-gas bench; (3) lower cut-points for the TSI test; (4) OBD testing for 1996 and newer; (5) gas tank/gas cap pressure test; (6) functional exhaust gas recirculation (EGR) valve test; (7) model year coverage from two years old to 1975 model year; (8) 0.5% waiver rate; (9) 30% failure rate for all models; (10) remote sensing of 15% of vehicles in core counties and 10% of vehicles in commuter area; (11) low income assisted repair (wheels to work); (12) statewide electronic transfer of safety/emission test data; (13) a 98% compliance rate; and (14) expansion of testing program to include additional counties divided into core, maintenance, commuter, and transitional groups. TSIA also proposed specific testing strategies for each group.

The Clean Cars 2000 Plan contains several elements common to the commission safety and emissions testing program. These include OBD test for 1996 and newer vehicles, check engine light function check, visual emissions component check, statewide gas cap pressure check, aggressive emissions repair technician training, program evaluation through mass emissions transient testing, and real-time transfer of emissions/safety data. In addition to the design elements common to both programs, TSIA recommended the following: (1) upgraded TX96 TSI analyzer; (2) a five-gas bench; (3) lower cutpoints for the TSI test; (4) gas tank/gas cap pressure test; (5) functional EGR valve test; (6) model year coverage from two years old to 1975 model year; (7) 98% compliance rate; (8) 0.5% waiver rate; (9) 30% failure rate for all vehicles; (10)

remote sensing of 15% of vehicles in core counties and 10% of vehicles in commuter area; (11) low income assisted repair (wheels to work); (12) statewide electronic transfer of safety/emission test data; and (13) expansion of testing program outside of state recommended core counties.

Upgraded TX96 TSI Analyzer

TSIA made no mention of what type of upgrades would be included in the upgrade from the TX96 to a TX2000 analyzer other than going to the five-gas bench. The commission upgrade to analyzer equipment includes a five-gas bench, dynamometer testing, OBD testing, tethered gas cap testing, and bar code scanning.

Five-gas Bench

TSIA recommended the use of a five-gas bench with the upgraded TSI emissions testing analyzers with OBD, in lieu of upgrading existing testing equipment in the DFW region to a loaded mode dynamometer test with OBD and for the proposed TSI-plus OBD system in El Paso and Harris Counties. Using a five-gas bench analyzer will allow for detection of NO_x, but using a TSI procedure does not allow the NO_x to be quantified. Idling vehicles do not produce much NO_x. Only by putting a vehicle under a load, transient or steady-state, can the vehicle engine produce NO_x in amounts similar to on-road conditions, and that can be more accurately quantified. By placing the vehicle under a load, the reproduction of high operating temperature and pressure needed to quantify NO_x is provided. Under the EPA current MOBILE5 model, the state would receive no more NO_x benefits from implementing the TSI/five-gas bench combination than for implementing the current TSI test.

Lower Cutpoints for Two-speed Idle Test

The current TSI test uses the default cutpoints set by the EPA. The MOBILE5 model does allow non-default cutpoints to be entered for the TSI test; however, the EPA does not have a data file containing credits for any cutpoints other than the default. For this reason, an alternate data file would have to be created establishing credits for non-default cutpoints. Substantial testing of vehicles and justification for the alternate credits at tighter cutpoints would be required for the EPA to accept the new cutpoints. However, lowering the TSI cutpoints will not allow the measurement of NO_x because when the vehicle engine is idling, the temperature and pressure in the combustion chambers are not high enough to produce a sufficient amount of measurable NO_x.

Gas Tank/Gas Cap Pressure Test

Based on conversations with representatives from Snap-on Diagnostics, gas tank pressure/purge test cannot be added to the current analyzers used for the TSI test because of software problems and conflicts. The cost to add the pressure/purge test to ASM type units would be approximately \$2,100. Although this test would be effective in detecting fugitive HC emissions escaping from bad gas tank caps or fractures in the tank system, and would provide additional HC credits, the test would not check or gain credit for NO_x.

Functional EGR Valve Test

According to the EPA, performance of a functional EGR test does not provide any NO_x credits beyond what is given for the visual EGR check already existing in the current TSI test. Research indicates a visual or functional EGR check may detect malfunctions in model year 1980 and older

vehicles. However, in newer technology vehicles the exhaust gas recirculation system is a more integral process of the engine, so a functional or visual check of just one component or valve cannot necessarily indicate whether the EGR system is functioning properly. Also according to the EPA, research indicates that EGR valve failure does not necessarily lead to excess NO_x emissions. For these reasons, the EPA does not grant any additional NO_x credit in the MOBILE model for a functional EGR check. The commission will include in its upcoming research on various loaded mode test methodologies, such as ASM and BAR31, the effectiveness of an EGR functionality test in achieving NO_x reductions.

Model Year Coverage

TSIA proposed emissions testing on vehicles two years old to the 1975 model year. The I/M program tests vehicles 2 - 24 years old, which includes the testing of 1976 model year vehicles. Inclusion of one additional year in testing coverage will make no modeled difference in emission reductions. The registration distributions used for MOBILE modeling group all vehicles 24 years and older together; therefore, modeling program coverage of 2 - 24 years will give the same results as modeling program coverage of 2 - 25 years. Even modeling program coverage of 2 - 23 years, so that the 24 and older group is not included in testing, has only a slight impact on reduction credits because there is such a small percentage of vehicles in the 24 and older grouping (only 1.4% of light-duty gas vehicles in the Dallas/Tarrant registration distribution).

98% Compliance Rate

The default compliance rate in the MOBILE model is 96%. This default rate is normally used for modeling purposes. Current I/M program data and a 1996 vehicle safety inspection sticker compliance rate survey for Dallas, El Paso, Harris, and Tarrant Counties (Appendix J of the SIP) suggests a compliance rate of approximately 96%. Compliance rate data collected by the commission does not support the use of a compliance rate higher than 96% for modeling purposes, and the commission will continue to monitor compliance rate data.

0.5% Waiver Rate

TSIA proposed a waiver rate of 0.5%. A default waiver rate of 3.0% is normally used in modeling scenarios. The actual waiver rate for the current TSI program is approximately 0.25%. An increase in the waiver rate is expected with the implementation of a \$450 minimum expenditure waiver amount in all I/M program areas.

30% Failure Rate for All Vehicles

MOBILE modeling requires input of a stringency rate which refers to the initial test failure rate for pre-1981 model year passenger cars and pre-1984 light-duty trucks. The stringency rate is used in the model to determine the credits obtained for the emissions testing of these older model vehicles. The default stringency rate used in modeling is 20%. The TSIA program calls for a 30% failure rate for all vehicles. More stringent cutpoints would have to be implemented to realize an increased failure rate for a TSI test. The current TSI test uses the default cutpoints set by the EPA. The MOBILE5 model does allow non-default cutpoints to be entered for the TSI test; however, the EPA does not have a data file containing credits for any cutpoints other than

the default. For this reason, an alternate data file would have to be created establishing credits for non-default cutpoints. Substantial testing and justification for the alternate credits at tighter cutpoints would be required for the EPA to accept the new cutpoints. Tightening the TSI cutpoints still will not address the need for NO_x reductions. The TSI test does not allow for the measurement of NO_x because when the vehicle engine is idling, the temperature and pressure in the combustion chambers are not high enough to produce a sufficient amount of measurable NO_x.

Remote Sensing of 15% of Vehicles in Core Counties and 10% of Vehicles in Commuter Area

The I/M program uses remote sensing to identify high-emitting vehicles commuting into nonattainment areas. The state will increase the use of remote sensing in all program areas to detect any high emitting vehicles, not just those commuting. The EPA plans to include the capability for modeling remote sensing programs in MOBILE6 which is still being developed. Remote sensing of vehicles registered within the I/M counties is used as an enforcement tool, and therefore does not gain any further emissions reduction credit.

Low Income Assisted Repair (Wheels to Work)

A low income repair assistance program could potentially reduce the number of low income time extensions and minimum expenditure waivers issued and possibly increase compliance with the program. No direct credits for a low income repair assistance program can be modeled in the MOBILE model; however, the waiver rate and compliance rate can be adjusted.

Statewide Electronic Transfer of Safety/Emission Test Data

During the Texas 76th Legislative Session, the legislature attempted to implement automation of the safety test statewide; however, the measure was vetoed by the governor. TSIA stated that implementation of electronic transfer of safety/emission test data would eliminate the need for registration denial. The commission does not believe this to be the case. Registration denial is one of the enforcement components of the emission testing program and is required by the EPA.

Expansion of Testing Program Outside of State Recommended Core Counties

Expansion of the I/M program to include emissions testing in Bexar, Brazoria, Travis, Waller, Ellis, Henderson, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Wise, Bastrop, Caldwell, Comal, Guadalupe, Gregg, Harrison, Hays, Nueces, Rusk, San Patricio, Smith, and Upshur Counties as suggested by TSIA, is beyond the scope of this rulemaking and would require legislative authority absent a federal requirement. However, the Texas Transportation Code, §548.301(b) and the Texas Health and Safety Code, §382.037(c) allow the commission to establish by rule an I/M program in any county provided the county and its most populous municipality adopt a resolution requesting such a program. The commission has included every county for which these resolutions have been submitted.

One individual stated that annual vehicle emissions testing is an inconvenience because people must drive to a test station when there is remote sensing technology that could screen out clean vehicles from the outset.

Implementation of a decentralized system of inspection stations was selected as the best method to ensure availability of a sufficient number of testing facilities throughout the participating counties. “Clean-screening,” or exempting clean vehicles from annual emissions testing using remote sensing, is under study in other states and may be available in the future provided the technology is proven both reliable at correctly identifying vehicle emissions and cost-effective to the citizens of Texas.

One individual expressed concern that too much emphasis is being placed on the inspection side of I/M instead of on maintenance.

Effective emission-related repairs are essential to the overall goals of the Texas I/M program. The inspection process alone will only identify those vehicles that have unacceptable emissions levels. Pollution from mobile sources is reduced only through effective emissions repairs. The commission agrees that an effective maintenance program will result in substantial reductions in emissions from motor vehicles.

One individual supported centralized testing, and expressed concern about fraud and enforcement.

The commission believes a decentralized test network is more acceptable to the public. The current decentralized I/M program has mechanisms in place to prevent fraud and ensure compliance, such as referee challenge facilities, citations, fines, registration denial, and covert audits.

Lewisville supported OBD testing beginning in 2001; however, they proposed that ASM with V_{MAS} be adopted no earlier than 2003, and only if the EPA provides information that the air quality in the North Texas CMSA is not improving.

The commission appreciates the city's support of OBD testing which will be implemented in Dallas, Tarrant, Harris, and El Paso Counties beginning in January 2001. In order to help achieve the NO_x emissions reductions needed for the DFW area to demonstrate ozone attainment, a loaded mode test like ASM testing in conjunction with OBD testing will be implemented in Dallas, Tarrant, Denton, and Collin Counties beginning May 1, 2002, and in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties beginning May 1, 2003. In its effort to ensure that the SIP strategies impose no more burden than necessary to protect health and welfare, the commission decided not to include the counties of Hunt, Hood, and Henderson as affected counties of these rules due to their limited impact on the air quality within the DFW nonattainment area. Due to the relatively low population, percentage of commuters, and growth rate of these counties, the commission re-evaluated the need for implementing the rules in these three counties. The re-evaluation included new photochemical modeling runs which applied this rule in the nine remaining counties only. The results of these runs indicated a minor impact of including Hunt, Hood, and Henderson Counties in these rules, but also showed that the area could demonstrate attainment of the NAAQS without those reductions in emissions. However, other control measures which were proposed for these counties do have measurable benefits for attainment of the NAAQS.

In regard to the use of a loaded mode test like ASM with V_{MAS} , there is currently no additional modeled benefit for using V_{MAS} . However, as technology evolves, the agency will continue to evaluate technological advances in emissions testing to ensure the best possible testing methodologies and equipment are considered in future program development. Ozone levels will continue to be monitored at designated sites throughout the state using special ambient air monitoring equipment.

One individual stated that testing a car on a dynamometer requires individuals who are very knowledgeable in running a dynamometer and suggested that the commission come up with a proposal to get cars tested annually and tuned-up because this will reduce emissions.

An intensive training program will be implemented for all inspectors operating a dynamometer type emissions test. A training program will include proper use, safety, and calibration of dynamometers. Currently, all subject vehicles registered in and operated more than 60 calendar days a year in an I/M program area are required to take an emissions test. As a result of emissions testing, failing vehicles are required to be repaired. The repair may involve a tune-up, or replacement of an emissions-related part in order to comply with emissions testing requirements.

State Compliance

The EPA expressed concern that the state must obtain the necessary commitments from the outlying counties to implement the proposed vehicle I/M program, or will be required to make up equivalent emission reductions from other sources.

The commission believes the SIP and rule packages being adopted, which includes a revised I/M program, will achieve the emission reductions needed for the DFW area to demonstrate attainment. The commission also believes the counties and most populous municipalities within the EDFW program area are committed to participating in the revised I/M program. However, an I/M program will not be implemented in any of the counties that comprise the EDFW program area until the county and its most populous municipality submit a resolution requesting the program.

Motorist Compliance

One individual commented that no one in El Paso or the federal government certifies that vehicles owned by military personnel have the required pollution control equipment upon return to Texas.

Current commission rules state that federal employees must show proof of compliance with I/M program requirements if their stay on the federal facility exceeds 60 calendar days per year. The federal government also requires that all vehicles owned by service members entering the United States be equipped with a catalytic converter. All vehicles registered in Texas must pass an annual safety inspection which includes a visual inspection to assure all required pollution control equipment is present and shows no evidence of tampering. TxDOT requires that vehicles

displaying Armed Forces license plates to register their vehicle within 45 days upon entering the state. If the service member displays foreign plates, i.e., German plates, the member must register the vehicle immediately and meet all pollution control and emission requirements.

Four individuals expressed concern that older model vehicles may be denied registration or scrapped because the owners are unable to afford repairs and cannot afford the cost of a newer vehicle, and that the test is unreliable so a new vehicle may not pass.

Motorists will not be required to scrap their vehicles. Vehicles that are properly maintained should have no problem passing the emissions test. In the event that repairs are necessary, the commission acknowledges that these vehicle repairs may be costly, but there are mechanisms (waivers and extensions) in place that help alleviate the up-front cost of emissions repairs.

The vehicle emissions testing program includes two waiver options: the minimum expenditure waiver and the individual vehicle waiver. The minimum expenditure waiver is available to those who have made repairs to their vehicle within the established criteria and met the dollar limits established by EPA rule. The individual vehicle waiver is for those motorists who cannot meet emissions standards despite every reasonable effort. In addition to these two waivers, the low income time extension is available for those who can demonstrate a financial inability to either afford adequate repairs or to meet the applicable minimum expenditure waiver amount. This extension is available for only one test cycle and may not be issued to the same vehicle two test cycles in a row. The waivers are a way to ensure that motorists who are making a “good faith”

effort to comply with the I/M program requirements do not incur excessive repair costs, are not excessively inconvenienced, or are not denied re-registration of their vehicle.

Regarding test reliability, the EPA has approved both ASM and TSI testing methodologies in a number of I/M programs nationwide. Any subject vehicle that does not meet the vehicle emissions requirements of these tests will fail regardless of the age of the vehicle.

Two individuals recommended that the police issue tickets to motorists in the 12-county DFW area who are driving visibly smoking vehicles.

Texas Transportation Code, Chapter 548, Subchapter F, §548.306, specifies that a motor vehicle registered in an ozone nonattainment area commits an offense if visible smoke remains suspended in the air ten or more seconds before fully dissipating. Therefore, law enforcement personnel may issue a citation to the registered owner of a vehicle that produces excessive visible smoke. In addition, a law enforcement officer who has probable cause to believe that this offense has been committed, has the authority to issue the driver of the vehicle an informative citation and explain that the registered owner of the vehicle may receive notice in the mail about the violation.

Additionally, 30 TAC §111.111(a)(5) states that motor vehicles shall not have visible exhaust emissions for more than ten consecutive seconds. This rule applies statewide and can be enforced by local law enforcement agencies.

One individual commented that older cars do not necessarily pollute, but that any car (new or old) that is poorly maintained will pollute; and therefore, all motorists need to be responsible for maintaining their vehicles.

The commission agrees that it is the responsibility of the motorists to properly maintain their vehicles. A properly maintained vehicle, old or new, should meet all emissions requirements.

Modeling/Good Faith Efforts

TSIA and one individual stated that it is unclear that ASM testing as proposed for the DFW area will have any positive effect on cleaning the air, and commented that the EPA should be required to prove that ASM testing will provide the pollution reductions claimed in the EPA MOBILE model.

The EPA requires that states use the most current version of their MOBILE model to estimate the emissions reduction credits achieved by I/M programs. In the MOBILE5 model, an ASM-2 (50/15-25/25) test using start-up cutpoints achieves VOC and NO_x reductions comparable to those achieved by an IM-240 test at start-up cutpoints. EPA devised the I/M credits for ASM test procedures based on a combination of the data from the California El Monte Study and EPA testing in Phoenix, Arizona. The commission believes that a loaded test, such as ASM, will achieve significantly more real-world NO_x reduction benefits than the TSI test.

Geographic Coverage

One individual requested to know if the impact of the vehicles from surrounding communities has been evaluated and if any ideas or plans are being presented to deal with this aspect of the pollution problem in the DFW Metroplex.

The emissions from vehicles in the surrounding communities and counties (Collin, Denton, Parker, Hood, Johnson, Ellis, Henderson, Kaufman, Rockwall, Hunt) have been considered in planning the I/M program. Currently in the DFW area, vehicle emissions testing is limited to Dallas and Tarrant counties. The I/M program has been modified to include Collin and Denton Counties beginning May 1, 2002; and Parker, Johnson, Ellis, Kaufman, and Rockwall Counties beginning May 1, 2003. The I/M program will continue to include remote sensing to identify high-emitting commuting into the area. In addition, remote sensing of vehicles operating within I/M program areas will also be conducted.

In its effort to ensure that the SIP strategies impose no more burden than necessary to protect health and welfare, the commission decided not to include the counties of Hunt, Hood, and Henderson as affected counties of these rules due to their limited impact on the air quality within the DFW nonattainment area. Due to the relatively low population, percentage of commuters, and growth rate of these counties the commission re-evaluated the need for implementing the rules in these three counties. The re-evaluation included new photochemical modeling runs which applied these rules in the nine remaining counties only. The results of these runs indicated a minor impact of including Hunt, Hood, and Henderson Counties in these rules, but also showed

that the area could demonstrate attainment of the NAAQS without those reductions in emissions.

However, other control measures which were proposed for these counties do have measurable benefits for attainment of the NAAQS.

Dallas, SCATC, SPAC, and 18 individuals expressed favor for a mandatory I/M program in the 12-county DFW CMSA. Additionally, Dallas supported remote sensing in the 12-county DFW CMSA.

The commission agrees that an I/M program in the DFW program area is vital to the overall success of a clean air strategy. In order to help achieve the NO_x emissions reductions needed for the DFW area to demonstrate ozone attainment, a loaded mode test like ASM testing in conjunction with OBD testing will be implemented in Dallas, Tarrant, Denton, and Collin Counties beginning May 1, 2002. The commission cannot mandate surrounding counties unless the county and the most populous municipality have submitted a resolution to the commission requesting inclusion in the Texas I/M program.

The commission agrees that remote sensing has a useful role to play in detecting high-emitting vehicles in the I/M program areas, and the I/M program will continue to use remote sensing to identify gross polluters.

Other Issues

Four individuals commented that stricter vehicle emission standards would not help clean the air in El Paso County unless vehicles from New Mexico and Ciudad Juarez, Chihuahua, Mexico that come into El Paso County are required to meet the same standards.

The suggestion that vehicles from New Mexico, Ciudad Juarez, and Chihuahua, Mexico meet the same standards is beyond the scope of this rulemaking; therefore, the commission made no change in response to this comment.

Two individuals commented that tougher testing is not needed to find polluters, but that once a polluting vehicle is identified by the current testing program it should not be allowed to continue operating because it costs too much to fix.

The commission is adopting an emissions testing system that has the capability to identify NO_x emissions. The current TSI analyzer is not capable of testing for NO_x emissions. The loaded mode type test in conjunction with the implementation of OBD testing will allow for the identification of vehicles emitting excess HC, CO, and/or NO_x. If a vehicle fails the emissions test for any pollutant, the vehicle must be repaired and pass a re-test or qualify for a low income time extension, individual vehicle waiver, or a minimum expenditure waiver. A waiver or extension does not exempt a motorist from meeting the requirements of the I/M program, but rather gives the individual the time necessary to properly have the vehicle repaired. In addition, waivers are a way to ensure that motorists are making a “good faith” effort to comply with the I/M program

requirements and do not incur excessive repair costs, are not excessively inconvenienced, or denied re-registration of their vehicle. Since waivers or extensions are not extended past one test cycle, a non-compliant vehicle must be brought into compliance or the vehicle can not be legally driven on public roadways. Vehicles that do not meet the safety and emission test requirements are not issued a safety certificate and will be denied re-registration.

Pennzoil/Quaker State requested the commission petition the EPA to coordinate corporate average fuel economy testing with the time of the recommended oil change to capture the true fuel economy of the engine.

The suggestion is beyond the scope of this rulemaking.

One individual wanted to mandate that every vehicle (personal or commercial) receive a thorough, patented "Best Engine Care"(BEC) engine cleaning every three years or 30,000 miles, which ever comes first.

The suggestion to mandate a BEC maintenance procedure that motorists must adhere to is beyond the scope of this rulemaking.

STATUTORY AUTHORITY

The amendment is adopted under the Texas Water Code, §5.103, which provides the commission the authority to adopt rules necessary to carry out its powers and duties under the TWC. The amendment is also adopted under the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.011, which provides the commission the authority to control the quality of the state's air; §382.012, which provides the commission the authority to prepare and develop a general, comprehensive plan for the control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA; §382.019, which provides the commission the authority to adopt rules to control and reduce emissions from engines used to propel land vehicles; §§382.037-382.038, which provide the commission the authority by rule to establish, implement, and administer a program requiring emissions-related inspections of motor vehicles to be performed at inspection facilities consistent with the requirements of the FCAA; and §382.039, which provides the commission the authority to coordinate with federal, state, and local transportation planning agencies to develop and implement transportation programs and other measures necessary to demonstrate and maintain attainment of NAAQS and to protect the public from exposure to hazardous air contaminants from motor vehicles.

SUBCHAPTER A: DEFINITIONS

§114.2

§114.2. Inspection and Maintenance (I/M) Definitions.

Unless specifically defined in the TCAA or in the rules of the Texas Natural Resource Conservation Commission (commission), the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms which are defined by the TCAA, the following words and terms, when used in Subchapter C of this chapter (relating to Vehicle Inspection and Maintenance), shall have the following meanings, unless the context clearly indicates otherwise.

(1) Acceleration simulation mode (ASM-2) test - An emissions test using a dynamometer (a set of rollers on which a test vehicle's tires rest) which applies an increasing load or resistance to the drive train of a vehicle, thereby simulating actual tailpipe emissions of a vehicle as it is moving and accelerating. The ASM-2 vehicle emissions test is comprised of two phases:

(A) the 50/15 mode - in which the vehicle is tested on the dynamometer simulating the use of 50% of the vehicle available horsepower to accelerate at a rate of 3.3 miles per hour (mph) per second at a constant speed of 15 mph; and

(B) the 25/25 mode - in which the vehicle is tested on the dynamometer simulating the use of 25% of the vehicle available horsepower to accelerate at a rate 3.3 mph per second at a constant speed of 25 mph.

(2) Consumer Price Index - The Consumer Price Index for any calendar year is the average of the Consumer Price Index for all-urban consumers published by the Department of Labor, as of the close of the 12-month period ending on August 31 of the calendar year.

(3) Motorist - A person or other entity responsible for the inspection, repair, and maintenance of a motor vehicle, which may include, but is not limited to, owners and lessees.

(4) On-board diagnostic (OBD) system - The computer system installed in a vehicle by the manufacturer which monitors the performance of the vehicle emissions control equipment, fuel metering system, and ignition system for the purpose of detecting malfunction or deterioration in performance that would be expected to cause the vehicle not to meet emissions standards.

(5) On-road test - Utilization of remote sensing technology to identify vehicles operating within the inspection and maintenance program areas that have a high probability of being high-emitters.

(6) Out-of-cycle test - Required emissions test not associated with vehicle safety inspection testing cycle.

(7) **Primarily operated** - Use of a motor vehicle greater than 60 calendar days per testing cycle in an affected county. Motorists shall comply with emissions requirements for such counties. It is presumed that a vehicle is primarily operated in the county in which it is registered.

(8) **Program area** - County or counties in which the Texas Department of Public Safety, in coordination with the commission, administers the vehicle emissions inspection and maintenance program contained in the revised Texas Inspection and Maintenance (I/M) State Implementation Plan. These program areas include:

(A) the Dallas/Fort Worth (DFW) program area which consists of the following counties: Dallas, Denton, Collin, and Tarrant;

(B) the El Paso program area which consists of El Paso County;

(C) the Houston/Galveston program area which consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties; and

(D) the extended DFW (EDFW) program area which consists of Ellis, Johnson, Kaufman, Parker, and Rockwall Counties. These counties will become part of the program area as of May 1, 2003.

(9) **Retests** - Successive vehicle emissions inspections following the failing of an initial test by a vehicle during a single testing cycle.

(10) **Testing cycle** - Annual cycle commencing with the first safety inspection certificate expiration date for which a motor vehicle is subject to a vehicle emissions inspection.

(11) **Two-speed idle inspection and maintenance test** - A measurement of the tailpipe exhaust emissions of a vehicle while the vehicle idles, first at a lower speed and then again at a higher speed.

(12) **Uncommon part** - A part that takes more than 30 days for expected delivery and installation, where a motorist can prove that a reasonable attempt made to locate necessary emission control parts by retail or wholesale part suppliers will exceed the remaining time prior to expiration of the vehicle safety inspection certificate or the 30-day period following an out-of-cycle inspection.

SUBCHAPTER C: VEHICLE INSPECTION AND MAINTENANCE

§§114.50-114.53

STATUTORY AUTHORITY

These amendments are adopted under the Texas Water Code, §5.103, which provides the commission the authority to adopt rules necessary to carry out its powers and duties under the TWC. The amendments are also adopted under the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.011, which provides the commission the authority to control the quality of the state's air; §382.012, which provides the commission the authority to prepare and develop a general, comprehensive plan for the control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA; §382.019, which provides the commission the authority to adopt rules to control and reduce emissions from engines used to propel land vehicles; §§382.037-382.038, which provide the commission the authority by rule to establish, implement, and administer a program requiring emissions-related inspections of motor vehicles to be performed at inspection facilities consistent with the requirements of the FCAA; and §382.039, which provides the commission the authority to coordinate with federal, state, and local transportation planning agencies to develop and implement transportation programs and other measures necessary to demonstrate and maintain attainment of NAAQS and to protect the public from exposure to hazardous air contaminants from motor vehicles.

§114.50. Vehicle Emissions Inspection Requirements.

(a) Applicability. The requirements of this section and those contained in the revised Texas Inspection and Maintenance (I/M) State Implementation Plan (SIP) shall be applied to all gasoline-powered motor vehicles 2 - 24 years old and subject to an annual emissions inspection, beginning with the first safety inspection. Currently, military tactical vehicles, motorcycles, diesel-powered vehicles, dual-fueled vehicles which cannot operate using gasoline, and antique vehicles registered with the Texas Department of Transportation are excluded from the program. Safety inspection facilities and inspectors certified by the Texas Department of Public Safety (DPS) shall inspect all subject vehicles, in the following program areas in accordance with the following schedule.

(1) All vehicles registered and primarily operated in Dallas, Tarrant, Harris, and El Paso Counties shall be tested using a two-speed idle (TSI) test through December 31, 2000.

(2) This paragraph applies to all vehicles registered and primarily operated in the Dallas/Fort Worth (DFW) program area.

(A) Beginning January 1, 2001 through April 30, 2002, all 1996 and newer model year vehicles registered and primarily operated in Dallas and Tarrant Counties equipped with on-board diagnostic (OBD) systems shall be tested using EPA-approved OBD test procedures in conjunction with a TSI test.

(B) Beginning January 1, 2001 through April 30, 2002, all pre-1996 and older model year vehicles registered and primarily operated in Dallas and Tarrant Counties shall be tested using a TSI test. All vehicle emissions test stations must offer both TSI and OBD tests to the public.

(C) Beginning May 1, 2002, all 1996 and newer model year vehicles equipped with OBD systems shall be tested using EPA-approved OBD test procedures in conjunction with an acceleration simulation mode (ASM-2) test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by the EPA.

(D) Beginning May 1, 2002, all pre-1996 model year vehicles shall be tested using the ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by the EPA. All vehicle emissions test stations must offer both an OBD test and ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by EPA, to the public.

(3) This paragraph applies to all vehicles registered and primarily operated in the extended DFW (EDFW) program area.

(A) Beginning May 1, 2003, all 1996 and newer model year vehicles equipped with OBD systems shall be tested using EPA-approved OBD test procedures in conjunction with an ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by the EPA.

(B) Beginning May 1, 2003 , all pre-1996 and older model year vehicles shall be tested using the ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by the EPA. All vehicle emissions test stations must offer both an OBD test and an ASM-2 test, or a vehicle emissions test that meets SIP emissions reduction requirements and is approved by the EPA, to the public.

(4) This paragraph applies to all vehicles registered and primarily operated in Harris County of the Houston/Galveston (HGA) program area.

(A) Beginning January 1, 2001, all 1996 and newer model year vehicles equipped with OBD systems shall be tested using EPA-approved OBD test procedures in conjunction with a TSI test.

(B) Beginning January 1, 2001, all pre-1996 and older vehicles shall be tested using a TSI test. All vehicle emissions test stations must offer both TSI and OBD tests to the public.

(5) This paragraph applies to all vehicles registered and primarily operated in the El Paso program area.

(A) Beginning January 1, 2001, all 1996 and newer model year vehicles equipped with OBD systems shall be tested using EPA-approved OBD test procedures in conjunction with a TSI test.

(B) Beginning January 1, 2001, all pre-1996 vehicles shall be tested using a TSI test. All vehicle emissions test stations must offer both TSI and OBD tests to the public.

(b) Control requirements.

(1) No person or entity may operate, or allow the operation of, a motor vehicle registered in the DFW, EDFW, HGA, and El Paso program areas which does not comply with:

(A) all applicable air pollution emissions control related requirements included in the annual vehicle safety inspection requirements administered by DPS, as evidenced by a current valid inspection certificate affixed to the vehicle windshield; and

(B) the vehicle emissions inspection and maintenance requirements contained in this subchapter.

(2) All federal government agencies shall require a motor vehicle operated by any federal government agency employee on any property or facility under the jurisdiction of the agency and located in a program area to comply with all vehicle emissions I/M requirements contained in the revised Texas I/M SIP. Commanding officers or directors of federal facilities shall certify annually to the executive director, or appointed designee, that all subject vehicles have been tested and are in compliance with the Federal Clean Air Act (42 United States Code, et seq.). This requirement shall not

apply to visiting agency, employee, or military personnel vehicles as long as such visits do not exceed 60 calendar days per year.

(3) Any motorist in the DFW, EDFW, or El Paso program areas or Harris County who has received a notice from an emissions inspection station that there are recall items unresolved on their motor vehicle, should furnish proof of compliance with the recall notice prior to the next vehicle emissions inspection. The motorist may present a written statement from the dealership or leasing agency indicating that emissions repairs have been completed as proof of compliance.

(4) A motorist whose vehicle has failed an emissions test may request a challenge retest through DPS. If the retest is conducted within 15 days of the initial inspection, the retest is free.

(5) A motorist whose vehicle has failed an emissions test and has not requested a challenge retest or has failed a challenge retest must have emissions-related repairs performed and must submit a properly completed Vehicle Repair Form (VRF) in order to receive a retest, a minimum expenditure waiver, or a parts availability time extension.

(6) A motorist whose vehicle is registered in the DFW, EDFW, HGA, or El Paso program areas and has failed an on-road test administered by the DPS shall:

(A) submit the vehicle for an out-of-cycle vehicle emissions inspection within 30 days of written notice by the DPS; and

(B) satisfy all inspection, extension, or waiver requirements of the vehicle emissions I/M program contained in the revised Texas I/M SIP.

(7) State, governmental, and quasi-governmental agencies which fall outside the normal registration or inspection process shall comply with all vehicle emissions I/M requirements contained in the Texas I/M SIP for vehicles primarily operated in I/M program areas.

(c) Waivers and extensions. A motorist may apply to the DPS for a waiver or an extension as specified in §114.52 of this title (relating to Waivers and Extensions for Inspection Requirements), which defer the need for full compliance with vehicle emissions standards for a specified period of time after failing a vehicle emissions inspection.

(d) Prohibitions.

(1) No person may issue or allow the issuance of a vehicle inspection report (VIR), as authorized by DPS, unless all applicable air pollution emissions control related requirements of the annual vehicle safety inspection and the vehicle emissions I/M requirements and procedures contained in the revised Texas I/M SIP are completely and properly performed in accordance with the rules and regulations adopted by DPS and the commission. Prior to taking any enforcement action regarding this provision, the commission shall consult with DPS.

(2) No person may allow or participate in the preparation, duplication, sale, distribution, or use of false, counterfeit, or stolen safety inspection certificates, VIRs, VRFs, vehicle emissions repair documentation, or other documents which may be used to circumvent the vehicle emissions I/M requirements and procedures contained in the revised Texas I/M SIP.

(3) No organization, business, person, or other entity may represent itself as an emissions inspector certified by the DPS, unless such certification has been issued under the certification requirements and procedures contained in the Texas Transportation Code, §§548.401 - 548.404.

(4) No person may act as or offer to perform services as a Recognized Emissions Repair Technician of Texas, (as designated by DPS), without first obtaining and maintaining DPS recognition.

§114.51. Equipment Evaluation Procedures for Vehicle Exhaust Gas Analyzers.

(a) Any manufacturer or distributor of vehicle testing equipment may apply to the executive director of the Texas Natural Resource Conservation Commission (commission) or his appointee, for approval of an exhaust gas analyzer or analyzer system for use in the Texas Inspection and Maintenance (I/M) program administered by the Texas Department of Public Safety. Each manufacturer shall submit a formal certificate to the commission stating that any analyzer model sold or leased by the manufacturer or its authorized representative and any model currently in use in the I/M program will

satisfy all design and performance criteria set forth in "Specifications for Preconditioned Two Speed Idle Vehicle Exhaust Gas Analyzer Systems for Use in the Texas Vehicle Emissions Testing Program," dated March 15, 2000, or in "Specifications for Acceleration Simulation Mode (ASM-2) Vehicle Exhaust Gas Analyzer Systems for use in the Texas Vehicle Emissions Testing Program," dated March 15, 2000. Copies of these documents are available at the commission's Central Office, located at 12100 Park 35 Circle, Austin, Texas 78753. The manufacturer shall also provide sufficient documentation to demonstrate conformance with these criteria including a complete description of all hardware components, the results of appropriate performance testing, and a point-by-point response to each specific requirement.

(b) All equipment shall be tested by an independent test laboratory. The cost of the certification shall be absorbed by the manufacturer. The conformance demonstration shall include, but is not limited to:

(1) certification that equipment design and construction conform with the specifications referenced in subsection (a) of this section;

(2) documentation of successful results from appropriate performance testing;

(3) evidence of necessary changes to internal computer programming, display format, and data recording sequence;

(4) a commitment to fulfill all maintenance, repair, training, and other service requirements described in the specifications referenced in subsection (a) of this section. A copy of the minimum warranty agreement to be offered to the purchaser of an approved vehicle exhaust gas analyzer shall be included in the demonstration of conformance; and

(5) documentation of communication ability using protocol provided by the commission or the commission Texas Data Link contractor.

(c) If a review of the demonstration of conformance and all related support material indicates compliance with the criteria listed in subsections (a) and (b) of this section, the executive director or his appointee may issue a notice of approval to the analyzer manufacturer which endorses the use of the specified analyzer or analyzer system in the Texas I/M program.

(d) The applicant shall comply with all special provisions and conditions specified by the executive director or his appointee in the notice of approval.

(e) Any manufacturer or distributor which receives a notice of approval from the executive director or his appointee for a vehicle emissions test equipment for use in the Texas I/M program may be subject to appropriate enforcement action and penalties prescribed in the TCAA or the rules and regulations promulgated thereunder if:

(1) any information included in the conformance demonstration as required in subsection (b) of this section is misrepresented resulting in the purchase or operation of equipment in the Texas I/M program which does not meet the specifications referenced in subsection (a) of this section; or

(2) the applicant fails to comply with any requirement or commitment specified in the notice of approval issued by the executive director or implied by the representations submitted by the applicant in the conformance demonstration required by subsection (b) of this section; or

(3) the manufacturer or distributor fails to provide on-site service response by a qualified repair technician within two business days of a request from an inspection station, excluding Sundays, national holidays (New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day), and other days when a purchaser's business might be closed;

(4) the manufacturer or distributor fails to fulfill, on a continuing basis, the requirements described in this section or in the specifications referenced in subsection (a) of this section; or

(5) the manufacturer fails to provide analyzer software updates within six months of request and fails to install analyzer updates within 90 days of commission written notice of acceptance.

§114.52. Waivers and Extensions for Inspection Requirements.

(a) Applicability. The waivers and extensions apply to any motorist who can satisfy the conditions of a specific waiver or extension. Applications must be made to the Department of Public Safety (DPS). For the minimum expenditure waiver, individual vehicle waiver, and parts availability time extension, the motorist may apply only once for each testing cycle. For the low income time extension, the motorist may apply every other test cycle.

(b) Minimum expenditure waiver. A motorist shall use any available warranty coverage to obtain needed repairs before expenditures shall be used in calculating the minimum repair expenditures to qualify for a minimum expenditure waiver, unless the warranty remedy has been denied in writing from the manufacturer or authorized dealer. A motorist may not use or attempt to use expenditures for tampering-related repairs in calculating the minimum repair expenditures to qualify for a minimum expenditure waiver. A minimum expenditure waiver shall be valid for the remaining portion of the testing cycle. Tampering includes, but is not limited to, engine modifications, emissions system modifications, or fuel-type modifications disapproved by the Texas Natural Resource Conservation Commission or EPA. A minimum expenditure waiver may be granted in accordance with the following conditions:

(1) The applicant must have a valid retest Vehicle Inspection Report (VIR), a valid Vehicle Repair Form (VRF), and the vehicle must have failed a retest after all qualifying repairs. Qualifying repairs must meet the following conditions.

(A) The minimum expenditure waiver in any program area shall be at least \$450 or that amount adjusted by the Consumer Price Index.

(B) All qualifying repairs shall be performed by a Recognized Emissions Repair Technician of Texas (as designated by DPS) in order to count labor cost and/or diagnostic costs.

(C) Qualifying repairs must be directly applicable to the cause for the test failure (repairs conducted up to 60 days prior to the initial test may count toward the waiver amount).

(D) When repairs are not performed by a Recognized Emissions Repair Technician of Texas, only the purchase price of parts, applicable to the failure, qualify as a repair expenditure for the minimum expenditure waiver.

(2) The motorist provides to the DPS an original retest VIR, a properly completed VRF, and an original itemized receipt indicating the emissions-related repairs performed. If labor and/or diagnostic charges are being claimed toward the minimum expenditure, the VRF shall be completed by a Recognized Emissions Repair Technician of Texas.

(c) Low income time extension. A low income time extension may be granted in accordance with the following conditions.

(1) A motorist must supply proof that the subject vehicle failed the initial emissions inspection test in the form of an original failed vehicle inspection report.

(2) A motorist shall provide proof in writing to the DPS that the registered vehicle owner(s) meet(s) the following conditions:

(A) the low income time extension applicant is the owner of the vehicle that has failed an inspection and maintenance (I/M) test;

(B) the vehicle has not been granted a low income time extension waiver in the previous inspection cycle; and

(C) the applicant meets one of the following:

(i) the applicant receives financial assistance from the Texas Department of Human Services (subject to approval by the director of DPS); or

(ii) the applicant's adjusted gross income is within the current federal poverty income guidelines;

(D) the applicant shows proof of conformity with paragraph (2)(C) of this subsection by providing to the DPS one of the following, which the applicant certifies are true and correct:

(i) a federal income tax return; or

(ii) other documentation authorized by the director of the DPS.

(3) After a motorist receives an initial low income time extension, the vehicle must pass an emissions test prior to receiving another low income time extension or any waiver or extension.

(d) Parts availability time extension. The parts availability time extension does not exempt the vehicle from the compliance requirements of the I/M program but merely extends the period for compliance. By the end of the time extended, the vehicle must be repaired, retested, and receive a passing VIR or comply with paragraph (4) of this subsection. Only one parts availability time extension is allowed in each test cycle for each vehicle. A parts availability time extension may be granted in accordance with the following conditions.

(1) The motorist can document that emissions-related repairs cannot be completed before the expiration of the safety inspection certificate or before the 30-day period following an out-of-cycle inspection because the repairs require an uncommon part.

(2) The motorist shall provide to the DPS an original VIR indicating that the vehicle failed the emissions test and an original itemized documentation by a Recognized Emissions Repair Technician of Texas, indicating parts ordered by name; description and catalog number; order number; sources of parts, including addresses and phone numbers; and expected delivery and installation dates of uncommon parts before a parts availability time extension can be issued.

(3) The motorist shall return the motor vehicle to the DPS for a retest and verification of repairs upon completion of the repairs.

(4) The motorist shall provide to the DPS, prior to expiration of a parts availability time extension, adequate documentation that one of the following conditions exists:

(A) the motor vehicle passed a retest;

(B) the motorist qualifies for a Minimum Expenditure Waiver or Low Income Time Extension; or

(C) the motor vehicle shall no longer be operated in the program area.

(5) A vehicle which receives a parts availability time extension in one test cycle must have the vehicle repaired and retested prior to the expiration of such extension or the vehicle shall be

ineligible for a parts availability time extension in the subsequent test cycle in addition to other penalties authorized for non-compliance.

(6) The length of a parts availability time extension shall depend upon expected delivery and installation dates of uncommon parts as determined by the DPS representative on a case-by-case basis and issued for either 30, 60, or 90 days or longer if necessary, but shall not exceed one test cycle.

(e) Individual vehicle waiver. If a vehicle has failed an I/M test, a motorist may petition the director of the DPS for an individual vehicle waiver. Upon demonstration that the motorist has taken reasonable measures to comply with the requirements of the vehicle emissions I/M program contained in the revised Texas I/M State Implementation Plan and that such waiver shall have minimal impact on air quality, the director may approve the petition, and the motorist may receive a waiver. Motorists may apply for the individual vehicle waiver each test cycle.

§114.53. Inspection and Maintenance Fees.

(a) The following fees must be paid for an emissions inspection of a vehicle at an inspection station. This fee shall include one free retest should the vehicle fail the emissions inspection, provided that the motorist has the retest performed at the same station where the vehicle originally failed and submits, prior to the retest, a properly completed Vehicle Repair Form showing that emissions-related repairs were performed and the retest is conducted within 15 days of the initial emissions test.

(1) Through December 31, 2000, any emissions inspection station required to conduct a two-speed idle (TSI) test in accordance with §114.50(a)(1) of this title (relating to Vehicle Emissions Inspection Requirements) shall collect a fee of \$13 and shall remit \$1.75 to the Department of Public Safety (DPS).

(2) Beginning January 1, 2001, any emissions inspection station required to conduct a (TSI) test and on-board diagnostic (OBD) test in accordance with §114.50(a)(2)(A) and (B), (4), and (5) of this title shall collect a fee of \$14 and shall remit \$2.00 to the DPS.

(3) Beginning May 1, 2002, any emissions inspection station required to conduct an acceleration simulation mode test and test in accordance with §114.50(a)(2)(C) and (D) of this title shall collect a fee of \$22.50 and shall remit \$2.00 to the DPS.

(4) Beginning May 1, 2003, any emissions inspection station required to conduct an acceleration simulation mode test and OBD test in accordance with §114.50(a)(3) of this title shall collect a fee of \$22.50 and shall remit \$2.00 to the DPS.

(b) The per-vehicle fee and the amount the inspection station remits to the DPS for a challenge test, at an inspection station designated by the DPS, shall be the same as the amounts set forth in subsection (a) of this section. The challenge fee shall not be charged if the vehicle is retested within 15 days of the initial test.

(c) Inspection stations performing out-of-cycle vehicle emissions inspections for the state's remote sensing element shall charge a motorist for an out-of-cycle emissions inspection in the amount specified in subsection (a) of this section, resulting from written notification that subject vehicle failed on-road testing. If the vehicle passes the vehicle emissions inspection, the vehicle owner may request reimbursement from DPS.