

NOTICES OF PROPOSED RULEMAKING

Unless exempted by A.R.S. § 41-1005, each agency shall begin the rulemaking process by 1st submitting to the Secretary of State's Office a Notice of Rulemaking Docket Opening followed by a Notice of Proposed Rulemaking that contains the preamble and the full text of the rules. The Secretary of State's Office publishes each Notice in the next available issue of the *Register* according to the schedule of deadlines for *Register* publication. Due to time restraints, the Secretary of State's Office will no longer edit the text of proposed rules. We will continue to make numbering and labeling changes as necessary.

Under the Administrative Procedure Act (A.R.S. § 41-1001 et seq.), an agency must allow at least 30 days to elapse after the publication of the Notice of Proposed Rulemaking in the *Register* before beginning any proceedings for adoption, amendment, or repeal of any rule. A.R.S. §§ 41-1013 and 41-1022.

NOTICE OF PROPOSED RULEMAKING

TITLE 4. PROFESSIONS AND OCCUPATIONS

CHAPTER 3. STATE BOXING COMMISSION

PREAMBLE

1. **Sections Affected:** R4-3-412.01
Rulemaking Action: New Section
2. **The specific authority for rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):**
Authorizing statute: A.R.S. § 5-224
Implementing statutes: A.R.S. § 41-1073
3. **The name and address of the agency personnel with whom persons may communicate regarding the rulemaking:**
Name: John H. Montaño, Executive Director
Address: State Boxing Commission
1400 West Washington, Room 210
Phoenix, Arizona 85007
Telephone: (602) 542-1417
Fax: (602) 542-1458
4. **An explanation of the rules, including the agency's reasons for initiating the rules:**
Laws 1996, Ch. 102, § 42, requires agencies to adopt rules establishing time-frames for the granting or denial of licenses. A.R.S. § 41-1001(11) defines a "license" as *the whole or part of any agency permit, certificate, approval, registration, charter or similar form of permission require by law, but it does not include a license required solely for revenue purposes*. The rules must specify:
 1. An "administrative completeness time-frame" (the time it takes the agency to determine if an application is complete);
 2. A "substantive review time-frame" (the time it takes the agency to review the application and determine if the applicant meets the substantive criteria for licensure); and
 3. An "overall time-frame" (a combination of the administrative completeness and substantive review time-frames).The law also requires an agency to notify applicants within the established time-frames, whether the application is complete (administrative completeness) and whether a license is being issued (substantive review).
The licenses issued by the Commission that fall under the requirements of the new law are contained within subsection (D). The administrative and substantive time-frames allow for possible delays in fingerprinting information, financial requirements and verification, scheduling Commissioner meetings, or establishing sparing sessions to verify a boxer's general physical condition. In certain circumstances, when a boxer is well known within the boxing community, the boxer may choose to have a medical examination the evening of the fight — extending the administrative time-frame to the maximum. Except for this occurrence, it is extremely rare, that the fully allotted time-frames will be used. If all the required documentation and information is submitted, the license is generally issued.

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5. **A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state.**

Not applicable.

6. **The preliminary summary of the economic, small business, and consumer impact:**

It is not anticipated that the adoption of this rule will have a significant impact on government, or any impact on private industry, small business, or consumers. This rule action provides the codification of the time-frames currently observed by the State Boxing Commission.

A. Estimated Costs and Benefits to the State Boxing Commission.

Currently, when incomplete applications are received, the Commission obtains the information when the application is brought in or by telephone when the application is mailed. In cases where financial or medical information is needed the applicant is noticed in a letter explaining what information is missing. This rule simply codifies the time-frames and procedures already observed by the Commission. The Commission will assume additional costs to notice every applicant who does not provide a complete application. However, it is unknown what those costs may be.

B. Estimated Costs and Benefits to Political Subdivisions.

Political subdivisions of this state are not directly affected by the implementation and enforcement of this rulemaking.

C. Businesses Directly Affected By the Rulemaking.

Any person applying for a license will follow current procedures and practices and no additional cost shall occur. The proposed rule will provide an intangible benefit for an applicant by identifying the time-frames in which the Commission will approve or deny the license.

D. Estimated Costs and Benefits to Private and Public Employment.

Private and public employment are not directly affected by the implementation and enforcement of this rulemaking.

E. Estimated Costs and Benefits to Consumers and the Public.

Consumers and the public are not directly affected by the implementation and enforcement of this rulemaking.

F. Estimated Costs and Benefits to State Revenues.

This rulemaking will have no impact on state revenues.

7. **The name and address of agency personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:**

Name: John H. Montaño
Address: State Boxing Commission
1400 West Washington, Room 210
Phoenix, Arizona 85007
Telephone: (602) 542-1471
Fax: (602) 542-1458

8. **The time, place, and nature of the proceedings for the adoption, amendment, or repeal of the rules or, if no proceeding is scheduled, where, when, and how persons, may request an oral proceeding on the proposed rules:**

Date: July 23, 1998
Time: 1 p.m.
Location: State Boxing Commission
1400 West Washington, Room 250
Phoenix, Arizona 85007
Nature: Public Hearing

Written comments on the proposed rules or preliminary economic, small business, and consumer impact statement must be received by 4 p.m., July 23, 1998. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting the Commission's Executive Director, John H. Montaño at (602) 542-1471, 468-1414 (voice), or 1-800-367-3839 (TDD Relay). Requests should be made as early as possible to allow time to arrange the accommodation.

9. **Any other matters prescribed by statute that are applicable to the specific agency or to any specific agency or to any specific rule or class of rules.**

None.

10. **Incorporations by reference and their locations in the rules:**

None.

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11. The full text of the rules follows:

TITLE 4. PROFESSIONS AND OCCUPATIONS

CHAPTER 3. STATE BOXING COMMISSION

ARTICLE 4. ADMINISTRATION

Section

R4-3-412.01. Licensing Time-frames

ARTICLE 4. ADMINISTRATION

R4-3-412.01. Licensing Time-frames

R4-3-412.01. Licensing Time-Frames

A. Overall time-frame. The Commission shall issue or deny a license within the overall time-frames listed in subsection (D) after receipt of the complete application. The overall time-frame is the total of the number of days provided in the administrative completeness review and the substantive review.

B. Administrative completeness review.

1. The administrative completeness review time-frames established in subsection (D) begins on the date the Commission receives the application. The Commission shall notify the applicant, in writing within the administrative completeness review time-frame if the application or request is incomplete. The notice shall specify what information is missing. If the Commission does not provide notice to the applicant, the license application shall be considered complete.

2. An applicant with an incomplete license application shall supply the missing information within the completion period established in subsection (D). The administrative completeness review time-frame is suspended from the date the Commission notifies the applicant of

missing information until the date the Commission receives the information.

3. If the applicant fails to submit the missing information before the completion period, the Commission may close the file. An applicant whose file has been closed and who later wishes to obtain a license shall submit a new application.

C. Substantive review. The substantive review time-frame established in subsection (D) shall begin after the application is administratively complete.

1. If the Commission makes a comprehensive written request for additional information, the applicant shall submit the additional information identified by the request within the additional information period provided in subsection (D). The substantive completeness review is suspended from the date the Commission mails the request until the information is received by the Commission. If the applicant fails to provide the information identified in the written request the Commission shall consider the application withdrawn.

2. The Commission shall issue a written notice granting or denying the license within the substantive review time-frame. If the application is denied, the Commission shall send the applicant written notice explaining the reason for the denial, the applicant's right to seek a fair hearing, and the time period in which the applicant may appeal the denial.

D. Time-frames.

Time-frames.

<u>License</u>	<u>Statutory Authority (Title 4)</u>	<u>Administrative Completeness Review</u>	<u>Completion Period</u>	<u>Substantive Completeness Review</u>	<u>Additional Information</u>	<u>Overall Time-frame</u>
<u>Promoter, Matchmaker, Corporation, Manager, Judge, Referee</u>	<u>5-228</u>	<u>35</u>	<u>10</u>	<u>30</u>	<u>7</u>	<u>65</u>
<u>Boxer, Trainer, Ring Announcer, Timekeeper, Physician</u>	<u>5-228</u>	<u>10</u>	<u>10</u>	<u>30</u>	<u>14</u>	<u>40</u>

NOTICE OF PROPOSED RULEMAKING

TITLE 7. EDUCATION

CHAPTER 2. STATE BOARD OF EDUCATION

PREAMBLE

1. **Sections Affected:** R7-2-408
Rulemaking Action: New Section
2. **The specific authority for rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):**
Authorizing statute: A.R.S. § 15-203(A)
Implementing statute: A.R.S. § 15-881(B)
3. **The name and address of the agency personnel with whom persons may communicate regarding the rulemaking:**
Name: Corinne L. Velasquez, Executive Director
Address: State Board of Education
1535 West Jefferson, Room 418
Phoenix, Arizona 85007
Telephone: (602) 542-5057
Fax: (602) 542-3046
4. **An explanation of the rules, including the agency's reasons for initiating the rules:**
R7-2-408 will prescribe rules for use by school districts in determining the eligibility of handicapped pupils for an extended school year program. This rule is proposed pursuant to the requirements set forth in A.R.S. § 15-881(B).
5. **A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state.**
Not applicable.
6. **The preliminary summary of the economic, small business, and consumer impact:**
A.R.S. § 15-881(A) requires that each school district make an extended school year program available to all handicapped pupils for whom such a program is necessary. Subsection (B) continues, requiring the State Board of Education to adopt rules, and includes the criteria for determining the eligibility of handicapped pupils in an extended school year program. The proposed language of R7-2-408 is consistent with the criteria outlined in A.R.S. § 15-881(B). Therefore, there will be no economic, small business or consumer impact related to this proposed rule, as school districts are currently required to have extended school year programs available to all handicapped pupils for whom such a program is necessary, and the criteria for such a program is outlined in A.R.S. § 15-881.
7. **The name and address of agency personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:**
Name: Corinne L. Velasquez
Address: State Board of Education
1535 West Jefferson, Room 418
Phoenix, Arizona 85007
Telephone: (602) 542-5057
Fax: (602) 542-3046
8. **The time, place, and nature of the proceedings for the adoption, amendment, or repeal of the rules or, if no proceeding is scheduled, where, when, and how persons, may request an oral proceeding on the proposed rules:**
An oral proceeding on the proposed rulemaking is scheduled as follows:
Date: August 24, 1998
Time: 1:30 p.m.
Location: State Board of Education
1535 West Jefferson, Room 417
Phoenix, Arizona 85007

Written comments may be submitted on or before 5 p.m., August 21, 1998, to the contact person listed above.

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9. Any other matters prescribed by statute that are applicable to the specific agency or to any specific agency or to any specific rule or class of rules.
Not applicable.
10. Incorporations by reference and their locations in the rules:
None.
11. The full text of the rules follows:

TITLE 7. EDUCATION

CHAPTER 2. STATE BOARD OF EDUCATION

ARTICLE 4. SPECIAL EDUCATION

Section

R7-2-408. Extended school year programs for students with a disability

ARTICLE 4. SPECIAL EDUCATION

R7-2-408. Extended school year programs for students with a disability

- A. "Extended school year" shall be as defined in A.R.S. § 15-881.
- B. Eligibility. Eligibility shall be determined by the Individualized Education Program (IEP) Team, including the parent. Criteria for determining eligibility in an extended school year program shall be:
1. Regression-recoupment factors.
 2. Critical learning stages.

3. Least restrictive environment considerations.
 4. Teacher and parent interviews and recommendations.
 5. Data-based observations of the pupil.
 6. Considerations of the pupils' previous history, and
 7. Parental skills and abilities.
- C. The extended school year program is not compulsory and is not required for all students with a disability.
- D. Factors that are inappropriate for consideration. Eligibility for participation shall not be based on:
1. A day care or respite care service for handicapped pupils.
 2. A program to maximize the academic potential of a handicapped pupil, and
 3. A summer recreation program for handicapped pupils.

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TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR POLLUTION CONTROL

Editor's Note: This Notice of Proposed Rulemaking, originally printed in the May 29, 1998, issue of the Register, is being reprinted here to correct subsection relabeling that was incorrectly changed by the office in the original notice. We apologize for the error. Because the office made the error, the public comment period does not change.

PREAMBLE

1. **Sections Affected:**
R18-2-1003
R18-2-1006
R18-2-1010
R18-2-1019
- Rulemaking Action:**
Amend
Amend
Amend
Amend
2. **The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rule are implementing (specific):**
Authorizing statutes: A.R.S. §§ 49-104, 49-425
Implementing statutes: A.R.S. §§ 49-404, 49-447, 49-541, 49-542, and 49-546
3. **The name and address of agency personnel with whom persons may communicate regarding the rule:**
Name: Leonard Ishihara, Vehicle Emission Section
Address: ADEQ VEI
600 North 40th Street
Phoenix, Arizona 85008
Telephone: (602) 207-7015
Fax: (602) 207-7020

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Name: Mark Lewandowski, Rule Development Section
Address: ADEQ
3033 North Central
Phoenix, Arizona 85012-2809
Telephone: (602) 207-2230
Fax: (602) 207-2251

4. An explanation of the rule, including the agency's reasons for initiating the rule:

Summary. ADEQ is proposing to change the tail pipe emissions test it uses to test smoke emissions from diesel vehicles in the Phoenix area that are greater than 8500 pounds gross vehicle weight rating (GVWR). Apart from other advantages, the new test will detect more malfunctioning engines and reduce smoke (particulate) emissions from the Phoenix diesel fleet. The change is required by a statute enacted in 1996.

Purpose. The main purpose of the rule is to reduce particulate emissions from on-road diesel vehicles registered in the Phoenix area. The Phoenix nonattainment area was downgraded to serious for PM10 by the United States Environmental Protection Agency (EPA) on May 10, 1996 (61 FR 21372). PM10 are particles with an aerodynamic diameter less than or equal to 10 micrometers. As part of a multifaceted effort to reduce particulate emissions, a law was passed in special session in July 1996 requiring that in area A, diesels rated at 8500 pounds or more and registering more than 33 months after initial registration must pass "a test that conforms with the society for automotive engineers standard J1667," hereafter SAE J1667 or J1667. (Laws 1996, 7th S.S., Ch.6, § 32) Urban PM monitoring data has shown that on road diesel engines are a significant source of PM10 in the Phoenix nonattainment area. The National Ambient Air Quality Standards (NAAQS) for PM10 are set not only for human health purposes, but to enhance visibility, and to protect vegetation and materials.

Diesel particulate emissions vary by vehicle but most of the particulates in diesel exhaust are elemental carbon or soot. Hazardous air pollutants, such as polycyclic aromatic hydrocarbons (PAH), are also present in particulates. Diesel NOx emissions are significant, but are not controlled directly by diesel smoke controls.

In 1997, EPA promulgated a new NAAQS for particulates known as PM2.5, to be phased in over several years. PM2.5 are particles with an aerodynamic diameter less than or equal to 2.5 micrometers. The new J1667 test should work equally well or better as a control measure to meet the new standard. According to the 1994 Regional PM10 Emission Inventory for the Maricopa County Nonattainment Area, on road diesel emissions contributed proportionately more PM 2.5 than PM10 pollution.

SAE J1667. There is no requirement in the Clean Air Act (CAA) that states implement an in-use, diesel smoke testing program. However, a number of states that exceed the federal ambient particulate and/or NOx standards have opted to adopt some form of in-use diesel testing. Diesel vehicles have been tested in the Phoenix and Tucson areas since at least 1986. EPA has not provided detailed guidance on in-use diesel testing as it has for basic and enhanced emission testing for gasoline vehicles. However, the Society of Automotive Engineers and California Air Resources Board (CARB), with the close involvement of the trucking industry, worked together to develop a safer, more cost-effective and consistent smoke test known as SAE J1667, issued in 1996. In April 1997, EPA issued a memo recommending that states use J1667.

SAE J1667 is a procedure for obtaining vehicle exhaust smoke measurements using the snap-acceleration test procedure. The snap-acceleration test begins with the vehicle and test equipment properly preconditioned and the vehicle in neutral. The throttle is moved to the fully open position as quickly as possible, and held fully open until maximum governed speed is reached, plus an additional 1 to 4 seconds. The throttle is then released and the engine is allowed to return to low idle speed. The engine is allowed to remain at idle for from 5 to 45 seconds. This cycle is executed three times and a "corrected maximum half second average smoke value" is obtained for each cycle. The average of these three becomes the final test result.

J1667 is a stationary vehicle test that can be conducted anywhere, including along the roadside. It is intended for heavy duty trucks and buses and is designed to be used in conjunction with smoke meters using the light extinction principle of smoke measurement. The test is intended to provide an indication of the state of maintenance and/or tampering of the engine and fuel system relative to the parameters which affect exhaust smoke. The procedure does not replicate the federal engine certification smoke cycle and is intended to identify gross emitters. Regulatory agencies must provide their own pass/fail criteria since SAE bylaws prohibit them. ADEQ intends to incorporate J1667 into the existing centralized and fleet testing network. There is currently no statutory authority to do roadside testing.

Pass/Fail Criteria. EPA has had national smoke (opacity) standards for new, on road heavy duty diesels since at least the 1984 model year. (See 40 CFR 86, Subparts A and I) However, there are no pass/fail criteria included in J1667 for in-use testing. Rather than develop Arizona-specific standards, ADEQ, for purposes of efficiency and consistency, waited for California to develop them. This rule proposes the same 2 tier pass/fail opacity standards for in-use heavy duty diesels recently adopted in California and in use on a voluntary basis in several other states: 40% for 1991 and newer vehicles, and 55% for pre-1991 vehicles. These are the same standards a number of other states are currently gathering test data using the J1667 procedure. Data from California indicates that vehicles which fail at these standards can be repaired to pass and that for at least 1985 and newer vehicles, the results would correlate to the federal test procedure for certifying engine emissions (See 40 CFR 86.884-5). However, ADEQ, as an added safeguard intends to adopt California's engine family waiver procedure as well. See proposed new R18-2-1006(H)(1)(e).

ADEQ is aware that Utah and Nevada have recently begun using J1667 with a 70% opacity standard for older vehicles. At a

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workshop on this rule held at ADEQ on January 6, 1998, ADEQ was requested to estimate the additional emission benefits that result from using the proposed standards instead of a 70% opacity standard for older vehicles. Data from a random sample of the California fleet in the fall of 1996 show that an additional 8% of heavy duty diesel vehicles will fail with a 55% rather than a 70% opacity cut point, with the failure rate from all California vehicles in that study increasing from 14.6 to 22.1. Estimated additional emission benefits are approximately proportional, an additional 8%. Regardless, the state of Arizona is applying for an extension to its deadline to meet particulate standards in Maricopa County, and a condition for approval of that extension is that the control measures being implemented are the most stringent that can be implemented. Given the fact that 40 and 55% opacity limits are being implemented elsewhere, ADEQ has determined that the standards proposed in the rule are necessary to comply with this Clean Air Act requirement.

In this rule, ADEQ is proposing a diesel test procedure that "conforms to" J1667. Within J1667, a number of options are outlined. ADEQ is seeking comment on these options and on whether items in addition to, or equivalent to, items mentioned in the actual procedure, but still conforming to J1667, may be appropriate for the rule. ADEQ intends to balance the flexibility inherent in a rule that leaves some details open against the added value that may be obtained by limiting test variability through requiring additional conditions not specifically required in J1667. Testing flexibility tends to reduce the cost and increase the convenience of the test for the general public at centralized test stations, and for fleet vehicles at fleet testing stations.

Current Diesel Test Procedure and Failure Rate. A "lug down" test is currently used for all diesel vehicles in both area A and area B. In these tests, the vehicle is tested in gear, usually on a dynamometer, and a moderate load is put on the engine for the actual smoke measurement.

In 1996, a total of 27,370 initial diesel tests were performed by the state contractor in Maricopa County. Of these, 12,657 vehicles were either tandem axles, greater than 26,000 lbs., or 10,501 lbs. to 26,000 lbs. GVWR. The initial failure rate for this group was 5.0% (514). The failure rate in the 4001 lbs. to 10,500 lbs. category (12,462 vehicles) was 5.4% (679 vehicles). The current failure rate for all vehicles that would be subject to the proposed snap-acceleration test cannot be determined exactly because it cannot be determined which vehicles for the 4001 to 10,500 weight class, on a result by result basis, would be subject to snap acceleration, which is proposed for vehicles greater than 8500 lbs. However, the current failure rate for the snap-acceleration fleet can still be estimated to be 5.0 - 5.4%.

There is no directly applicable data on J1667 failure rates in Maricopa County since J1667 is relatively new. Data from California, where opacity rates were surveyed from a fleet including over the road vehicles (not to be tested in Arizona) and where no diesel program is currently in existence suggests that the proposed cut points will produce a significant increase over the current 5% failure rate. For the purposes of analyzing this proposed rule, the failure rate for these vehicles when snap-acceleration is conducted is assumed to be 15 - 20%. The California study also found that all vehicles failing close to the cut points would be repairable.

There are other advantages to the J1667 procedure compared to the current area A procedure. There is no dynamometer used which should make the test safer and more convenient to administer. Gordon-Darby Inc., the testing contractor, (GDI) and ADEQ are planning that heavy duty diesel testing with the J1667 test will be available at each of the 10 centralized test stations in the Phoenix area, compared to the current 2 heavy duty diesel testing lanes. This should in turn result in less wait times, even with the projected higher failure and retest rates. Although dynamometers are used for gasoline vehicles and therefore still need to be in every lane in the state testing system, there may also be some small cost savings attributable to reduced and lower cost dynamometer maintenance and possible surplusing of the contractor's heavy duty dynamometers, which will no longer be needed.

The J1667 test should also benefit fleet testing capability. Information received at the workshop indicate that in some instances, the time to test a number of fleet vehicles would be cut in half compared to the current lug down procedure. Mobile analyzers, suitable for outlying fleet locations, are also possible since no dynamometer is needed.

Finally, ADEQ believes that a uniform national test procedure, such as J1667, is a benefit to most truck owners, engine manufacturers, and diesel repair facilities, because it is more difficult to service interstate fleets and oversee repairs when diesel engines are subject to different emissions tests in different states.

Fee inequity; possibility of no adoption. ADEQ will not adopt this rule under the current statutory language related to diesel tests and diesel test fees. Under A.R.S. §§ 49-542(F)(2)(c)(ii) and 49-543(B), the heaviest duty diesels, comprising less than half of the vehicles that would be subject to J1667, would have to subsidize the cost of the new test for the majority of J1667 vehicles, which range from 8501 to 25,999 lbs GVWR. Currently, all diesels are charged \$10 per test. Legislation is being proposed to correct this inequity.

Relationship to other rules. Particulate emissions from off road diesel engines are also significant contributors to air quality problems in Maricopa County but this source category is outside the scope of this rule making. EPA has had new engine smoke standards for heavy duty off road diesels since 1994, and recently proposed a rule extending those standards to smaller off road diesel engines. (62 FR 50152; Sep. 24, 1997) A.R.S. § 49-542.04(B)(1), enacted in 1997, gives ADEQ authority to adopt *Arizona* emission standards for new heavy duty off road diesel engines beginning with the 1999 model year. ADEQ is considering proposing such a rule in the near future.

Besides diesel engines, PM10 emissions also originate from gasoline engines, paved roads, construction and demolition activities, unpaved parking areas and roads, nonmetallic mineral mining and processing facilities, open burning activities, uncovered haul trucks and farming operations. Other rules in Title 18, Chapter 2, such as Articles 6 and 8, cover these activities. Particu-

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lates from gasoline engines are not tested for directly through the I/M program in Article 10, but, in general, passing readings in the 3 directly measured parameters: HC, CO and NOx, correlate well with low particulate readings.

5. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority to a political subdivision of this state:
Not applicable.
6. The preliminary summary of the economic, small business, and consumer impact, and solicitation of comments on the summary:

EXECUTIVE SUMMARY

This rule requires a change in the emissions test to be administered annually to all heavy duty diesel vehicles (HDDV) registered in Area A. HDDV are defined as diesel vehicles with a gross vehicle weight rating (GVWR) of more than 8,500 lbs. However, A.R.S. § 49-542(F) exempts from emissions testing all HDDV that are newer than 33 months (2.75 years). The subject vehicles also include those registered outside Area A which commute to the driver's principal place of employment within Area A. As of December 1997, there were an estimated 48,000 diesel vehicles in Maricopa County with a GVWR of more than 8,500 lbs.

About 18% of these are newer than thirty three months.¹ Therefore, the rule will require over 39,000 vehicles to be tested with the proposed test. A limitation of this estimate is that it is not possible to determine the number of HDDV registered outside Area A (and commute to it regularly) that would be subject to emissions testing. This revision in the emissions testing program is being made as part of a multi-pronged effort by ADEQ and the Legislature to address the problem of Maricopa County's serious non-attainment status for particulate matter.

The proposed test is the Society of Automotive Engineers (SAE) J1667 test procedure that will replace the current steady state loaded opacity test used to measure diesel emissions in Maricopa County for about a decade. The SAE Recommended Practice J1667 was developed through the cooperative efforts of the National Trucking Association, diesel engine manufacturers, the transportation industry and State and Federal regulatory agencies involved in environmental protection. Hence, many states have adopted the SAE J1667 snap-acceleration testing, which provides a basis for standardizing diesel smoke opacity testing nationwide. The SAE J1667 has demonstrated a sufficient level of accuracy, precision and correlation to the Federal certification test for identifying gross emitters of particulate emissions. The test eliminates the need for dynamometers for heavy-duty vehicles, offering economic advantages over lug-down testing by lowering capital expenditures and increasing the number of potential testing sites. The test may be administered in a relatively small testing site since the vehicle is stationary, consequently reducing the probability of accidents and injuries. Setting up the instruments and conducting the test is also facilitated. Furthermore, the SAE J1667 is a more efficient method of determining if a diesel engine is malfunctioning.

The Maricopa Association of Governments (MAG) commissioned Sierra Research Inc., a California consulting company, to conduct a research study in part to analyze Maricopa County's particulate emissions problem and to review applicable control measures. The final report was published on January 24, 1997.² Based on this study, ADEQ Air Quality staff estimate that implementation of the J1667 will reduce annual emissions by an additional 27.1 metric tons of PM10 and 25.1 metric tons of PM2.5 (particulate matter with an aerodynamic diameter of 10 and 2.5 microns or smaller, respectively). It is estimated that 18% of PM10 and 35% of PM2.5 emissions in the urban core of the Phoenix Metropolitan area come from vehicular exhaust of diesel powered vehicles.

COSTS

SAE J1667 TEST EQUIPMENT

A cost of this rule will be the purchase of new smoke opacity meters which meet the J1667 test requirements. The market price of opacity meters varies widely depending on manufacturers and distributors, but unit prices made available to ADEQ staff are currently averaging \$5,901.³ These will be installed at each inspection station in Maricopa County operated by the current state contractor, Gordon Darby, Inc. (GDI), as well as at ADEQ permitted fleet inspection stations. GDI has indicated that it will require 22 testing units to outfit the ten official test stations and four waiver stations. The number of HDDV fleet owners who will choose to invest in their own testing equipment is unknown, but it is estimated that more than a third of all diesel vehicles are tested at permitted facilities owned by fleet owners.

TEST FEES

GDI's costs for the purchase and installation of the required equipment, as well as related costs to administer the program will be repaid in the form of test fees to be paid by vehicle owners. The cost to purchase 22 units at the estimated average price is about \$130,000, although selection of units suitable for high volume testing may increase this amount. Currently, the test fee is \$10 for all vehicles with a GVWR of <26,000 lbs., and there is a statutory limit of \$25 for vehicles with a GVWR of >26,000 lbs., or with tandem drive axles. In order to recover its J1667 costs, Gordon Darby calculates that a test fee of between \$20 to \$25 per

1. From data compiled by ADOT Motor Vehicle Division.

2. Robert Dulla and Earl Withycombe, Particulate Control Measure Feasibility Study prepared for MAG, Sierra Research Inc., Sacramento, CA., Jan. 24, 1997.

3. Price quotes were supplied by manufacturers from California, Illinois and North Carolina. ADEQ does not endorse any specific manufacturer or product.

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test will be required. Based on 1997 test data, GDI projects that they will test more than 22,000 HDDV resulting in annual test revenues for GDI of between \$440,000 and \$550,000. Re-tests will be required for all failing vehicles, but no fee is assessed for a re-test conducted within 60 days of the initial test. Only one free re-test is permitted for each paid test. A passing test result will be required for vehicle registration.

VEHICLE REPAIRS

Another major cost to implement this rule will consist of vehicle repair expenditures that will be borne by owners of vehicles failing the SAE J1667 test. The repair of failing vehicles will achieve the emissions reduction. The Sierra Research study indicated that typical HDDV repair costs are about \$350 (expressed in terms of 1994 dollars). However, another technical support document dated October 1997 shows that a more realistic representation for average costs across several model-year strata dating back to 1980, is \$652 per vehicle.⁴ The document assumed that, all other things being equal, repair costs are higher, the older the vehicles in a fleet. Vehicle repair costs in Arizona may be generally lower than those in California because Arizona has been conducting emissions testing since 1986. The emissions testing program promotes better maintenance of the fleet, and over the long term, repair costs would tend to go down.

The ADEQ Vehicle Emissions Inspection (VEI) Section estimates that the proposed test will increase the vehicle failure rate from its historical annual average of 5.4% for all diesel vehicles to between 15 and 20% of all subject vehicles. This could translate to about 7,000 failed vehicles annually, and a corresponding cost to repair estimated at \$2.5 to \$2.8 million. Repair costs will be paid by owners of the failed vehicles to dealers and vehicle repair shop owners. Incremental repair costs (the amounts required to repair the difference between the historical and the projected failure rate) are about \$1.7 million annually. If repair costs in Maricopa County turn out to be closer to those indicated in the CARB study, incremental repair costs could climb to \$3 million.

BENEFITS

CLEANER AIR

This rule will benefit all residents of, and visitors to, Maricopa County who will breathe cleaner air. According to Maricopa County Air Quality staff, 56% of particulate matter (the visible parts of the Valley's winter brown cloud), is created by vehicle - especially diesel - exhaust, and the dust motorists kick up. A net reduction in PM10 and PM2.5 emissions will be particularly important to "at-risk" residents of the Phoenix Metropolitan area. The American Lung Association of Arizona identified these as people who suffer from asthma, chronic lung disease, chronic obstructive pulmonary disease, children under 12 and adults over

65. The Report of the Governor's Air Quality Strategies Task Force dated December 2, 1996, stated that Maricopa County residents included in the "at-risk" groups number about one million. There is also new medical evidence compiled by the American Thoracic Society that "even current ambient levels of PM10 (30 to 150 micrograms per cubic meter) are associated with increases in daily cardio-respiratory mortality and in total mortality, excluding accidental and suicide deaths."⁵

AVOIDANCE OF FEDERAL SANCTIONS

Apart from the public health benefits to be derived from improving ambient air quality, there are federal sanctions which may be imposed for continued non-attainment of PM10 National Ambient Air Quality Standards (NAAQS). Due to measured violations of the PM10 standards from 1992 through 1994, EPA reclassified the Maricopa County Non-Attainment Area from **moderate** to **serious** on June 10, 1996. As indicated by the PM10 Sub-Committee in its final report to the Governor's Air Quality Strategies Task Force,⁶ this action required the submission of a Serious Area State Implementation Plan (SIP) by December 1997. The Clean Air Act requires that the plan demonstrate attainment by the year 2001. But during preparation of the SIP in the fall of 1997, it became evident that attainment could not be demonstrated by Dec. 31, 2001, and that the Department and MAG would need to request a five-year extension of the attainment deadline.

The Clean Air Act (CAA) contains requirements that must be met in order for EPA to grant approval of an extension request. One of the requirements is that the "SIP include the most stringent measures included in the plan of any State or achieved in practice in any State, and can feasibly be implemented in the area." The SAE J1667, with opacity standards of 40% and 55%, is considered to be the most stringent, feasible measure currently available for testing HDDVs, and is expected to identify a substantially higher number of particulate gross emitters. Furthermore, failure to submit a complete plan, or EPA disapproval of a plan (in part or whole) under section 179 (b) of the CAA, may result in federal sanctions. Sanctions may include two-for-one offsets for industry and the loss of federal highway funds. Federal funding levels programmed for highways in the 1998-2002 MAG Transportation Improvement Program total \$446 million. Failure to achieve attainment or submit a plan could therefore jeopardize federal funds allocated for Arizona amounting to an annual average of \$89.2 million in the next 5 years.

4. California Air Resources Board and Energy and Environmental Analysis, Inc. Regulatory Amendments to California's Heavy-Duty Vehicle Inspection Program and Periodic Smoke Inspection Program, Technical Support Document, October 1997.

5. The American Thoracic Society, "Health Effects of Outdoor Air Pollution, State of the Art", American Journal of Respiratory and Critical Care Medicine, Vol. 153, 1996.

6. PM10 Subcommittee, Final Report to the Governor's Air Quality Strategies Task Force, Maricopa Association of Governments, Jan. 20, 1998.

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A.R.S. § 41-1055 Requirements for an EIS

B(2) PERSONS DIRECTLY AFFECTED BY THE RULE

The following Persons/Parties will be affected:

- 1) ADEQ, the implementing agency, is charged with making appropriate modifications to the vehicle emissions testing program in order to reduce diesel engine smoke emissions in Area A.
- 2) Maricopa County, all municipalities, state and federal agencies as well as other public institutions (e.g., school districts) which own or operate diesel vehicles registered in Area A, will be required to comply with the rule.
- 3) Gordon Darby, Inc., the State Contractor, will carry out emissions testing in Area A using the SAE J1667 test procedure.
- 4) All owners of privately-owned HDDVs in Area A, including fleet owners, will be required to comply.
- 5) Vehicle repair shop owners, specifically, those specializing in the repair of HDDVs will see an increase in their business opportunities directly related to the expected increase in the vehicle failure rate.
- 6) Manufacturers and distributors of smoke opacity meters and other products needed to implement the SAE J1667 test procedure will increase their business.
- 7) All persons and businesses who stand to benefit from the planned expenditure of \$446 million in federal highway funds between 1998 and 2002.
- 8) All residents and visitors to Maricopa County who will breathe cleaner air.

B(3) COST-BENEFIT ANALYSIS

I. COSTS AND BENEFITS TO STATE AGENCIES

a) Arizona Department of Environmental Quality

The Department's expenditures to implement this rule will be minimal. The Vehicle Emissions Inspection (VEI) Section does not plan to hire additional FTEs as a result of this rule. Neither are there any anticipated major changes to program procedures, since the change consists primarily of implementing an additional test procedure and instrumentation. The Department is re-negotiating its emissions testing contract with Gordon Darby, Inc., but any contract revision is not expected to create additional costs for the Department, and therefore no major impact to the ADEQ budget is anticipated.

No incremental dollar benefits will accrue to ADEQ. However, approval of this rule will enable the Department to carry out a program that will help satisfy the CAA requirements for Maricopa County, the State's most populous county. Attainment will obviate any federal sanctions that may jeopardize federal dollars earmarked for the county, estimated at an average \$89.2 million annually from 1998 to 2002.

b) Arizona Department of Transportation and AZ Department of Corrections

ADOT and the AZ State Prison Complex (Eyman Florence) are currently permitted by ADEQ to self-inspect their fleets. ADOT is the owner-operator of about 1,000 diesel vehicles, 548 of which are HDDV and registered in Maricopa County. ADOT will be investing in the new test equipment; as will the AZ Department of Corrections which has ten HDDV that will be tested at the Eyman facility.

c) Federal Facilities

There are 2 federal facilities that are ADEQ permitted fleet owners: Luke Air Force Base and the US Postal Service. Luke AFB, which has 145 HDDV and will be conducting its own tests, has already ordered its SAE J1667 test equipment. The US Postal Service has 124 HDDV registered in Maricopa County.

II. COSTS AND BENEFITS TO POLITICAL SUBDIVISIONS OF THE STATE

All HDDV owners, whether public or privately-owned, will be required to comply with the rule. There are nine municipalities, one county facility and 11 school districts that are permitted facilities regulated by ADEQ. According to the City of Phoenix Office of Fleet Management, the City owns and operates 906 buses with a GVWR of >8,500 lbs. Adding the two state and two federal entities that own fleets brings the number of public fleet owners to 25 which together account for almost 40% of the total.

The incremental costs of compliance for all public fleet owners, including the costs to implement a self-testing program, will be reflected in their respective budgets, and will therefore be borne by taxpayers. For fleet owners, public or private, the CARB study cited above stated that in-house inspections with company smoke meters will be more economical than contractual service testing when the fleet size exceeds 16 vehicles. The amounts to be allocated for repair costs will depend on the conditions of the vehicles, how well they have been maintained, and their age. These variables heavily influence failure rates.

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III. COSTS AND BENEFITS TO PRIVATE BUSINESSES, INCLUDING SMALL BUSINESSES

a) The State Contractor, Gordon Darby, Inc. --

The re-negotiated State Contract between ADEQ and GDI is expected to increase the current annual HDDV test fee from \$10 per vehicle to between \$20 and \$25. Additional costs will be incurred to expand GDI's HDDV test capabilities to all Maricopa County testing facilities. According to GDI staff, the company has identified the following "cost categories":

- 1) Program development costs
- 2) Maricopa Vehicle Emissions Inspection Program (MVEIP) and other software costs
- 3) Lane modifications at all testing and waiver facilities
- 4) Equipment acquisition and installation costs
- 5) Liaison with ADEQ and acceptance test procedures (ATP)
- 6) Staff training and other implementation costs
- 7) On-going operational costs.

Program implementation at official test stations has been determined by ADEQ VEI staff to be more complex and demanding than tests carried out in a fleet environment. Gordon Darby operates ten testing stations in Maricopa County that will need to be modified. And, there are four State waiver stations that will also need modifications. The combined facilities have a total of 53 lanes. GDI will test the larger HDDV (those with >26,000 lbs. GVWR, and those with tandem drive axles) in the two existing dedicated HDDV lanes, and all other vehicles will be tested in the other general purpose lanes.

Based on the re-negotiated test fees, vehicle owners of HDDV tested at official testing stations could collectively pay anywhere from \$440,000 to \$550,000 annually. The estimate pertains to HDDV test fees only, and does not include the fees paid by light duty vehicle owners. The amounts payable for re-test fees (to be levied on all owners whose vehicles exhibit multiple failures, or when re-tests exceed 60 days of the initial test) is unknown. Also excluded from this analysis are amounts GDI will receive for testing gasoline-powered vehicles which comprise more than 97% of all motor vehicles registered in Maricopa County. GDI's revenues are expected to encompass the company's expected rate of return. GDI is a privately held company based in Kentucky, and has offices in Phoenix and Tucson.

b) Private sector diesel fleet owners and other owners of subject vehicles --

Thirty eight (60%) of fleet owners listed by ADEQ are private sector entities. There are an estimated 48,180 diesel vehicles registered in Maricopa County with a GVWR of >8,500 lbs. According to data obtained from the ADOT Motor Vehicle Division, HDDV vehicles comprise just a fraction (2.5%) of the 1.9 million registered vehicles. Of the total HDDV, an estimated 8,672 (18%) are newer than 33 months. These newer vehicles will be exempt from the test, but will have to comply when they exceed the stipulated age.

Estimates for test fees to be paid to Gordon Darby by vehicle owners are based on 1997 company records of diesel test data. If the number of tested HDDV changes, the fees will increase or decrease accordingly. No test fees will be paid by fleet owners who choose to conduct their own tests and are licensed by ADEQ to do this. However, these fleet owners will have to invest in their own test equipment and cover all other related operational costs.

A larger cost burden stems from the vehicle repairs which will be required of all vehicles that fail the initial SAE J1667 test. The projected cost of repairs are found in the following table:

	1998	1999	2000
HDDV Vehicles	40,376	41,264	42,172
HDDV Failures	7,065	7,221	7,380
1994 Cost to Repair	\$2,473,077	\$2,527,485	\$2,583,089
Inflation-adjusted			
Cost to Repair	\$2,847,195	\$2,910,063	\$2,974,140

Tested vehicles as well as vehicle failures are projected to increase at an average annual rate of 2.2% between now and the year 2000, in accordance with VEI historical data compiled between 1994 and the present. Vehicle failures could therefore exceed 21,600 over the three-year period. This is based on a 17.5% (the mid-point between 15% and 20%) failure rate of existing subject vehicles, accompanied by an annual cost to repair of about \$2.5 million, assuming the average vehicle repairs are \$350 per vehicle, as indicated in the Sierra Research study. But the Sierra study calculated repair costs in terms of 1994 price levels. If

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repair costs in Maricopa County escalated at the rate of the Phoenix Metropolitan Consumer Price Index (compiled by the ASU Center for Business Research), the comparable average repair cost in 1998 would be \$403. Vehicle owners could then spend \$8.7 million in repair costs in the next three years.

Still another estimate of vehicle repair costs is given by the CARB study cited above, which indicated a much higher average cost (\$652 per vehicle). Three Maricopa County vehicle repair shop owners who repair HDDV were contacted for comparison costs in Arizona (they were faxed the schedule of costs indicated in the CARB study). All three of them stated that the CARB data were more in line with what is being charged in the Phoenix Metropolitan area. If this is the case, total annual costs to repair could average \$4.7 million.

The combined repair cost estimates (for both public- and privately-owned vehicles) therefore range between a low of \$2.5 million to a high of 4.7 million per annum. These sums could be affected by the number of vehicle owners who are granted waivers. But in the experience of the ADEQ VEI Section, most diesel vehicle owners willingly pay for the repair costs of their failed vehicles.

c) Diesel vehicle repair shop owners --

There were a total of 1,279 automotive repair establishments in Maricopa County as recorded in the 1995 economic census.⁷ These are primarily small business establishments which collectively employed 6,887 people and had an annual payroll of \$157 million. Approximately 81 (6.3%) of these have been identified by the VEI Section as specialists in HDDV repairs. Since diesel vehicles comprise only a small portion of vehicles registered in Arizona, dealers and vehicle repair shop owners who employ technicians specializing in HDDV repairs tend to be limited. Hourly rates for the repair of HDDV in the Phoenix Metropolitan area are currently averaging \$64 per hour.

The projected average increase in the HDDV failure rate from 5.4% to between 15 and 20% will bring an incremental benefit of about \$1.7 million annually (or \$5.2 million over three years) to these businesses, assuming the average repair cost is \$350. If the upper limit (\$652) is used, the incremental benefit to vehicle repair businesses is \$3.3 million annually or \$9.8 million over three years.

IV. COSTS AND BENEFITS TO CONSUMERS AND TAXPAYERS

Owners of failed vehicles will either pass on their repair costs to customers, or they may choose to absorb the costs. For publicly-owned vehicles, the increased repair costs due to an increase in failure rates will tend to be absorbed in the budgets of agencies or municipalities that own HDDV. Repair costs for privately-owned vehicles will more likely be passed on to the customers of business owners, or they may choose to absorb the costs. While vehicle repair costs may appear to be substantial, there are benefits to vehicle owners from carrying out repairs promptly. The CARB study cited savings from reduced fuel costs as well as overall operational efficiencies derived from improved vehicle maintenance. Similar fuel savings are expected in Arizona, although these savings could not be quantified. But in California, the calculated cost impacts were not expected to affect freight or passenger rates, or the costs of goods transported by HDDV.

Based on methods used in the Sierra Research study, ADEQ Air Quality Division staff calculated annual emissions reductions resulting from implementation of the SAE J1667 test of 1.85 lbs. per vehicle per year for PM10 and 1.71 lbs. per vehicle per year for PM2.5. Total emissions reductions are projected to be 27.1 metric tons per year for PM10 and 25.1 metric tons per year for PM2.5. The reduction in particulate emissions, combined with other measures undertaken by the Department, is expected to result in public health benefits related to declines in morbidity and mortality. Although these health benefits are not readily monetized, it is well known that health care costs in general, and specifically, the costs to treat lung and other respiratory diseases, are high. Medical economists have also known for quite some time that the US medical care inflation rate exceeds the overall inflation rate by a wide margin.

Information from the American Lung Association of Arizona (ALAA) and the Arizona Department of Health Services is compelling:

- * an estimated 210,000 Arizonans have asthma
- * the 1995 mortality rate for asthmatics in Arizona was 2.8 per 100,000 population, versus 2.1 nationwide
- * Maricopa County has the third highest death rate from asthma in the US
- * The hospital costs for treating Arizona children with asthma amounted to \$12 million in 1996.

People suffering from asthma and other lung diseases are not the only ones who will benefit from emissions reductions. All residents and visitors are bound to benefit from cleaner air. The July 1, 1997 resident population estimate for Maricopa County was 2,720,575. This figure does not include the estimated 124,000 seasonal residents who stay in the Phoenix Metropolitan area during the winter season, according to the ASU Center for Business Research which has been tracking the economic impact of the "snowbirds" in Arizona for the past 13 years. Thus, over 2.8 million people in Maricopa County would be impacted beneficially by cleaner air. Residents and visitors will benefit from the prevention or aggravation of asthma and other chronic lung diseases. These are diseases that are known to be caused or aggravated by exposure (or prolonged exposure) to air quality exceedances.

⁷ US Department of Commerce, Economics and Statistics Administration, BUREAU OF THE CENSUS, Arizona County Business Patterns: 1995, CPB/95 issued October 1997.

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In addition to the health benefits that are realized due to the reduction of PM10 and PM 2.5 emissions, there are aesthetic benefits that will be realized. Urban haze, better known as the "brown cloud", is visible pollution comprised primarily of fine particulate matter less than one micron in diameter. The Urban Haze Study conducted in 1989-1990⁸ revealed that the primary source of urban haze is combustion engine exhaust from on-road vehicles (50% from diesel engines, 50% from gasoline-powered engines). The obscured visibility due to the brown cloud significantly decreases the natural beauty of the area observed by visitors and residents.

REDUCTION OF RULE IMPACTS ON SMALL BUSINESSES

Rule impact reduction on small businesses. A.R.S. § 41-1035 requires ADEQ to reduce the impact of a rule on small businesses by using certain methods when they are legal and feasible in meeting the statutory objectives for the rule making. The five listed methods are:

1. Establish less stringent compliance or reporting requirements in the rule for small businesses.
2. Establish less stringent schedules or deadlines in the rule for compliance or reporting requirements for small businesses.
3. Consolidate or simplify the rule's compliance or reporting requirements for small businesses.
4. Establish performance standards for small businesses to replace design or operational standards in the rule.
5. Exempt small businesses from any or all requirements of the rule.

The statutory objectives which are the basis of the rulemaking. The general statutory objectives that are the basis of this rulemaking are contained in the statutory authority cited in number 2 of this preamble. The specific objectives are to protect and improve public health and to avoid federal sanctions, by reducing particulate emissions from on-road diesel vehicles registered in the Phoenix area.

ADEQ has evaluated each of the five listed methods and has concluded that none of the methods are legal and feasible. The Director does have authority to set various emission standards but A.R.S. § 49-542(F) requires that these be set by vehicle class, not by owner. A.R.S. § 49-542(L) specifies the waiver cost limits that must be set for diesel vehicles, by vehicle class, not by owner. A.R.S. § 49-542(J)(2) generally allows the Director to exempt certain vehicles from testing, but A.R.S. § 49-542(F)(2)(c) specifically requires that all diesels in the defined class be tested. A.R.S. § 49-543 allows the Director to set the fees for diesel testing, but subsection (E) of that section requires the fees to be uniform by each vehicle class.

Finally, ADEQ has found that any impact reduction under A.R.S. § 41-1035 that might be determined legal, would be infeasible. The vehicle emission testing system is designed such that it can efficiently test more than a million vehicles a year. This efficiency is attained, in part, because vehicles are processed by the vehicles' attributes, not the owner's.

7. The name and address of agency personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:

Name: Mila Hill
Address: ADEQ
3033 North Central
Phoenix, Arizona 85012-2809
Telephone: (602) 207-4435
Fax: (602) 207-2251

8. The time, place, and nature of the proceedings for the adoption of the rule:

An oral proceeding has been scheduled as follows:

Date: Tuesday, June 30, 1998
Time: 10 a.m.
Location: Arizona Department of Environmental Quality, Room 280
3003 North Central
Phoenix, Arizona 85012

The close of written comment is: Monday, July 6, 1998, at 5 p.m.

9. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:
Not applicable.

10. Incorporations by reference and their locations in the rules:

Incorporation by reference	Location
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8. Desert Research Institute, Maricopa County Urban Haze Study, 1989-1990, Volume II.

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SAE J1667

R18-2-1006(H)

11. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR POLLUTION CONTROL

ARTICLE 10. MOTOR VEHICLES; INSPECTION AND MAINTENANCE

Section

- R18-2-1003. Vehicles to be Inspected by the Mandatory Vehicular Emissions Inspection Program
R18-2-1006. Emissions Test Procedures
R18-2-1010. Low Emissions Tune-up, Emissions and Evaporative System Repair
R18-2-1019. Fleet Station Procedures and Permits

ARTICLE 10. MOTOR VEHICLES; INSPECTION AND MAINTENANCE

R18-2-1003. Vehicles to be Inspected by the Mandatory Vehicular Emissions Inspection Program

- A. The following vehicles shall be inspected in accordance with this Article at a state station or a fleet station unless exempted by subsection (B) of this Section:
1. All vehicles to be registered or reregistered within area A or area B for highway use. For the purposes of this Article, registration within a vehicle emissions control area shall be determined by the vehicle owner's permanent and actual residence. The permanent address in the MVD database shall be presumed to be the owner's permanent and actual residence.
 2. All vehicles being delivered to retail purchasers by dealers licensed to sell used motor vehicles for highway use pursuant to Title 28 and whose place of business is located in area A or area B.
 3. All vehicles registered outside area A and area B but used to commute to the driver's principal place of employment located within area A or area B.
 4. All vehicles owned by a person who is subject to A.R.S. §§ 15-1444(C) or 15-1627(G).
- B. The following vehicles are exempt from the inspection requirements of this Article:
1. Vehicles manufactured in or before the 1966 model year.
 2. Vehicles leased to a person residing outside area A and area B by a leasing company whose place of business is in area A or area B, except as otherwise provided in subsection (A)(3) of this Section.
 3. Vehicles being sold between motor vehicle dealers.
 4. Electrically-powered vehicles.
 5. Prorate vehicles.
 6. Golf carts.
 7. Vehicles with engine displacements of less than 90 cubic centimeters.
 8. New vehicles originally registered at the time of initial retail sale and titling in this state pursuant to A.R.S. § 28-302.
 9. Vehicles being registered at the time of change of name of ownership except when the change in registration is accompanied by required fees for the year following expiration of the prior registration or the change results

from the sale by a dealership whose place of business is located in area A or area B.

10. Vehicles for which a current certificate of exemption or Director's certificate has been issued.
 11. Diesel powered vehicles applying for registration or reregistration in area A less than 33 months after the date of initial registration as a new vehicle.
- C. Governmental vehicles operated in area A or area B and not exempted by this Article shall be emissions inspected pursuant to R18-2-1017.

R18-2-1006. Emissions Test Procedures

- A. Each vehicle to be inspected at a state station shall be visually inspected prior to the emissions test for the following unsafe conditions:
1. All fuel leaks in or around the engine area, fuel tank, or lines which cause wetness or pooling of fuel.
 2. All continuous leaking of engine or transmission oil onto the floor.
 3. All continuous leaking of engine coolant onto the floor to such a degree that engine overheating has occurred or will occur within a short time.
 4. Worn tires with less than 2/32-inch tread remaining or which have cord showing, bulges, delaminations, lumps, or separations.
 5. Exhaust tail pipes that do not exit the rear or side of the vehicle to allow for safe exhaust probe insertion. Exhaust tail pipes on diesel-powered vehicles that do not allow for safe exhaust probe insertion and attachment of opacity meter sensor units.
 6. Other unsafe conditions such as loud internal engine noises and obvious exhaust leaks.
- B. No mandatory vehicular emissions inspection shall be performed by an official emissions inspection station on any vehicle that is carrying, loaded with, or towing a trailer loaded with explosives or any other hazardous material not used as fuel for the vehicle.
- C. Any vehicle that has been found to be in unsafe condition as determined by the visual portion of the inspection requirements listed shall be rejected without an emissions test. Vehicle owners or drivers shall be notified of all unsafe conditions found on rejected vehicles, and if at a state station no fee shall be charged if the vehicle is rejected. The emissions test shall not be conducted on a vehicle rejected for safety until the cause for rejection has been repaired.
- D. When conducting the emissions test procedure prescribed by this Section, both of the following requirements shall be met:
1. All vehicles shall be tested in as-received condition, unless rejected pursuant to subsections (A) or (B) of this Section. The vehicle's engine shall be operating at normal temperature, the vehicle's engine shall not be overheating as indicated by a gauge, warning light, or boiling radiator, and all of the vehicle's accessories shall be turned off.
 2. Vehicles that are designed to operate with more than one fuel shall be tested on the fuel used by the vehicle at time of inspection.

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- E. In area A, the inspection test procedures for all vehicles other than diesel-powered vehicles and vehicles held for resale by motor vehicle dealers with a fleet license shall conform to the following:
1. Vehicles manufactured in the 1967 through 1980 model years, all nonexempt vehicles with a GVWR greater than 8500 pounds and all reconstructed vehicles, except motorcycles and constant four-wheel drive vehicles, shall be required to annually take and pass both a loaded cruise test and curb idle test, described as follows:
 - a. For the loaded cruise test, the vehicle's drive wheels shall be placed on a dynamometer and the vehicle shall be operated as prescribed in Table 1 of this Article, in drive for automatic transmission or second or higher gear for manual transmission. Overdrive shall not be used. All vehicles shall be driven by the inspector. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized or at the end of 90 seconds, whichever occurs first. After exhaust emissions have been recorded, engine speed shall be returned to idle for a curb idle test.
 - b. The curb idle test shall be performed with the vehicle in neutral for 1981 and newer vehicles. For 1980 and older vehicles, it shall be performed in neutral, except that if the vehicle has an automatic transmission, drive shall be used. Engine RPM shall be within plus or minus 100 RPM of the manufacturer's specified idle RPM. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized or at the end of 90 seconds, whichever occurs first. A CO₂ plus CO reading of six percent or greater shall be registered to establish test validity. A CO₂ plus CO reading of less than six percent shall be deemed proof of exhaust sample dilution and the vehicle shall be rejected from further emissions inspection.
 2. Vehicles manufactured in or after the 1981 model year with a gross vehicle weight rating of 8500 pounds or less, except motorcycles, reconstructed vehicles and constant four-wheel drive vehicles, shall be required to biennially take and pass a transient loaded emissions test, an evaporative system purge test and an evaporative system integrity test as follows:
 - a. The transient loaded emission test shall consist of 240 seconds of mass emission measurement using a constant volume sampler while the vehicle is driven by an inspector through a computer-monitored driving cycle on a dynamometer with inertial weight settings appropriate for the weight of the vehicle. The driving cycle shall include acceleration, deceleration, and idle operating modes as specified in Table 4. The 240 second sequence may be ended earlier using fast pass or fast fail algorithms. Drive shall be used for automatic transmissions and first gear shall be used to begin for manual transmission. Overdrive shall not be used. Exhaust emissions concentrations in grams per mile for HC, CO, NO_x and CO₂ shall be recorded continuously beginning with second one. The inspector shall reject from testing vehicles with audible or otherwise detectable exhaust leaks.
 - b. The evaporative system purge test procedure shall consist of measuring the total purge flow in standard liters occurring in the vehicle's evaporative system during the transient dynamometer emission test specified in subparagraph (a) of this paragraph. The purge flow measurement system shall be connected to the purge portion of the evaporative system in series between the canister and the engine as near to the canister as practicable.
 - c. The evaporative system integrity test shall consist of the following steps in sequence:
 - i. Connect the test equipment to the fuel tank canister hose at the canister end. The gas cap shall be checked to ensure that it is properly, but not excessively tightened, and shall be tightened if necessary.
 - ii. Pressurize the system to 14 ± 0.5 inches of water without exceeding 26 inches of water system pressure.
 - iii. Close off the pressure source, seal the evaporative system and monitor pressure decay for up to two minutes.
3. For vehicles required to take a biennial emissions test, except as otherwise provided by subsection (J) of this Section, all testing and test equipment shall conform to "High-Tech I/M Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications-Final Technical Guidance", (hereinafter "High Tech I/M Final Technical Guidance"), EPA-AA-EPSPD-IM-93-1, EPA, April 1994, and no further editions, which is incorporated herein by reference, and is on file with the Department and the Secretary of State. For vehicles required to take an annual emissions test, exhaust sampling shall conform to paragraph (F)(6) of this Section.
 4. All motorcycles and constant four-wheel drive vehicles shall be required only to take and pass a curb idle test as prescribed in subsection (F)(1).
 5. The emissions pass/fail determination for all vehicles tested pursuant to this subsection shall be made as follows:
 - a. Vehicles tested pursuant to paragraph (1) of this subsection, which do not exceed either the loaded cruise mode or curb idle mode HC and CO emissions standards listed in Table 2, shall be deemed in compliance with minimum emissions standards contained in Table 2. The loaded cruise test standards specified in Table 2 shall be applicable to fleet vehicles tested under the 2500 RPM unloaded fast idle test pursuant to R18-2-1019(A).
 - b. To be in compliance with this Article, vehicles tested pursuant to paragraph (2) of this subsection shall meet the standards in Table 3, pass the evaporative system integrity test and pass the evaporative system purge test as follows:
 - i. To meet Table 3 standards a vehicle shall meet either the composite standard for the whole test or the phase 2 standard for seconds 94 to 239. The Department may implement testing algorithms for fast-pass, fast-fail or both, provided that such algorithms are equivalent to or consistent with those listed in "High Tech I/M Final Technical Guidance" and have been shown to be reliable in accurately predicting the final outcome of the entire cycle. Vehicles not meeting either the composite or phase 2 standard shall fail.

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- ii. Vehicles shall fail the evaporative system integrity test if the system cannot maintain a system pressure above eight inches of water for up to two minutes after being pressurized to 14 ± 0.5 inches of water. Additionally, vehicles shall fail the evaporative test if the canister is missing or obviously damaged, if hoses are missing or obviously disconnected, or if the gas cap is missing.
 - iii. Vehicles with a total purge system flow measuring less than one liter, over the course of the transient test required in paragraph (E)(2) of this Section, shall fail the evaporative system purge test.
 - c. Motorcycles and constant four-wheel drive vehicles which do not exceed the curb idle mode HC and CO emissions standards listed in Table 2 on either the first curb idle test or the second curb idle test shall be deemed in compliance with the minimum emissions standards contained in Table 2.
 - d. Any vehicle exceeding the applicable emissions standards for the tests described in (E)(1) and (E)(2)(a) of this Section shall fail the emissions test and shall have a low emissions tune-up performed as described in R18-2-1010 prior to reinspection. Any vehicle that fails the test described in either (E)(2)(b) or (c) of this Section shall have repairs performed as required under R18-2-1010(D)(1) or (2), as applicable, prior to reinspection.
6. Each non-diesel vehicle required to take an annual emission test in area A shall, at the time of the test, undergo a tampering inspection based on the original configuration of the vehicle as manufactured. The applicable emission system requirements shall be verified by the VEHICLE EMISSION CONTROL INFORMATION label under the hood. Owners of vehicles that fail any portion of the tampering inspection shall be required to repair such tampering in accordance with R18-2-1009 prior to reinspection or provide the written statement prescribed in R18-2-1008(B). With respect to foreign manufactured vehicles, "original configuration" means the design and construction of those vehicles produced by that manufacturer for original entry and sale in the United States. The inspection shall consist of the following:
- a. All non-diesel vehicles emission tested, except those with non-sealing gas caps, shall undergo a functional test of the gas cap(s) to determine that the cap leakage does not exceed 200 cubic centimeters of air per minute at a pressure of 30 inches of water gauge. Non-diesel vehicles with non-pressurized, vented systems shall undergo a visual inspection to determine the presence of a gas cap.
 - b. For vehicles manufactured after the 1974 model year:
 - i. A visual inspection to determine the presence of properly installed catalytic converters.
 - ii. A visual inspection to determine the presence of fuel filler neck inlet restrictor(s) or malfunction thereof.
 - iii. An examination to determine the presence of an operational air pump.
 - iv. A visual inspection to determine the presence or malfunction of the positive crankcase ventilation system and the evaporative control system.
- F. In area B, the inspection test procedures for all vehicles other than diesel-powered vehicles shall conform to the following:
1. Area B vehicles manufactured in the 1967 through 1980 model years shall be required to take and pass only a curb idle test.
 - a. The curb idle test shall be performed with the vehicle in drive for vehicles with automatic transmissions or in neutral for vehicles with manual transmissions. Engine RPM shall be within plus or minus 100 RPM of the manufacturer's specified idle RPM. HC and CO exhaust emissions shall be recorded after readings have stabilized or at the end of 30 seconds, whichever occurs first. A CO₂ plus CO reading of six percent or greater shall be registered to establish test validity. A CO₂ plus CO reading less than six percent shall be deemed proof of exhaust sample dilution and the vehicle shall be rejected from further emissions inspection.
 - b. In the event the vehicle fails the curb idle test, and if requested by the vehicle operator, the vehicle shall be conditioned according to one of the following conditioning procedures:
 - i. For the fast-idle, the vehicle shall be conditioned by increasing engine speed to 2500, plus or minus 300 RPM, for up to 30 seconds with the transmission in neutral. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized or at the end of 30 seconds, whichever occurs first. The conditioning mode standards in Table 2 shall be for diagnostic and advisory information only. After exhaust emissions have been recorded, the engine speed shall be returned to curb idle for a second idle test. The fast idle conditioning mode may be used on a vehicle at state stations in place of the loaded conditioning mode if one of the following situations occurs:
 - (1) The vehicle has a tire on a driving wheel with less than 2/32-inch tread, with metal protuberances, or with obviously low tire pressure, as determined by superficial visual inspection, or any other condition that in the opinion of the vehicular emissions inspector precludes loaded conditioning for reason of safety to personnel, equipment, or vehicle.
 - (2) The vehicle is driven by a person who, because of physical incapacity, is unable to yield the driver's seat to the vehicular emissions inspector.
 - (3) The driver refuses to yield the driver's seat to the vehicular emissions inspector.
 - (4) The vehicle is unable to be tested according to Table 1 because of the vehicle's inability to attain the speeds specified.
 - ii. For the loaded condition, for all vehicles other than motorcycles and constant four-wheel-drive vehicles, the vehicle's drive wheels shall be placed on a dynamometer and the vehicle shall be operated as prescribed in Table 1, in drive for automatic transmission or second or higher gear for manual transmission. All front wheel drive vehicles shall be driven by the inspector. HC and CO exhaust

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- emissions concentrations shall be recorded after readings have stabilized or at the end of 30 seconds, whichever occurs first. The conditioning mode standards in Table 2 shall be for diagnostic and advisory information only. After exhaust emissions have been recorded, engine speed shall be returned to curb idle for a second idle test.
- c. Following one of the conditioning procedures described in subparagraph (b) of this paragraph, the vehicle shall be retested in accordance with the curb idle test procedure described in subparagraph (a) of this paragraph.
2. Area B vehicles manufactured in or after the 1981 model year, except motorcycles and constant four-wheel drive vehicles, shall be required to take and pass both a loaded cruise test and curb idle test, described as follows:
 - a. For the loaded cruise test, the vehicle's drive wheels shall be placed on a dynamometer and the vehicle shall be operated as prescribed in Table 1, in drive for automatic transmission or second or higher gear for manual transmission. Overdrive shall not be used. All front wheel drive vehicles shall be driven by the inspector. Exhaust emissions, HC and CO concentrations, shall be recorded after readings have stabilized or at the end of 90 seconds, whichever occurs first. After exhaust emissions have been recorded, engine speed shall be returned to idle for a curb idle test.
 - b. The curb idle test shall be performed with the vehicle in neutral. Engine RPM shall be within plus or minus 100 RPM of the manufacturer's specified idle RPM. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized or at the end of 90 seconds, whichever occurs first. A CO₂ plus CO reading of six percent or greater shall be registered to establish test validity. A CO₂ plus CO reading less than six percent shall be deemed proof of exhaust sample dilution and the vehicle shall be rejected from further emissions inspection.
 3. All motorcycles and constant four-wheel drive vehicles shall be required only to take and pass a curb idle test as prescribed in paragraph (1) of this subsection. In the event the vehicle fails the curb idle test, and if requested by the vehicle operator, the vehicle shall be conditioned according to the fast idle conditioning procedure prescribed in paragraph (1)(b) of this subsection. Following conditioning, the engine speed shall be returned to idle for a second curb idle test as prescribed in paragraph (1)(a) of this subsection.
 4. The emissions pass/fail determination shall be made as follows:
 - a. Vehicles manufactured in the 1967 through 1980 model years, except motorcycles and constant four-wheel drive vehicles, which do not exceed the curb idle mode HC and CO emissions standards listed in Table 2 on either the first curb idle test or the second curb idle test, shall be deemed in compliance with the minimum emission standards contained in Table 2.
 - b. Vehicles manufactured in or after the 1981 model year, except motorcycles and constant four-wheel drive vehicles, which do not exceed either the loaded cruise mode or curb idle mode HC and CO emissions standards listed in Table 2, shall be deemed in compliance with minimum emissions standards contained in Table 2. The loaded cruise test standards specified in Table 2 shall be applicable to fleet vehicles tested under the 2500 RPM unloaded fast idle test.
 - c. Motorcycles and constant four-wheel drive vehicles which do not exceed the curb idle mode HC and CO emissions standards listed in Table 2 on either the first curb idle test or the second curb idle test shall be deemed in compliance with the minimum emissions standards contained in Table 2.
 - d. Any vehicle exceeding the appropriate emissions standards shall fail the emissions test and shall have a low emissions tune-up performed as described in R18-2-1010 prior to reinspection.
5. Each area B vehicle required to take an emission test under this Article, shall at the time of the test undergo a tampering inspection based on the original configuration of the vehicle as manufactured, as follows:
 - a. Vehicles that have pressure holding gas caps shall undergo a functional test of the gas cap(s) to determine that the cap leakage does not exceed 200 cubic centimeters of air per minute at a pressure of 30 inches of water gauge. Vehicles with non-sealing gas caps shall be checked for the presence of a gas cap.
 - b. For vehicles manufactured after the 1974 model year:
 - i. A visual inspection to determine the presence of properly installed catalytic converters.
 - ii. A visual inspection to determine the presence of fuel filler neck inlet restrictor(s) or malfunction thereof.
 - iii. An examination to determine the presence of an operational air pump.

The above items shall be checked for conformance to the original configuration at time of manufacture. With respect to foreign manufactured vehicles, "original configuration" means the design and construction of those vehicles produced by that manufacturer for original entry and sale in the United States. The applicable emission system requirements shall be verified by the VEHICLE EMISSION CONTROL INFORMATION label under the hood. Owners of vehicles that fail any portion of the tampering inspection shall be required to repair such tampering in accordance with R18-2-1009 prior to reinspection or provide the written statement prescribed in R18-2-1008(B).
 6. Exhaust sampling in area B shall conform to the following:
 - a. All CO and HC emission analyzers shall have water traps incorporated in their sampling lines. Sampling probes shall be capable of taking undiluted exhaust samples from the vehicle's exhaust system.
 - b. All vehicles, other than diesel-powered vehicles, shall be inspected with NDIR analyzers capable of determining concentrations within the ranges and tolerances specified in Table 5.
 - c. Vehicles with multiple exhaust tail pipes shall be inspected by collecting and averaging samples with one of the following methods:
 - i. Collect separate samples from each exhaust.

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- ii. Utilize manifold exhaust probes to simultaneously sample approximately equal volumes from each pipe.
 - iii. Utilize manifold exhaust pipes to collect approximately equal volume samples from each pipe.
 - iv. Collect samples by a combination of the methods described in subdivisions (ii) and (iii) of this subparagraph. The average concentration shall be used to determine the test results.
- G. The following apply to all testing pursuant to subsections (E) or (F) of this Section:
- 1. All rotary piston engines shall be treated in the same manner as 4-stroke engines with four cylinders or less.
 - 2. All turbine engines shall be treated as 4-stroke engines having more than 4 cylinders.
 - 3. All vehicles in which a diesel engine has been replaced with a gas engine shall be inspected as gas-powered vehicles of the vehicle model year. Catalytic converters, fuel filler neck inlet restrictors, air pumps, gas caps and other emissions control devices applicable to the vehicle model year and the same or more recent year engine configuration shall be installed and in operating condition.
- H. Diesel tests-area A. The inspection test procedure for diesel-powered vehicles in area A shall be as follows:
- I. A diesel-powered vehicle with a GVWR greater than 8,500 pounds shall be tested with a procedure that conforms to Society of Automotive Engineers standard J1667, February, 1996, and no further editions, which is incorporated by reference and on file with the Department and the Secretary of State. The procedure shall report test results in units of smoke opacity. Emissions pass/fail determinations shall be as follows:
 - a. Vehicles powered by a 1991 or subsequent model year diesel engine shall fail when the J1667 final test result is 40% or greater unless the engine family is exempted from the 40% standard under subsection (e).
 - b. Vehicles powered by a pre-1991 model year diesel engine shall fail when the J1667 final test result is 55% or greater unless the engine family is exempted from the 55% standard under subsection (e).
 - c. The engine model year shall be determined by the emission control label. If the emission control label is determined by the inspector to be missing, illegible or incorrect, the test standard shall be 40% unless a correct, legible replacement is attached within 30 days.
 - d. Any vehicle exceeding the appropriate standard shall fail the emission test. Prior to reinspection, the vehicle shall have a low emissions tune-up performed as described in R18-2-1010(G).
 - e. The Director shall exempt from the standards in subsections (a) or (b) any engine family for which the engine manufacturer demonstrates either of the following:
 - i. The engine family exhibits smoke opacity greater than the standard when in good operating condition and adjusted to the manufacturer's specifications. In such case, the engine family shall comply instead with any technologically appropriate less stringent standard identified by the Director based on a review of data obtained from engines in good operating condition and adjusted to manufacturer's specifications:
 - ii. The engine family has been exempted from an equivalent standard based on J1667 by the executive officer of the California Air Resources Board (CARB). In such case, the engine family shall comply instead with any technologically appropriate less stringent standard identified by the executive officer of CARB.
 - f. A demonstration under subsection (e)(i) shall be based on data from at least 3 vehicles. Data from official inspections under this paragraph showing that vehicles with the engine family are passing shall rebut the demonstration made. The Director shall implement any new standard resulting from each such exemption as soon as practicable for all subsequent tests and provide reasonable notice at all affected test stations and fleets.
- 2. A diesel-powered vehicle with a GVWR greater than 4000 pounds and less than or equal to 8,500 pounds shall be tested by a loaded dynamometer test by applying a single load of 30 HP, plus or minus 2 HP, while being operated at 50 MPH. A diesel-powered vehicle with a GVWR of 4000 pounds or less shall be tested by a loaded dynamometer test by applying a single load of between 6.4 - 8.4 HP while being operated at 30 MPH. For all diesel-powered vehicles with a GVWR less than or equal to 8,500 pounds:
 - a. The emissions pass/fail determination shall be made as follows:
 - i. The opacity reading made over a period of 10 consecutive seconds with the engine under the applicable loading shall be the opacity reading used for comparison with the standard specified in R18-2-1030(B). Vehicles which do not exceed the opacity standards set forth in R18-2-1030(B) shall be deemed in compliance with the minimum emission standards.
 - ii. Any vehicle exceeding the appropriate standard shall fail the emission test. Prior to reinspection, the vehicle shall have a low emissions tune-up performed as described in R18-2-1010.
 - b. Exhaust sampling shall conform to the following:
 - i. Separate measurements shall be made on each exhaust outlet on diesel vehicles equipped with multiple exhaust outlets. For vehicles equipped with more than one exhaust stack or pipe, the reading taken from the outlet giving the highest opacity reading shall be used for comparison with the appropriate standard.
 - ii. Vehicles shall be inspected with an opacity meter that is a full-flow, direct reading, continuous reading light extinction type using a collimated light source and photo-electric cell, accurate to a value within plus or minus 5% of filter value.
- II. Diesel tests-area B. The inspection test procedure for diesel-powered vehicles shall conform to the following: 1. The emissions inspection procedure in area B shall be conducted as follows:

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- a1. A diesel-powered vehicle either with a GVWR of greater than 26,000 pounds or having tandem axles shall be tested pursuant to one of the following two methods:
- ia. With the vehicle on a chassis dynamometer under no power absorption, the vehicle shall be tested by selecting a gear ratio which will produce a maximum vehicle speed of between 30-35 MPH at governed or maximum rated RPM, if the vehicle has a manual transmission or an automatic transmission with individual gear selection, and then running the engine at governed or maximum rated engine RPM, at normal operating temperature under a power absorption load applied to the dynamometer until such loading reduces the engine RPM to 80 percent of the governed speed at wide-open throttle position. In the case of vehicles with automatic transmissions with automatic gear kickdown, the engine shall be loaded to a speed just above the kickdown speed or 80 percent of the governed speed, whichever is greater. If the chassis dynamometer does not have enough horsepower absorption capability to lug the engine down to these speeds, the vehicle's brakes may be used to assist the dynamometer.
 - ib. If a chassis dynamometer is not available, the vehicle shall be tested by being lugged by its own brakes by selecting a gear ratio which will produce a maximum speed of between 10-15 MPH at governed engine RPM or maximum rated RPM and then loading the engine by applying the brakes until the engine RPM is lugged down to 80 percent of the governed or maximum rated RPM at wide-open throttle position. If the vehicle does not have a tachometer, the vehicle may be loaded to 80 percent of governed or maximum rated speed.
- b2. A diesel-powered vehicle without tandem axles and having a GVWR greater than 10,500 pounds and less than or equal to 26,000 pounds shall be tested pursuant to one of the following three methods:
- ia. With the vehicle on a chassis dynamometer under no power absorption, the vehicle shall be tested by selecting a gear ratio which will produce a maximum vehicle speed of between 30-35 MPH at governed or maximum rated RPM, if the vehicle has a manual transmission or an automatic transmission with individual gear selection, and then running the engine at governed or maximum rated engine RPM, at normal operating temperature under a power absorption load applied to the dynamometer until such loading reduces the engine RPM to 80 percent of the governed speed at wide-open throttle position. In the case of vehicles with automatic transmissions with automatic gear kickdown, the engine shall be loaded to a speed just above the kickdown speed or 80 percent of governed speed, whichever is greater. If the chassis dynamometer does not have enough horsepower absorption capability to lug the engine down to these speeds, the vehicle's brakes may be used to assist the dynamometer.
 - ib. The vehicle shall be tested by applying a single load of 30 HP, plus or minus 2 HP, while being operated at 50 MPH.
 - ic. The vehicle shall be tested by being lugged by its own brakes by selecting a gear ratio which will produce a maximum speed of between 10-15 MPH at governed engine RPM or maximum rated RPM and then loading the engine by applying the brakes until the engine RPM is lugged down to 80 percent of the governed or maximum rated RPM at wide-open throttle position. If the vehicle does not have a tachometer, the vehicle may be loaded to 80 percent of governed or maximum rated speed.
- e3. A diesel-powered vehicle with a GVWR of greater than 4000 pounds and less than or equal to 10,500 pounds shall be tested by a loaded dynamometer test by applying a single load of 30 HP, plus or minus 2 HP, while being operated at 50 MPH.
- e4. A diesel-powered vehicle with a GVWR of 4000 pounds or less shall be tested by a loaded dynamometer test by applying a single load of between 6.4 - 8.4 HP while being operated at 30 MPH.
25. The emissions pass/fail determination shall be made as follows:
- a. The opacity reading made over a period of ten consecutive seconds with the engine under the applicable loading specified in ~~paragraph (1)~~ paragraphs (1) through (4) of this subsection shall be the opacity reading used for comparison with the standard specified in R18-2-1030(B). Vehicles which do not exceed the opacity standards set forth in R18-2-1030(B) shall be deemed in compliance with the minimum emission standards.
 - b. Any vehicle exceeding the appropriate standard shall fail the emission test. Prior to reinspection, the vehicle shall have a low emissions tune-up performed as described in R18-2-1010.
36. Exhaust sampling shall conform to the following:
- a. Separate measurements shall be made on each exhaust outlet on diesel vehicles equipped with multiple exhaust outlets. For vehicles equipped with more than one exhaust stack or pipe, the reading taken from the outlet giving the highest opacity reading shall be used for comparison with the appropriate standard.
 - b. ~~All diesel-powered vehicles~~ Vehicles shall be inspected with an opacity meter that is a full-flow, direct reading, continuous reading light extinction type using a collimated light source and photo-electric cell, accurate to a value within plus or minus five percent of filter value.
- II. Area A or area B vehicles that are diesel-fueled and equipped with catalytic converters or PCV systems shall undergo a tampering inspection for those devices pursuant to subsections (E) or (F) of this Section.
- J. ~~The Director shall monitor biennial test failure rates by vehicle type on at least a weekly basis during the first three months of biennial testing, and if necessary, shall adjust emission standards according to this subsection. If the cumulative initial fail rate for any vehicle type listed in Table 3 exceeds 30%, excluding vehicles that failed due solely to an evaporative system failure, at any time after a minimum sample of 1000 vehicles is available, the Director shall, one at a time, raise each emission standard with the highest number of exceedances for the sample in increments equal to 10% of the original standard until the cumulative initial failure rate for the vehicle type would fall below 28%. The Director shall implement the new standards resulting from each such adjustment as soon as practicable for all subsequent tests and provide reasonable notice at all affected test stations subse-~~

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~~quent to any such adjustments. For any vehicle type for which a minimum sample of 1000 vehicles is not reached within the first three months of biennial testing, the Director's authority under this subsection shall extend until a minimum sample of 1000 is reached.~~

R18-2-1010. Low Emissions Tune-up, Emissions and Evaporative System Repair

A. A low emissions tune-up on nondiesel-powered vehicles shall consist of performing the following procedures:

1. Perform an emission failure diagnosis. On computer controlled vehicles, access the on-board-diagnostics and record any stored trouble codes. The following instruments or equipment are required to complete a low emissions tune-up: tachometer, timing light, or an engine analyzer or oscilloscope, and where specified by the manufacturer, a HC/CO NDIR analyzer to make final A/F adjustments. Final adjustment shall be made only after the vehicle engine is at normal operating temperature. All adjustments shall be made in accordance with the manufacturer's specifications and procedures.
2. Inspect for dirty or plugged air cleaner and stuck choke, restricted air intake system. Replace and repair as required.
3. Check dwell (or point gap) and basic timing according to manufacturer's specifications and adjust as required.
4. Check for manufacturer's recommended PCV valve and for its correct operation. Verify free flow through the PCV system passages and hoses. Repair and replace as required.
5. Check for improperly routed, leaking or disconnected vacuum hoses. Repair and replace as required.
6. Adjust idle speed and A/F mixture in accordance with manufacturer's specifications and procedures.

Note: If vehicle is equipped with fuel injection system or an alternate fuel (LPG or LNG) follow manufacturer's recommended adjustment procedure.

B. The low emissions tune-up must be performed on all vehicles to qualify for a waiver if the vehicle fails reinspection.

C. If the maximum required repair cost outlined in subsections (E) and (F), or the vehicle owner share in R18-2-1014(D), if applicable, whichever is less, has not been exceeded after performing the low emissions tune-up described in subsection (A), then the following shall be done:

1. For vehicles failing CO only, check for proper canister purge system operation, high float setting, leaky power valve, faulty or worn needles, seats, jets or improper jet size. If applicable, check the computer, engine and computer sensors, engine solenoids, engine thermostats, engine switches, coolant switches, throttle body or port fuel injection system, fuel injectors, fuel lines, (routing and integrity), air in fuel system (line, pump, etc.), fuel return system, injection pump, fuel injection timing, routing of vacuum hoses and/or electrical connections. Repair and replace as required.
2. For vehicles failing HC or HC and CO, check for faulty spark plugs and faulty, open, crossed, or disconnected plug wires, distributor module, vacuum hose routing and electrical connections; and for distributor component malfunctions including vacuum advance, faulty points or condenser, and distributor cap crossfire, catalytic converter efficiency, and catalytic converter air supply; and for vacuum leaks at intake manifold, carburetor base gasket, EGR, and vacuum-operated components. Repair or replace as required.

3. For vehicles failing NO_x, check for removed, plugged, or malfunctioning EGR valve; exhaust gas ports, lines, and passages; EGR valve electrical and vacuum control circuitry, components, and computer control, as applicable; and for above normal engine operating temperature, proper air management, lean A/F mixture, catalytic converter efficiency and over advanced off-idle timing. Repair, replace and adjust as required.

D. Evaporative System Failures:

1. For vehicles failing an evaporative system integrity (pressure) test, check for leaking or disconnected vapor hoses, line, gas cap, fuel tank. Repair or replace as required.
2. For vehicles failing an evaporative system purge test, check for missing or malfunctioning canister, canister electrical and vacuum control circuits and components. Repair or replace as required.

E. The maximum required repair cost for vehicles in area A, not including costs to repair vehicles which fail an evaporative system purge or integrity test due to tampering or other tampering repair costs, is as follows:

1. Five hundred dollars for a diesel-powered vehicle with a gross weight in excess of twenty-six thousand pounds or a diesel-powered vehicle with tandem axles.
2. For a vehicle other than a diesel-powered vehicle with a gross weight in excess of twenty-six thousand pounds or a diesel-powered vehicle with tandem axles:
 - a. One hundred dollars for such a vehicle manufactured in or before the 1974 model year.
 - b. Three hundred dollars for such a vehicle manufactured in the 1975 through 1979 model years.
 - c. Four hundred and fifty dollars for such a vehicle manufactured in or after the 1980 model year.
3. This subsection does not prevent the vehicle owner from authorizing or performing more than the required repairs. Vehicle operators who are having their vehicle reinspected shall have repair receipts available when requesting a certificate of waiver.

F. In area B, the maximum required repair cost, not including tampering repair costs, for area B vehicles is as follows:

1. Three hundred dollars for a diesel-powered vehicle with a gross weight in excess of twenty-six thousand pounds or a diesel-powered vehicle with tandem axles.
2. For a vehicle other than a diesel-powered vehicle with a gross weight in excess of twenty-six thousand pounds or a diesel-powered vehicle with tandem axles:
 - a. Fifty dollars for such a vehicle manufactured in or before the 1974 model year.
 - b. Two hundred dollars for such a vehicle manufactured in the 1975 through 1979 model years.
 - c. Three hundred dollars for such a vehicle manufactured in or after the 1980 model year.
3. This subsection does not prevent the vehicle owner from authorizing or performing more than the required repairs. Vehicle operators who are having their vehicle reinspected shall have repair receipts available when requesting a certificate of waiver.

G. A low emissions tune-up on diesel-powered vehicles shall consist of performing the following procedures:

1. Inspect for dirty or plugged air cleaner, restricted air intake system. Replace and repair as required.
2. Check fuel injection system timing according to manufacturer's specifications and adjust as required.
3. Check for fuel injector fouling, leaking or mismatch. Repair and replace as required.

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4. Check fuel pump and air-fuel ratio control according to manufacturer's specifications and adjust as required.
 5. If the vehicle has failed the J1667 procedure, check smoke-limiting devices, if any, such as the aneroid valve and puff limiter. Repair and replace as required.
- H. Any available warranty coverage shall be used to obtain needed repairs before expenditures can be counted towards the cost limits in subsections (E) and (F) of this Section. The operator of a vehicle within the statutory age and mileage coverage under section 207(b) of the Clean Air Act shall present a written denial of warranty coverage from the manufacturer or authorized dealer for this provision to be waived for approved tests applicable to the vehicle.
- R18-2-1019. Fleet Station Procedures and Permits**
- A. Vehicles owned by or leased to a holder of a fleet emissions inspection station permit that are not exempt from inspection shall be inspected as specified in R18-2-1006(E) through (I), except as follows:
1. Dealer fleet vehicles in area A held for resale and all area B fleet vehicles, if manufactured in or after the 1981 model year and other than diesel-powered, shall be required to take and pass both the curb idle test specified in R18-2-1006(F)(1) and a 2,500 RPM unloaded fast idle test as follows:
 - a. The vehicle's engine shall be operated at 2500, plus or minus 300 RPM, for up to 30 seconds with the transmission in neutral.
 - b. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized or at the end of 30 seconds, whichever occurs first, and compared to the loaded cruise standards in Table 2.
 2. Dealer fleet vehicles in area A held for resale, if manufactured in or before the 1980 model year and other than diesel-powered, shall be required to take and pass a curb idle test as specified in R18-2-1006(F)(1). The loaded cruise test standards specified in Table 2 of this Article shall be applicable to fleet vehicles tested under the 2,500 RPM unloaded fast idle test. A fleet emissions inspection station that is unable to test at least 25 vehicles as specified in R18-2-1006 and this Section shall surrender its license on the effective date of this Section.
- B. The following shall apply to permits for all fleet stations:
1. Any owner or lessee of a fleet of 25 or more nonexempt vehicles whose place of business is located in areas A or B may apply to the Director for a permit to establish a fleet station. The Director shall not issue or renew any fleet station permit until the Director has found that the permit applicant or permit holder:
 - a. Maintains an established facility for the inspection, repair and maintenance of the applicant's fleet of vehicles which meets the following requirements:
 - i. The facility shall be exclusively rented, leased, or owned by the permit applicant or permit holder.
 - ii. If the permit is for the inspection of nondiesel-powered vehicles, all of the following equipment shall be owned or leased by the permit applicant or permit holder or employees thereof and shall be in proper working condition:
 - (1) Ignition timing light with timing advance tester.
 - (2) Ignition operated tachometer.
 - (3) Dwell meter.
 - (4) Socket tool for replacing spark plugs.
 - (5) Spark-plug gap setting tool.
 - (6) Tools for replacing or adjusting carburetors or fuel injection systems, distributors, fuel pumps, and ignition coils.
 - (7) Nondispersive infra-red analyzer (NDIR).
 - iii. If the permit is for the inspection of diesel-powered vehicles, all of the following equipment shall be owned or leased by the permit applicant or permit holder or employees thereof and shall be in good working condition:
 - (1) Tools for removing fuel pumps and injectors.
 - (2) Fuel pressure gauge.
 - (3) Opacity meter. The meter shall meet J1667 specifications for vehicles with a GVWR greater than 8500 lbs. in area A.
 - (4) Tools required by the vehicle manufacturer for field setting of fuel injectors, inlet and exhaust valve clearance, governors, and throttle controls.
 - (5) A dynamometer for testing light and medium duty diesel vehicles.
- b. Employs properly trained personnel as follows:
 - i. If the facility is for the repair of nondiesel-powered vehicles, employs personnel to perform tune-ups of engines and replacement or repair of carburetion and ignition components.
 - ii. If the facility is for the repair of diesel-powered vehicles, employs personnel to perform tune-ups and replacement or repair of diesel fuel systems in the vehicle fleet.
- c. Provides a suitable space devoted principally to maintaining or repairing the fleet's motor vehicles. Such space shall be of sufficient area to conduct maintenance or repair of at least one fleet motor vehicle.
- d. Has obtained the CO and HC emissions analyzer conforming to the requirements of R18-2-1006 to conduct the required inspections.
- e. Employs a licensed vehicular emissions inspector who will perform the necessary inspections. This inspector may be the same person required by subparagraph (b) of this paragraph.
- f. Agrees to provide information to the Department as prescribed in this Section.
- g. Demonstrates proficiency by passing a Department-administered examination on the statutes and rules governing the operation and administration of a fleet emissions inspection station. If the permit applicant or permit holder will not be in charge of the day-to-day operation of the fleet station, then the individual who will be in charge of the day-to-day operation of the fleet station shall be required to pass the examination. This individual shall be known as the fleet agent.
2. A dealer's business inventory of vehicles held for resale that exists at the time of inspection of the dealer's fleet for approval of application by the Department shall be used to determine compliance with paragraph (i) of this subsection.
3. Application forms may be obtained from the Department.

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4. All completed applications shall be submitted to the Department.
 5. Before an original application for a fleet station permit may be approved, an inspection of the premises shall be made by a state inspector.
 6. A fleet station shall not inspect or certify vehicles not owned by or leased to the fleet owner. Consignment vehicles shall be tested at a state inspection station in accordance with R18-2-1005(A)(3).
 7. A fleet station permit shall expire one year from the date of issuance, except as otherwise provided in Title 41, Chapter 6, Article 6 of the Arizona Revised Statutes.
 8. The fleet station permit may be renewed by submittal of a renewal application to the Department 30 days prior to expiration.
 9. A fleet station permit shall only be applicable to the fleet's inspection facility located at the address shown on the fleet station permit. If a fleet owner wishes to have a permit for inspection facilities at more than one address, then separate permits shall be obtained for each facility.
 10. Fleet station permits issued by the Director shall not be transferable.
 11. When permit name or address changes do not involve a change of ownership, the permit shall be returned to the Department for cancellation and a new permit application shall be submitted. The Director shall cancel the returned permit and issue a new permit for the unexpired term.
 12. In the event of loss, destruction, or mutilation of the permit, the person to whom it was issued may obtain a duplicate upon furnishing satisfactory proof of the fact. Any fleet that loses a fleet station permit issued by the Director, and after obtaining a duplicate finds the original, shall immediately surrender the original permit to the Department.
 13. Persons whose permits have expired shall immediately cease the activity requiring a permit, except as otherwise provided in Title 41, Chapter 6, Article 6 of the Arizona Revised Statutes.
 14. A fleet station which does not have a vehicular emissions inspector in its employ shall immediately cease to operate as a fleet station and shall notify the Department immediately by telephone and within seven days in writing. All unused vehicle certificates of inspection shall be returned to the Department within seven days for a refund.
 15. A fleet station which does not have a fleet agent in its employ shall immediately cease to operate as a fleet station and shall notify the Department immediately by telephone and within seven days in writing unless the permit applicant or other designated employee has taken and passed the examination requirement as set forth in paragraph (1)(g) of this subsection and assumes responsibility for the day-to-day operation of the fleet station. The fleet owner shall notify the Department within seven days of the designation of a new fleet agent.
 16. When a fleet station permit is surrendered, suspended, revoked, or not renewed, all unused vehicle certificates of inspection shall be returned to the Department for a refund.
 17. Surrender of a permit shall not deprive the Department of jurisdiction from carrying out investigative or disciplinary proceedings against the permit holder for violations prior to surrender.
- C. In addition to the requirements in subsection (B) of this Section, non-dealer fleets in area A shall have all of the following:
 1. Equipment to perform a steady state loaded emission test as required in R18-2-1006(E)(1).
 2. Equipment to perform a transient loaded emission test as required in R18-2-1006(E)(2).
 3. Equipment for testing evaporative systems for pressure and purge flow as required in R18-2-1006(E)(2).
 4. Ability to perform the maintenance and quality control requirements of R18-2-1006(E)(2) and "High-Tech I/M Final Technical Guidance".
 - D. The Director may suspend, revoke, or refuse to renew a fleet station permit in accordance with A.R.S. §§ 49-546(F) and 41-1001 et seq. if the permittee, or any person working for or employed by the permittee:
 1. Violates any provision of Title 49, Chapter 3, Article 5 of the Arizona Revised Statutes or any provision of this Article.
 2. Has misrepresented a material fact in obtaining a permit.
 3. Fails to make, keep, and submit to the Department records showing vehicles tested as a permittee.
 4. Fails to maintain conformance with each of the applicable requirements of subsections (B) and (C) of this section.
 5. Does not provide a state inspector access to the information required by this Article.
 - E. The fleet station permit and licenses of all inspectors employed at the station shall be prominently displayed within the station.
 - F. A written notification shall be submitted to the Department by the fleet station permit holder within seven days of any change of the employment status of the fleet station's vehicular emissions inspector.
 - G. The inspection equipment shall meet the following requirements:
 1. Each fleet station shall be equipped with emission analyzers which meet the specifications contained in R18-2-1006. Only the equipment required to test the types of vehicles in the fleet inventory shall be required in the fleet stations.
 2. All test equipment and instrumentation shall be maintained in proper working condition as prescribed by the manufacturer. Instruments requiring periodic calibration shall be calibrated in accordance with instructions and recommendations of the instrument or equipment manufacturer. NDIR emission analyzers shall be registered and calibrated pursuant to R18-2-1027. A record of calibrations performed on each instrument other than NDIR emission analyzers shall be maintained by the fleet station indicating the date and authentication of the technician performing the previous calibration.
 3. The instrument calibration records shall be subject to review by the Department.
 4. Working gases used by the fleet station shall be subject to analysis and comparison to the Department's standard gases at any time.
 5. Fleet station equipment shall be subject to both scheduled and unscheduled checks for accuracy and condition by the Department.
 - H. If at any time a fleet station fails to meet all the requirements of subsection (B)(1), it shall immediately cease to operate as a fleet station until all such requirements are met. Should the fleet be administratively red tagged for failure to have the necessary equipment, it shall not resume operation as a fleet

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emissions inspection station until compliance has been verified by the Department.

I. Certificates of Inspection shall be processed as follows:

1. A certificate of inspection shall be completed and signed by the vehicular emissions inspector conducting the inspection at the time the vehicle passes inspection. Certificates shall be issued in numerical order.
2. For all inspections other than the biennial test, the expiration date shall be one year from the date that the vehicle has passed the mandatory vehicular emissions inspection. For vehicles required to pass the transient loaded emission test, the expiration shall be two years after the pass date.
3. All information required on the certificate of inspection shall be entered with sufficient pressure to ensure that all copies of the certificate are legible.
4. Any certificates of inspection that are incorrect shall have all corrections authenticated by the initials of the vehicular emissions inspector.
5. Only the vehicular emissions inspector performing the inspection may sign a certificate of inspection.
6. Unless inspection data is electronically transmitted pursuant to A.R.S. § 49-542(Q), the original completed certificate shall be presented to the Arizona Department of Transportation Motor Vehicle Division in Pima County or the Maricopa County Assessor in Maricopa County for processing of either the vehicle's application for title and registration or Arizona registration card.
7. The second copy of each completed certificate of inspection, along with the second copy of the Fleet Inspection Report/Monthly Summary, shall be forwarded to the Department monthly, within two weeks after the end of the month in which the inspection was conducted.
8. The third copy of each completed certificate of inspection, along with the original Fleet Vehicle Inspection Report/Monthly Summary, shall be retained for two years from the date of inspection.
9. Unless inspection data is electronically transmitted pursuant to A.R.S. § 49-542(Q), the Arizona Department of Transportation Motor Vehicle Division in Pima County or the Maricopa County Assessor in Maricopa County shall accept the signed certificate as evidence that the vehicle is a fleet inspected vehicle and has met the state's inspection requirements according to R18-2-1007(C).
10. Certificates shall be purchased from the Department in lots of 25. If the number of vehicles to be inspected by the fleet station is reduced after purchase of the certificates and before their use, the excess certificates may be either returned to the Department for refund or used in subsequent years.
11. The charge for certificates shall be \$5.00 each. The payment for the certificates shall be included with the application for certificates. Checks shall be made payable to the Department of Environmental Quality.
12. Only the Department shall sell or otherwise transfer certificates of inspection.
13. The fleet station owner shall be responsible for the security and accountability of all the owner's certificates.
14. In the event that any certificates are lost or stolen, the fleet station owner shall notify the Department in writing within 24 hours and indicate the number of certificates lost and their serial numbers. Refusal or failure to

report lost certificates within 24 hours shall be grounds for revoking a fleet station permit.

J. The Fleet Vehicle Inspection Report/Monthly Summary shall be obtained from the Department and, for all inspections other than diesel inspections and the transient loaded emissions test, shall contain all of the following information which shall be recorded at the time of inspection by the vehicular emissions inspector performing the inspection:

1. The VIN of the vehicle passing inspection.
2. The vehicle's license number, where applicable.
3. The HC content of the undiluted exhaust recorded at idle.
4. The CO content of the undiluted exhaust recorded at idle.
5. The HC content of the undiluted exhaust recorded at 2500 rpm.
6. The CO content of the undiluted exhaust recorded at 2500 rpm.
7. When applicable, results of a tampering check.
8. The vehicle model year.
9. The vehicle make.
10. The date of inspection.
11. The license number of the vehicular emissions inspector conducting the inspection.
12. The signature of the inspector making the entry.
13. The serial number of the certificate of inspection, recorded in numerical order.

K. For diesel vehicles, the summary described in subsection (J) shall record opacity rather than undiluted HC and CO readings.

L. For vehicles required to take the transient loaded emission test, the summary described in subsection (J) shall record the total HC, CO, CO₂ and NO_x measured in grams/mile, and the evaporative system integrity and purge test results rather than the items in (J)(3) through (7).

M. Upon request a state inspector shall be allowed access to and shall be allowed to photocopy on or off the premises the original Fleet Vehicle Inspection Report/Monthly Summaries, the second copies of certificates of inspection, and any or all other related documents.

N. Fleet vehicles shall be subject to inspection by state inspectors.

O. A certificate of waiver may be issued by a fleet inspector other than an auto dealer licensed to sell used motor vehicles pursuant to Title 28 of the Arizona Revised Statutes when the requirements of R18-2-1008(A), R18-2-1009, and R18-2-1010 have been met according to the following procedure:

1. A certificate of waiver shall be completed and signed by the vehicular emissions inspector conducting the inspection following completion of a fleet inspection waiver report. The report shall be forwarded to the Department within three working days from the date of issuance of the certificate of waiver. A fleet inspection waiver report shall be provided with the purchase of each certificate of waiver. The report shall contain a description of the vehicle, test results, and repairs performed.
2. The expiration date of the certificate of waiver shall be two years from the date that the waiver is granted for vehicles required to take the transient loaded emission test, and one year for all other vehicles.
3. All information required on the certificate of waiver shall be entered with sufficient pressure to ensure that all copies of the certificate are legible.

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7. The name and address of agency personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:
Name: Paul Ryneveld
Address: Arizona Department of Racing
3877 North 7th Street, Suite 201
Phoenix, Arizona 85014
Telephone: (602) 277-1704
Fax: (602) 277-1165
8. The time, place, and nature of the proceedings for the adoption, amendment, or repeal of the rule or, if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:
No oral proceedings are scheduled. Contact Paul Ryneveld in writing to request one. At least 5 requests need to be submitted within the 30 days following publication of the proposed rulemaking in order to schedule an oral proceeding.
9. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:
None.
10. Incorporations by reference and their location in the rules:
None.
11. The full text of the rules follows:

TITLE 19. ALCOHOL, HORSE AND DOG RACING, LOTTERY, AND GAMING

CHAPTER 2. ARIZONA RACING COMMISSION

ARTICLE 1. HORSE RACING

Section
R19-2-109. Jockeys

ARTICLE 1. HORSE RACING

R19-2-109. Jockeys

A. Generally:

1. All jockeys shall pass a physical examination by a physician designated by the permittee. ~~The~~ Such examination is valid for a 12-month period. The stewards may require that any jockey be reexamined and may refuse to allow any jockey to ride until the jockey successfully passes ~~the such an~~ examination. The stewards or their designee may require that any jockey provide blood or urine samples for analysis upon request.
2. A jockey who is to ride in a race shall report to the jockey room at the time ~~appointed as posted there in the jockey room~~ and shall remain in ~~the jockey~~ this room between races until all engagements for the day have been fulfilled.
3. Only standard jockey attire ~~is shall be~~ allowed in official races.
4. Only jockeys, their attendants, and racing officials are permitted in the jockey room.
5. A jockey is entitled to a mount fee ~~when the jockey is weighed-out by the clerk of scales except in the following cases; upon the command by the paddock judge to mount.~~
 - a. The jockey does not weigh-out and ride in a race because an owner or trainer engaged more than 1 jockey for the same race. In such a case, the stewards shall determine the appropriate fee for each jockey the owner or trainer engaged for the race. The fee may equal the fee of the jockey who rode the race or a losing fee.

- b. The jockey elects to take off a mount without proper cause.
- c. The stewards replace the jockey with a substitute jockey for a reason other than the jockey suffering an injury during the time between weighing-out and the start of the race.
- d. If the jockey was named by the stewards at the draw, the owner or trainer has until a time determined by the stewards to provide notice to the stewards that the owner or trainer wishes to engage a different jockey. In such a case, the stewards may not require the owner or trainer to pay a fee to the jockey named by the stewards.

6. ~~If a trainer engages two or more jockeys for the same race, the owner shall pay the losing fee for each jockey so engaged who does not ride in that race.~~

B. Equipment

1. A bridle used in races shall not exceed ~~2 two~~ pounds in weight.
2. A whip used in races shall be at least 1/4 inch in diameter and shall not exceed ~~1 one~~ pound in weight or 29 inches in length including the popper.
3. A helmet, properly fastened, shall be worn by all jockeys, apprentice jockeys, and any other rider while exercising or ponying a horse.

C. Weight; Weighing weighing

1. A jockey shall weigh out and weigh in without a whip or a bridle.
2. A jockey may be weighed out for a race only if a fee for a losing mount in that race has been deposited with the permittee. Failure to comply with this paragraph may result in the horse which the jockey is to ride being declared out of the race.
3. A jockey shall declare the amount of overweight at the time of weighing out.
 - a. ~~A jockey shall not No jockey shall~~ pass the scale more than ~~2 two~~ pounds overweight without the

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consent of the owner or trainer of the horse the jockey is to ride.

- b. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ pass the scale more than 7 ~~seven~~ pounds overweight without the consent of the stewards.
 - c. ~~The stewards shall not disqualify a~~ The stewards shall not disqualify a ~~A horse shall not be disqualified~~ because of any overweight it ~~might carry~~ may have carried.
 - d. ~~The permittee shall publicly post or announce an~~ The permittee shall publicly post or announce an ~~Any~~ overweight or change of weight different from that published in the official program ~~shall be publicly posted or announced~~.
4. A jockey shall ride ~~such jockey's~~ such jockey's horse to the place of weighing in immediately after pulling up, dismount after obtaining permission from the official in charge, and ~~offer present himself to be weighed by the clerk of the scales~~.
- a. A jockey shall unsaddle ~~the~~ the ~~such~~ jockey's own horse unless the jockey has obtained permission from the official in charge.
 - b. An attendant may touch the horse only by its bridle unless ~~the~~ the ~~such~~ attendant has obtained permission from the official in charge.
 - c. ~~A person shall not~~ A person shall not ~~No one shall~~ touch the equipment of a jockey who has returned to the winner's circle to dismount until the jockey has been weighed in unless ~~the person has obtained permission~~ the person has obtained permission ~~permission has been obtained~~ from the official in charge.
5. A jockey who is prevented from riding to the place of weighing in because of accident or illness which disables either ~~the~~ the ~~such~~ jockey or ~~the~~ the ~~such~~ horse shall walk or be assisted to the scales.
6. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ be more than 1 ~~one~~ pound short of ~~the~~ the ~~such~~ jockey's weight.
7. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ dismount before reaching the scales.
8. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ dismount without permission.
9. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ touch intentionally any person or thing other than ~~the~~ the ~~such~~ jockey's own equipment before weighing in.

D. Apprentice Jockeys ~~jockeys~~

1. Licenses; ~~Certificates~~ Certificates

- a. An ~~applicant~~ applicant application for an ~~apprentice~~ Apprentice ~~jockey~~ Jockey ~~license~~ License shall ~~provide~~ provide be accompanied by a certified copy of the ~~applicant's~~ applicant's birth certificate or other satisfactory evidence of the date of birth of the applicant.
- b. ~~The stewards shall issue an~~ The stewards shall issue an ~~Apprentice Jockey Certificate~~ Apprentice Jockey Certificate shall be issued by the stewards if the applicant:
 - i. Is over the age of 16 and, if under 18, has a parent or guardian sign ~~the~~ the ~~such~~ apprentice jockey's license application assuming full financial responsibility for the applicant; -
 - ii. Is approved working a horse out of the gate by the starter; -
 - iii. Successfully demonstrates to the stewards pursuant to R19-2-121(E)(3), the ability to gallop or exercise a horse; Has experience in galloping or exercising a horse acceptable to the stewards.

- iv. ~~Has such apprentice jockey's and owns the~~ Has such apprentice jockey's and owns the ~~required own~~ required own tack and other required wearing apparel.
- c. An apprentice jockey license expires ~~upon satisfaction of the criteria when the allowances set forth in subsection (D)(2) below have been claimed~~ and shall be surrendered to the Department. If the license expires during the term of the ~~current~~ current licensing ~~cycle~~ period a jockey license will be issued at no additional cost.

2. Allowances

- a. An apprentice jockey who has not been licensed previously in any country may claim the following allowances in all overnight races except handicaps:
 - i. 5 ~~Five~~ pounds, to be continued for 1 ~~one~~ year from the date of ~~the~~ the ~~such~~ apprentice jockey's 5th ~~fifth~~ winner.
 - ii. If the apprentice jockey has not ridden 40 winners within a period of 1 ~~one~~ year from the date of ~~the~~ the ~~such~~ apprentice jockey's 5th ~~fifth~~ winner, 5 ~~five~~ pounds, to be continued for 3 ~~three~~ years from the date of ~~the~~ the ~~such~~ apprentice jockey's 1st ~~first~~ winner or and until the ~~such~~ apprentice jockey has ridden 40 winners whichever comes first.
 - b. The calculation of the time for which an apprentice allowance may be claimed shall not include:
 - i. Time spent in the armed forces.
 - ii. Time during which the apprentice jockey is physically incapacitated.
3. An apprentice jockey may ride in a race in which quarter horses are eligible to start, provided that:
- a. An apprentice ~~jockey~~ jockey ~~allowance~~ shall not ~~claim the~~ claim the ~~weight allowance be claimed~~ in such a race; and -
 - b. Riding a winner in ~~the~~ the ~~such~~ a race ~~is not~~ is not shall not be considered in computing the expiration of the right to claim apprentice allowances in races restricted to thoroughbreds and included in the Monthly Chart Book of the Daily Racing Form.

E. Prohibited acts

1. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ ride in a race against a starter of ~~the~~ the ~~such~~ jockey's contract employer unless both ~~the~~ the ~~such~~ jockey's mount and the starter of ~~the~~ the ~~such~~ jockey's contract employer are trained by the same trainer.
2. ~~A jockey shall not~~ A jockey shall not ~~No individual jockey shall~~ fail or refuse to fulfill an engagement for a certain race or for a specified time unless the ~~race or race card is~~ race or race card is ~~cancelled~~ cancelled or unless the jockey is excused by the stewards.
3. ~~A jockey or the jockey's spouse shall not~~ A jockey or the jockey's spouse shall not ~~No jockey or such jockey's spouse shall~~ own, either in whole or in part, a horse registered for racing at the track where ~~the~~ the ~~such~~ jockey is riding.
4. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ engage in any betting transaction except through the owner of and on the horse which the ~~such~~ such jockey rides.
5. ~~A jockey attendants, jockey valet or any licensee~~ A jockey attendants, jockey valet or any licensee ~~employed inside the jockey's room shall not~~ employed inside the jockey's room shall not ~~No jockey attendants or jockey valets shall~~ place a bet for themselves or for another person during the time that they are acting under the authority of their license.
6. ~~A jockey shall not~~ A jockey shall not ~~No jockey shall~~ ride against a horse trained by ~~the~~ the ~~such~~ jockey's spouse except as part of an entry.