NOTICES OF PROPOSED RULEMAKING

Unless exempted by A.R.S. § 41-1005, each agency shall begin the rulemaking process by first 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. 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 making, amending, or repealing any rule. (A.R.S. §§ 41-1013 and 41-1022)

NOTICE OF PROPOSED RULEMAKING

TITLE 4. PROFESSIONS AND OCCUPATIONS

CHAPTER 6. BOARD OF BEHAVIORAL HEALTH EXAMINERS

[R08-255]

PREAMBLE

1. Sections Affected **Rulemaking Action**

R4-6-305	Amend
R4-6-801	Amend

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statute: A.R.S. § 32-3253(A)(1)

Implementing statute: A.R.S. §§ 32-3253(A)(1), 32-3253(A)(11), and 32-3273

3. A list of all previous notices appearing in the *Register* addressing the proposed rules:

Notice of Rulemaking Docket Opening: 14 A.A.R. 2718, June 27, 2008

4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Sherry D. Blatner
Address:	3443 N. Central Ave., Suite 1700 Phoenix, AZ 85012
Telephone:	(602) 542-1889
Fax:	(602) 364-0890
E-mail:	sherry.blatner@bbhe.state.az.us

5. An explanation of the rules, including the agency's reasons for initiating the rules:

The Arizona Board of Behavioral Health Examiners ("Board") has initiated this rulemaking to reduce from 40 to 30 the number of continuing education clock hours that a professional renewing a license biennially must complete.

Over time, the Board has enhanced its renewal process and required licensees to take specific coursework in ethics, cultural competency, and supervision. Substance abuse counselors are required to complete 20 clock hours of continuing education in the area of substance abuse during each renewal period.

Requiring licensees to take specific continuing education coursework has provided the Board with the opportunity to reduce the total number of continuing education hours required while ensuring the quality of the overall continuing education program of each professional and the safety of the public.

The Board has deleted the requirement for professionals to provide fingerprint cards at the time of renewal. The Board implemented this one-time requirement on July 1, 2004, the date mandatory licensure became effective. At this time, each professional has either provided fingerprint card information at the time of initial licensure or at the first renewal after July 1, 2004.

The Board has deleted the requirement for a professional, renewing a license, to provide a notarized signature on the renewal application. A notary confirmed the licensee's signature on the original application. It is sufficient to allow current licensees to affirm the truthfulness of the information contained in the renewal application without the additional requirement of a notarized signature during each biennial renewal period.

The rulemaking also includes language changes to provide consistency regarding the renewal application process for inactive and active licensees and to conform to the publication requirements of the Office of the Secretary of State.

6. A reference to any study relevant to the rules that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

None

7. 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

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

This rulemaking will affect professionals renewing current licenses by reducing the number of continuing education credits that are required in the biennial renewal period from 40 clock hours to 30 clock hours.

Licensees may experience a cost savings depending upon the source from which they receive their continuing education.

Consumers remain protected by the Board's increased requirements over the past few years for licensees to obtain specific continuing education coursework depending upon their license.

Licensees will benefit from the elimination of the requirement that a renewal license application contain a notarized signature. While the cost saving will be minimal, licensees will save time during the process.

9. 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:	Sherry D. Blatner
Address:	3443 N. Central Ave., Suite 1700 Phoenix, AZ 85012
Telephone:	(602) 542-1889
Fax:	(602) 364-0890
E-mail:	sherry.blatner@bbhe.state.az.us

10. The time, place, and nature of the proceedings for the making, 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:

The Board of Behavioral Health Examiners will accept written comments on the proposed rulemaking Monday through Friday 8:00 a.m. to 5:00 p.m. at the address indicated in item 4 through the close of record on September 23, 2008. A public hearing is not planned, but may be scheduled later if requested.

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

Not applicable

12. Incorporations by reference and their location in the rules:

None

13. The full text of the rules follows:

TITLE 4. PROFESSIONS AND OCCUPATIONS

CHAPTER 6. BOARD OF BEHAVIORAL HEALTH EXAMINERS

ARTICLE 3. LICENSURE

Section
R4-6-305. Inactive Status

ARTICLE 8. LICENSE RENEWAL AND CONTINUING EDUCATION

Section
R4-6-801. Renewal of Licensure

ARTICLE 3. LICENSURE

R4-6-305. Inactive Status

A. A licensee seeking inactive status shall submit:
1. A written request to the credentialing committee before expiration of the current license, and
2. The inactive status fee.

B. A licensee seeking inactive status after the expiration date of a license but no longer than three months after the expiration date of a license shall submit:
1. A written request for inactive status to the credentialing committee,
2. The inactive status fee, and
3. The late inactive status fee.

C. The credentialing committee shall grant a request for inactive status upon receiving a written request for inactive status from a licensee.

D. The credentialing committee shall not grant a request to be placed on inactive status received more than three months after expiration of the current license.

E. Placement on inactive status for any time period shall not change a licensee's licensure expiration date.

F. To return to active status, a licensee on inactive status shall meet all renewal requirements~~, including the following:~~ prescribed under R4-6-801(B).
~~1. Submitting the renewal fee,~~
~~2. Completion of 40 clock hours of continuing education activities during the 24 months before renewal of licensure; and~~
~~3. Submitting a completed renewal application.~~

G. Upon a showing of good cause, the credentialing committee shall grant a written request for modification or reduction of the continuing education requirement received from a licensee on inactive status.

H. The credentialing committee may, upon a written request filed before the expiration of the original 24 months of inactive status and for good cause, permit an already inactive license to remain on inactive status for one additional period not to exceed 24 months. To return to active status after being placed on a 24-month extension of inactive status, a licensee shall, in addition to the continuing education hours required under subsection (F)(2), complete ~~40~~ 30 clock hours of continuing education during the additional 24-month extension.

I. A licensee on inactive status shall not engage in the practice of behavioral health.

J. To return to active practice, the licensee must establish the licensee's competence to practice safely and competently. When reviewing a licensee's request to return to active practice, the Board may order any type of mental or physical evaluation, at the licensee's expense, it deems necessary to determine the licensee's competence to practice safely and competently.

K. The Board may start or continue an investigation against a licensee regardless of whether the licensee seeks to obtain inactive status or is on inactive status.

ARTICLE 8. LICENSE RENEWAL AND CONTINUING EDUCATION

R4-6-801. Renewal of Licensure

A. A licensee holding an active license to practice behavioral health in this state shall complete ~~40~~ 30 clock hours of continuing education as prescribed under R4-6-802 and R4-6-804 between the date the Board receives the licensee's last renewal application and the next license expiration date. A licensee may not carry excess hours over to another renewal cycle. One hour of credit is allowed for each clock hour of participation in continuing education activities.

B. To renew licensure, a licensee shall submit the following to the agency:
1. A completed renewal application form that includes a ~~notarized verification of 40~~ list of 30 hours of continuing education activities signed by the licensee and attesting that all information submitted in support of the renewal application is true and correct;
2. ~~Certified~~ A certified check, cashier's check, or money order for the renewal fee; and
3. ~~A completed and legible fingerprint card for a state and federal criminal history records check along with a certified check, cashier's check or money order in the amount prescribed under R4-6-213(A)(4) as authorized at A.R.S. § 32-3280(B), if the licensee has not previously submitted a full set of fingerprints to the Board, or verification that the applicant holds a current fingerprint card issued by the Department of Public Safety;~~
~~4.~~3. Other documents requested by the credentialing committee to determine the licensee's continued eligibility.

C. A license shall expire unless the licensee submits to the agency the items listed in subsection (B) on or before the license expiration date.

D. The Board shall mail to each licensee a license renewal application. ~~The licensee shall submit a signed and notarized statement with each renewal application that the continuing education requirements under subsection (A) are satisfied.~~ Failure to receive the license renewal application shall not relieve the licensee of the requirements of subsection (A).

E. The Board may audit a licensee to verify compliance with the continuing education requirements under subsection (A). Documentation verifying compliance shall be retained as prescribed under R4-6-803.

~~**E.**~~**F.** A licensee whose license expires may renew licensure by submitting a complete renewal application, other documents requested by the credentialing committee, and a late fee within 90 days of the license expiration date. A license that is renewed under this subsection shall be considered effective on the first of the month following the expiration date with no lapse in licensure.

NOTICE OF PROPOSED RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY AIR POLLUTION CONTROL

[R08-253]

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R18-2-216	Amend
R18-2-703	Amend
R18-2-708	Amend
R18-2-711	Amend
R18-2-712	Amend
R18-2-713	Amend
R18-2-715	Amend
R18-2-716	Amend
R18-2-717	Amend
R18-2-719	Amend
R18-2-720	Amend
R18-2-721	Amend
R18-2-722	Amend
R18-2-724	Amend
R18-2-730	Amend
Appendix 10	Repeal
Appendix 11	Repeal

2. The statutory authority for the rulemaking, including both the authorizing statute and the statutes the rules are implementing:

Authorizing statutes: A.R.S. §§ 49-104(A)(10) and 49-425

Implementing statutes: A.R.S. §§ 49-422, 49-426

3. A list of all previous notices appearing in the *Register* addressing the proposed rule:

Notice of Rulemaking Docket Opening: 14 A.A.R. 1242, April 18, 2008

4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking.

Name: Danielle M. Dancho

Address: Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007

Telephone: (602) 771-4210 (This number may be reached in-state by dialing 1-800-234-5677 and requesting the seven digit number.)

Fax: (602) 771-2366

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

Summary.

The Arizona Department of Environmental Quality is considering repealing Appendix 10, Evaluation of Air Quality Data, and Appendix 11, Allowable Particulate Emissions Computations, in their entirety. The Agency has determined that the information contained in the Appendix 10 is out of date and does not comply with current monitoring proto-

cols as designated by the Environmental Protection Agency. The Agency has also determined that Appendix 11 is not useful because the actual values must be calculated using the equation included in the rules, not the graph. As part of this rulemaking, other rules from the *Arizona Administrative Code* must be amended in order to reflect these changes. The Air Assessment Section, Air Quality Division, ADEQ prepared "Guideline for the Development of Ambient Air Quality Monitoring Protocols for Air Quality Permits," in December 2006.

Background.

Appendix 10 was adopted effective May 14, 1979. It was amended effective July 9, 1980. It was further amended effective June 19, 1981. Appendix 11 was adopted effective May 14, 1979. It was amended effective September 11, 1983.

Explanation of proposed rule changes.

The Arizona Department of Environmental Quality is proposing to repeal Appendix 10, Evaluation of Air Quality Data, and Appendix 11, Allowable Particulate Emissions Computations in their entirety. The Agency has determined that the information contained in Appendix 10 is out of date and does not comply with current monitoring protocols as designated by the Environmental Protection Agency in the *Code of Federal Regulations*. The Agency has also determined that Appendix 11 is not useful because the actual values must be calculated using the equation included in the rules, not this graph. As part of this rulemaking, other rules from the *Arizona Administrative Code* must be amended in order to reflect these changes.

6. A reference to any study relevant to the rules that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

None

7. 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 of a political subdivision of this state:

The rule does not diminish a previous grant of authority of a political subdivision of this state.

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

A. Rule identification.

Arizona Administrative Code, Title 18, Chapter 2, Appendix 10, "Evaluation of Air Quality Data," and Appendix 11, "Allowable Particulate Emissions Computations."

This rulemaking repeals appendices 10 and 11. References to these two appendices are proposed to be deleted from Title 18, Chapter 2, Article 2, "Ambient Air Quality Standards; Area Designations; Classification" (R18-2-216) and Title 18, Chapter 2, Article 7, "Existing Stationary Source Performance Standards" (various rule sections). Refer to "Sections Affected" in Preamble.

B. Summary.

Appendix 10 contains outdated monitoring protocols and Appendix 11 is not useful since actual values must be calculated using the equation included in the rules. The Air Assessment Section, Air Quality Division, ADEQ has prepared "Guideline for the Development of Ambient Air Quality Monitoring Protocols for Air Quality Permits," December 2006.

ADEQ does not expect the repeal of these appendices to result in a direct economic impact to any entity. Therefore, because ADEQ anticipates no economic impacts from these proposed changes, it has not developed an economic impact statement. Hence, neither ADEQ nor any other entity (other state agencies, political subdivisions, or businesses) will be impacted. Public and private employment, as well as revenues or payroll will not be impacted. State revenues will not be affected.

9. 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:	David Lillie
Address:	ADEQ 1110 W. Washington St. Phoenix, AZ 85007
Telephone:	(602) 771-4461 (This number may be reached in-state by dialing 1-800-234-5677 and requesting the seven digit number.)
Fax:	(602) 771-2366

10. The time, place, and nature of the proceedings for the making, 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:

Date: September 30, 2008

Time:	2:00 p.m.
Location:	ADEQ 1110 W. Washington St. Phoenix, AZ 85007
Nature:	Oral Proceedings with opportunity for formal comments on the record.
Close of Comment:	5:00 p.m., September 30, 2008

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

None

12. Incorporation by reference and their location in the rule:

There are no incorporations by reference in the Proposed Rulemaking.

13. The full text of the rule follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL

ARTICLE 2. AMBIENT AIR QUALITY STANDARDS; AREA DESIGNATIONS; CLASSIFICATIONS

Section
R18-2-216. Interpretation of ~~ambient air quality standards and evaluation of air quality data~~ Ambient Air Quality Standards and Evaluation of Air Quality Data

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

Section
R18-2-703. Standards of Performance for Existing Fossil-fuel Fired Steam Generators and General Fuel-burning Equipment
R18-2-708. Standards of Performance for Existing Asphalt Concrete Plants
R18-2-711. Standards of Performance for Existing Secondary Lead Smelters
R18-2-712. Standards of Performance for Existing Secondary Brass and Bronze Ingot Production Plants
R18-2-713. Standards of Performance for Existing Iron and Steel Plants
R18-2-715. Standards of Performance for Existing Primary Copper Smelters; Site-specific Requirements
R18-2-716. Standards of Performance for Existing Coal Preparation Plants
R18-2-717. Standards of Performance for Steel Plants: Existing Electric Arc Furnaces (EAF)
R18-2-719. Standards of Performance for Existing Stationary Rotating Machinery
R18-2-720. Standards of Performance for Existing Lime Manufacturing Plants
R18-2-721. Standards of Performance for Existing Nonferrous Metals Industry Sources
R18-2-722. Standards of Performance for Existing Gravel or Crushed Stone Processing Plants
R18-2-724. Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment
R18-3-730. Standards of Performance for Unclassified Sources

APPENDIX 10. ~~A10. EVALUATION OF AIR QUALITY DATA~~ REPEALED

APPENDIX 11. ~~A11. ALLOWABLE PARTICULATE EMISSIONS COMPUTATIONS~~ REPEALED

ARTICLE 2. AMBIENT AIR QUALITY STANDARDS; AREA DESIGNATIONS; CLASSIFICATIONS

R18-2-216. Interpretation of ~~ambient air quality standards and evaluation of air quality data~~ Ambient Air Quality Standards and Evaluation of Air Quality Data

~~A.~~ Unless otherwise specified, interpretation of all ambient air quality standards contained in this Article shall be in accordance with 40 CFR 50, incorporated by reference in Appendix 2.

~~B.~~ ~~The evaluation of air quality data in terms of procedure, methodology, and concept is to be consistent with methods described in Appendix 10 to this Chapter~~.

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

R18-2-703. Standards of Performance for Existing Fossil-fuel Fired Steam Generators and General Fuel-burning Equipment

A. This Section applies to the following:
1. Installations in which fuel is burned for the primary purpose of producing power, steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitation shall apply, except for wood waste burners as regulated under R18-2-704.
2. All fossil-fuel fired steam generating units or general fuel burning equipment which are greater than or equal to 73 megawatts capacity.

B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with R18-2-311. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit.

C. No person shall cause, allow or permit the emission of particulate matter in excess of the amounts calculated by one of the following equations:
1. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 1.02Q^{0.769}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   Q = the heat input in million Btu per hour.
2. For equipment having a heat input rate greater than 4200 million ~~Btu/hr~~ Btu per hour, the maximum allowable emissions shall be determined by the following equation:
   $E = 17.0Q^{0.432}$
   where "E" and "Q" have the same meaning as in subsection (C)(1).

D. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

E. When low sulfur oil is fired:
1. Existing fuel-burning equipment or steam-power generating installations which commenced construction or a major modification prior to May 30, 1972, shall not emit more than 1.0 pounds sulfur dioxide maximum three-hour average, per million Btu (430 nanograms per joule) heat input.
2. Existing fuel-burning equipment or steam-power generating installations which commenced construction or a major modification after May 30, 1972, shall not emit more than 0.80 pounds of sulfur dioxide maximum three-hour average per million Btu (340 nanograms per joule) heat input.

F. When high sulfur oil is fired, all existing steam-power generating and general fuel-burning installations which are subject to the provisions of this Section shall not emit more than 2.2 pounds of sulfur dioxide maximum three-hour average per million Btu (946 nanograms per joule) heat input.

G. When solid fuel is fired:
1. Existing general fuel-burning equipment and steam-power generating installations which commenced construction or a major modification prior to May 30, 1972, shall not emit more than 1.0 pounds of sulfur dioxide maximum three-hour average, per million Btu (430 nanograms per joule) heat input.
2. Existing general fuel-burning equipment and steam-power generating installations which commenced construction or a major modification after May 30, 1972, shall not emit more than 0.80 pounds of sulfur dioxide, maximum three-hour average, per million Btu (340 nanograms per joule) heat input.

H. Any permit issued for the operation of an existing source, or any renewal or modification of such a permit, shall include a condition prohibiting the use of high sulfur oil by the permittee, unless the applicant demonstrates to the satisfaction of the Director that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards set forth in R18-2-202 will not be violated.
1. The terms of the permit may authorize the use of high sulfur oil under such conditions as are justified.
2. In cases where the permittee is authorized to use high sulfur oil, it shall submit to the Department monthly reports detailing its efforts to obtain low sulfur oil.
3. When the conditions justifying the use of high sulfur oil no longer exists, the permit shall be modified accordingly.
4. Nothing in this Section shall be construed as allowing the use of a supplementary control system or other form of dispersion technology.

I. Existing steam-power generating installations which commenced construction or a major modification after May 30,

1972, shall not emit nitrogen oxides in excess of the following amounts:

1. 0.20 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when gaseous fossil fuel is fired.
2. 0.30 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when liquid fossil fuel is fired.
3. 0.70 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when solid fossil fuel is fired.

J. Emission and fuel monitoring systems, where deemed necessary by the Director for sources subject to the provisions of this Section shall, conform to the requirements of R18-2-313.

K. The applicable reference methods given in the Appendices to 40 CFR 60 shall be used to determine compliance with the standards as prescribed in subsections (C) through (G) and (I). All tests shall be run at the heat input calculated under subsection (B).

R18-2-708. Standards of Performance for Existing Asphalt Concrete Plants

A. Fixed asphalt concrete plants and portable asphalt concrete plants shall meet the standards set forth in this Section.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing asphalt concrete plant in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum allowable particulate emission rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (B)(1).

C. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. Liquid fuel containing greater than 0.9% sulfur by weight shall not be utilized for asphalt concrete plants subject to this Section.

F. Solid fuel containing greater than 0.5% sulfur by weight shall not be utilized for asphalt concrete plants subject to this Section.

G. The test methods and procedures required under this Section are:

1. The referenced methods given in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standards prescribed in subsection (B).
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min) except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director.
3. Percent sulfur in liquid fuel shall be determined by ASTM method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method), and the percent sulfur in solid fuel shall be determined by ASTM method D-3177-89 (Test Method for Total Sulfur in the Analysis Sample of Coal and Coke).

R18-2-711. Standards of Performance for Existing Secondary Lead Smelters

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing secondary lead smelter in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum, allowable emission rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (A)(1).

B. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. The test methods and procedures required by this Section are as follows:

1. The reference methods set forth in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standards prescribed in subsection (A) as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. Particulate sampling shall be conducted during representative periods of furnace operation including charging and tapping.

R18-2-712. Standards of Performance for Existing Secondary Brass and Bronze Ingot Production Plants

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any secondary brass or bronze ingot production plant in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (A)(1).

B. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. The test methods and procedures required by this Section are as follows:

1. The reference methods set forth in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standards prescribed in subsection (A) as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 120 minutes and the sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. Particulate matter sampling shall be conducted during representative periods of charging and refining but not during pouring of the heat.

R18-2-713. Standards of Performance for Existing Iron and Steel Plants

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any basic oxygen process furnace in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$E = 4.10P^{0.67}$
where:
E = the maximum allowable particulate emissions rate in pounds-mass per hour.
P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
$E = 55.0P^{0.11} - 40$
where "E" and "P" are defined as indicated in subsection (A)(1).

B. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. Monitoring of operations under this Section is as follows:

1. The owner or operator of an affected facility shall maintain daily records of the time and duration of each steel production cycle.
2. The owner or operator of any affected facility that uses Venturi scrubber emission control equipment shall install, calibrate, maintain and continuously operate the following monitoring devices:
   a. A monitoring device for the continuous measurement of the pressure loss through the Venturi constriction of the control equipment. The monitoring device shall be certified by the manufacturer to be accurate within ± 250 pascals (±1 inch water).
   b. A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5% of the design water supply pressure. The pressure sensor or tap shall be located close to the water discharge point.
3. All monitoring devices required in subsection (F)(2) shall be recalibrated annually and at other times as the Director may require, in accordance with the procedures in Appendix 9.

F. The test methods and procedures required under this Section are as follows:

1. The reference methods set forth in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standards prescribed in subsection (A) as follows:
   a. Method 5 for concentration of particulate matter and associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling for each run shall continue for an integral number of cycles with total duration of at least 60 minutes. The sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. A cycle shall start at the beginning of either the scrap preheat or the oxygen blow and shall terminate immediately prior to tapping.

R18-2-715. Standards of Performance for Existing Primary Copper Smelters; Site-specific Requirements

A. No owner or operator of a primary copper smelter shall cause, allow or permit the discharge of particulate matter into the atmosphere from any process in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
$E = 4.10P^{0.67}$
where
E = the maximum allowable particulate emissions rate in pounds-mass per hour.
P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
$E = 55.0P^{0.11} - 40$
where "E" and "P" are defined as indicated in subsection (A)(1).

B. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter for that process.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. The reference methods set forth in the Arizona Testing Manual and 40 CFR 60, Appendix A, as incorporated by reference

in Appendix 2, shall be used to determine compliance with the standards prescribed in this Section as follows:
1. Method A1 or Reference Method 5 for concentration of particulate matter and associated moisture content;
2. Reference Method 1 for sample and velocity traverses;
3. Reference Method 2 for volumetric flow rate;
4. Reference Method 3 for gas analysis.

F. Except as provided in a consent decree or a delayed compliance order, the owner or operator of any primary copper smelter shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from any stack required to be monitored by R18-2-715.01(K) in excess of the following:

1. For the copper smelter located near Hayden, Arizona at latitude 33°0'29"N and longitude 110°47'17" W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 6,882 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	24,641
1	22,971
2	21,705
4	20,322
7	19,387
12	18,739
20	17,656
32	16,988
48	16,358
68	15,808
94	15,090
130	14,423
180	13,777
245	13,212
330	12,664
435	12,129
560	11,621
710	11,165
890	10,660
1100	10,205
1340	9,748
1610	9,319
1910	8,953
2240	8,556

2. For the copper smelter located near Miami, Arizona at latitude 33°24'50"N and longitude 110°51'25"W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 604 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	8678

1	7158
2	5903
4	4575
7	4074
12	3479
20	3017
32	2573
48	2111
68	1703
94	1461
130	1274
180	1145
245	1064
330	1015
435	968
560	933
710	896
890	862
1100	828
1340	797
1610	765
1910	739
2240	712

G. Except as provided in a consent decree or a delayed compliance order, for the copper smelter located near Hayden, Arizona at latitude 33°0'29"N and longitude 110°47'17"W, annual average fugitive emissions calculated under R18-2-715.01(T) shall not exceed 295 pounds per hour.

H. In addition to the limits in subsection (F)(3), except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper smelter located near Miami, Arizona at latitude 33°24'50"N and longitude 110°51'25"W shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from combined stack and fugitive emissions units in excess of the 2420 pounds per hour annual average calculated under R18-2-715.01(U).

R18-2-716. Standards of Performance for Existing Coal Preparation Plants

A. The provisions of this Section are applicable to any of the following affected facilities in coal preparation plants: thermal dryers, pneumatic coal-cleaning equipment, coal processing and conveying equipment including breakers and crushers, coal storage systems, and coal transfer and loading systems. For purposes of this Section, the definitions contained in 40 CFR 60.251 are adopted by reference and incorporated herein.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing coal preparation plant in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (B)(1).

C. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used

in determining the maximum allowable emission of particulate matter.

E. Fugitive emissions from coal preparation plants shall be controlled in accordance with R18-2-604 through R18-2-607.

F. The test methods and procedures required by this Section are as follows:

1. The reference methods in the 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, are used to determine compliance with standards prescribed in subsection (B) as follows:
   a. Method 5 for the concentration of particulate matter and associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume is 0.85 dscm (30 dscf) except that short sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Director. Sampling shall not be started until 30 minutes after start-up and shall be terminated before shutdown procedures commence. The owner or operator of the affected facility shall eliminate cyclonic flow during performance tests in a manner acceptable to the Director.
3. The owner or operator shall construct the facility so that particulate emissions from thermal dryers or pneumatic coal cleaning equipment can be accurately determined by applicable test methods and procedures under subsection (F)(1).

R18-2-717. Standards of Performance for Steel Plants: Existing Electric Arc Furnaces (EAF)

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from electric arc furnaces or dust-handling equipment which are affected facilities in any steel plant in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (A)(1).

B. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. An opacity standard of 40% shall not be exceeded by existing steel plant electric arc furnaces and their appurtenances for more than an aggregate of three minutes in any 45-minute period.

E. A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this Section.

F. The test methods and procedures required under this Section are as follows:

1. Reference methods in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standards prescribed under subsection (A) as follows:
   a. Method 5 for concentration of particulate matter and associated moisture content.
   b. Method 1 for sample and velocity and volumetric flow rate;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least four hours. When a single EAF is sampled, the sampling time for each run shall also include an integral number of heats. Shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. The minimum sample volume shall be 4.5 dscm (160 dscf).

R18-2-719. Standards of Performance for Existing Stationary Rotating Machinery

A. The provisions of this Section are applicable to the following affected facilities: all stationary gas turbines, oil-fired turbines, or internal combustion engines. This Section also applies to an installation operated for the purpose of producing electric or mechanical power with a resulting discharge of sulfur dioxide in the installation's effluent gases.

B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. Compliance tests shall be conducted during operation at the normal rated capacity of

each unit. The total heat input of all operating fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

C. No person shall cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary rotating machinery in excess of the amounts calculated by one of the following equations:

1. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 1.02Q^{0.769}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   Q = the heat input in million Btu per hour.
2. For equipment having a heat input rate greater than 4200 million ~~Btu/hr.~~ Btu per hour, the maximum allowable emissions shall be determined by the following equation:
   $E = 17.0Q^{0.432}$
   where "E" and "Q" have the same meaning as in subsection (C)(1).

D. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

E. No person shall cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

F. When low sulfur oil is ~~fires~~ fired, stationary rotating machinery installations shall burn fuel which limits the emission of sulfur dioxide to 1.0 pound per million Btu heat input.

G. When high sulfur oil is fired, stationary rotating machinery installations shall not emit more than 2.2 pounds of sulfur dioxide per million Btu heat input.

H. Any permit issued for the operation of an existing source, or any renewal or modification of such a permit, shall include a condition prohibiting the use of high sulfur oil by the permittee. This condition may not be included in the permit if the applicant demonstrates to the satisfaction of the Director both that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards set forth in R18-2-202 will not be violated.

1. The terms of the permit may authorize the use of high sulfur oil under such conditions as are justified.
2. In cases where the permittee is authorized to use high sulfur oil, it shall submit to the Department monthly reports detailing its efforts to obtain low sulfur oil.
3. When the conditions justifying the use of high sulfur oil no longer exist, the permit shall be modified accordingly.
4. Nothing in this Section shall be construed as allowing the use of a supplementary control system or other form of dispersion technology.

I. The owner or operator of any stationary rotating machinery subject to the provisions of this Section shall record daily the sulfur content and lower heating value of the fuel being fired in the machine.

J. The owner or operator of any stationary rotating machinery subject to the provisions of this Section shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%.

K. The test methods and procedures required by this Section are as follows:

1. To determine compliance with the standards prescribed in subsections (C) through (H), the following reference methods shall be used:
   a. Reference Method 20 in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, for the concentration of sulfur dioxide and oxygen.
   b. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
   c. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases for the sulfur content of gaseous fuels.
2. To determine compliance with the standards prescribed in subsection (J), the following reference methods in the Arizona Testing Manual shall be used:
   a. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
   b. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases) for the sulfur content of gaseous fuels.

R18-2-720. Standards of Performance for Existing Lime Manufacturing Plants

A. The provisions of this Section are applicable to the following affected facilities used in the manufacture of lime: rotary lime kilns, vertical lime kilns, lime hydrators, and limestone crushing facilities. This Section is also applicable to limestone crushing equipment which exists apart from other lime manufacturing facilities.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any lime manufacturing or limestone crushing facility in total quantities in excess of the amounts calculated by one of the fol-

lowing equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (B)(1).

C. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. Fugitive emissions from lime plants shall be controlled in accordance with R18-2-604 through R18-2-607.

F. The owner or operator subject to the provisions of this Section shall install, calibrate, maintain, and operate a continuous monitoring system, except as provided in subsection (G), to monitor and record the opacity of the gases discharged into the atmosphere from any rotary lime kiln. The span of this system shall be set at 70% opacity.

G. The owner or operator of any rotary lime kiln using a wet scrubbing emission control device subject to the provisions of this Section shall not be required to monitor the opacity of the gases discharged as required in subsection (F).

H. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with this Section as follows:
   a. Method 5 for the measurement of particulate matter;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis;
   e. Method 4 for stack gas moisture;
   f. Method 9 for visible emissions.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director.
3. Because of the high moisture content of the exhaust gases from the hydrators, in the range of 40 to 85% by volume, the Method 5 sample train may be modified to include a calibrated orifice immediately following the sample nozzle when testing lime hydrators. In this configuration, the sampling rate necessary for maintaining isokinetic conditions can be directly related to exhaust gas velocity without a correction for moisture content.

R18-2-721. Standards of Performance for Existing Nonferrous Metals Industry Sources

A. The provisions of this Section are applicable to the following affected facilities: ~~mines, mills, concentrators, crushers, screens, material handling facilities, fine ore storage, dryers, roasters, and loaders.~~

1. Mines,
2. Mills,
3. Concentrators,
4. Crushers,
5. Screens,
6. Material handling facilities,
7. Fine ore storage,
8. Dryers,
9. Roasters, and
10. Loaders.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Section in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.
P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (B)(1).

C. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. No person shall cause, allow or permit to be discharged into the atmosphere from any dryer or roaster the operating temperature of which exceeds 700° F, reduced sulfur in excess of 10% of the sulfur entering the process as feed. Reduced sulfur includes sulfur equivalent from all sulfur emissions including sulfur dioxide, sulfur trioxide, and sulfuric acid.

F. The owner or operator of any mining property subject to the provisions of this Section shall record the daily process rates and hours of operation of all material handling facilities.

G. A continuous monitoring system for measuring sulfur dioxide emissions shall be installed, calibrated, maintained and operated by the owner or operator where dryers or roasters are not expected to achieve compliance with the standard under subsection (E).

H. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standard prescribed in this Section as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis and calculation of excess air, using the integrated sample technique;
   e. Method 6 for concentration of SO_2.
2. For Method 5, Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 60 minutes and the minimum sampling volume shall be 0.85 dscm (30 dscf), except that smaller sampling times or volumes, when necessitated by process variables or other factors, may be approved by the Director. The probe and filter holder heating systems in the sampling train shall be set to provide a gas temperature no greater than 160°C. (320°F.).
3. For Method 6, the sampling site shall be the same as that selected for Method 5. The sampling point in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft.). For Method 6, the sample shall be extracted at a rate proportional to the gas velocity at the sampling point.
4. For Method 6, the minimum sampling time shall be 20 minutes and the minimum sampling volume 0.02 dscm (0.71 dscf) for each sample. The arithmetic mean of two samples shall constitute one run. Samples shall be taken at approximately 30-minute intervals.

R18-2-722. Standards of Performance for Existing Gravel or Crushed Stone Processing Plants

A. The provisions of this Section are applicable to the following affected facilities: primary rock crushers, secondary rock crushers, tertiary rock crushers, screens, conveyors and conveyor transfer points, stackers, reclaimers, and all gravel or crushed stone processing plants and rock storage piles.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere except as fugitive emissions in any one hour from any gravel or crushed stone processing plant in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11} - 40$
   where "E" and "P" are defined as indicated in subsection (B)(1).

C. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. Spray bar pollution controls shall be utilized in accordance with "EPA Control of Air Emissions From Process Operations In The Rock Crushing Industry" (EPA 340/1-79-002), "Wet Suppression System" (pages 15-34, amended as of January 1979 (and no future amendments or editions)), as incorporated herein by reference and on file with the Office of the Secretary of State, with placement of spray bars and nozzles as required by the Director to minimize air pollution.

E. Fugitive emissions from gravel or crushed stone processing plants shall be controlled in accordance with R18-2-604 through R18-2-607.

F. The owner or operator of any affected facility subject to the provisions of this Section shall install, calibrate, maintain, and operate monitoring devices which can be used to determine daily the process weight of gravel or crushed stone produced. The weighing devices shall have an accuracy of ± 5% over their operating range.

G. The owner or operator of any affected facility shall maintain a record of daily production rates of gravel or crushed stone produced.

H. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standards prescribed in this Section as follows:
   a. Method 5 for concentration of particulate matter and moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume is 0.85 dscm (30 dscf), except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Director. Sampling shall not be started until 30 minutes after start-up and shall be terminated before shutdown procedures commence. The owner or operator of the affected facility shall eliminate cyclonic flow during performance tests in a manner acceptable to the Director.

R18-2-724. Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment

A. This Section applies to industrial and commercial installations which are less than 73 megawatts capacity (250 million British thermal units per hour), but in the aggregate on any premises are rated at greater than 500,000 British thermal units per hour (0.146 megawatts), and in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with R18-2-311. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

C. No person shall cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of the amounts calculated by one of the following equations:

1. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 1.02Q^{0.769}$
   where:
   E = the maximum allowable particulate emissions rate in pounds-mass per hour.
   Q = the heat input in million Btu per hour.
2. For equipment having a heat input rate greater than 4200 million ~~Btu/hr~~ Btu per hour, the maximum allowable emissions shall be determined by the following equation:
   $E = 17.0Q^{0.432}$
   where "E" and "Q" have the same meanings as in subsection (C)(1).

D. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values shall be calculated from the applicable equations and rounded off to two decimal places.

E. Fossil-fuel fired industrial and commercial equipment installations shall not emit more than 1.0 pounds of sulfur dioxide per million Btu heat input when low sulfur oil is fired.

F. Fossil-fuel fired industrial and commercial equipment installations shall not emit more than 2.2 pounds of sulfur dioxide per million Btu heat input when high sulfur oil is fired.

G. Any permit issued for the operation of an existing source, or any renewal or modification of such a permit, shall include a condition prohibiting the use of high sulfur oil by the permittee. This condition may be omitted from the permit if the applicant demonstrates to the satisfaction of the Director both that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air

quality standards set forth in R18-2-202 will not be violated.
1. The terms of the permit may authorize the use of high sulfur oil under such conditions as are justified.
2. In cases where the permittee is authorized to use high sulfur oil, it shall submit to the Department monthly reports detailing its efforts to obtain low sulfur oil.
3. When the conditions justifying the use of high sulfur oil no longer exist, the permit shall be modified accordingly.
4. Nothing in this Section shall be construed as allowing the use of a supplementary control system or other form of dispersion technology.

H. When coal is fired, fossil-fuel fired industrial and commercial equipment installations shall not emit more than 1.0 pounds of sulfur dioxide per million Btu heat input.

I. The owner or operator subject to the provisions of this Section shall install, calibrate, maintain and operate a continuous monitoring system for measurement of the opacity of emissions discharged into the atmosphere from the control device.

J. For the purpose of reports required under excess emissions reporting required by R18-2-310.01, the owner or operator shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15%.

K. The test methods and procedures required by this Section are as follows:
1. The reference methods in 40 CFR 60, Appendix A, as incorporated by reference in Appendix 2, shall be used to determine compliance with the standards as prescribed in this Section.
   a. Method 1 for selection of sampling site and sample traverses;
   b. Method 3 for gas analysis to be used when applying Reference Methods 5 and 6;
   c. Method 5 for concentration of particulate matter and the associated moisture content;
   d. Method 6 for concentration of SO_2.
2. For Method 5, Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 60 minutes and the minimum sampling volume shall be 0.85 dscm (30 dscf), except that smaller sampling times or volumes, when necessitated by process variables or other factors, may be approved by the Director. The probe and filter holder heating systems in the sampling train shall be set to provide a gas temperature no greater than 160°C. (320°F.).
3. For Method 6, the sampling site shall be the same as that selected for Method 5. The sampling point in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). For Method 6, the sample shall be extracted at a rate proportional to the gas velocity at the sampling point.
4. For Method 6, the minimum sampling time shall be 20 minutes and the minimum sampling volume 0.02 dscm (0.71 dscf) for each sample. The arithmetic mean of two samples shall constitute one run. Samples shall be taken at approximately 30-minute intervals.
5. Gross calorific value shall be determined in accordance with the applicable ASTM methods: D-2015-91 (Test for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter) for solid fuels; D-240-87 (Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter) for liquid fuels; and D-1826-88 (Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter) for gaseous fuels. The rate of fuels burned during each testing period shall be determined by suitable methods and shall be confirmed by a material balance over the fossil-fuel fired system.

R18-2-730. Standards of Performance for Unclassified Sources

A. No existing source which is not otherwise subject to standards of performance under this Article or Article 9 or 11 shall cause or permit the emission of pollutants at rates greater than the following:
1. For particulate matter discharged into the atmosphere in any one hour from any unclassified process source in total quantities in excess of the amounts calculated by one of the following equations:
   a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
      $E = 4.10P^{0.67}$
      where:
      E = the maximum allowable particulate emissions rate in pounds-mass per hour.
      P = the process weight rate in tons-mass per hour.
   b. For process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
      $E = 55.0P^{0.11} - 40$
      where "E" and "P" are defined as indicated in subsection (A)(1)(a).
2. Sulfur dioxide – 600 parts per million.
3. Nitrogen oxides expressed as NO_2 – 500 parts per million.

B. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

C. ~~For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual~~ Actual values

shall be calculated from the applicable equations and rounded off to two decimal places.

D. No person shall emit gaseous or odorous materials from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

E. No person shall operate or use any machine, equipment, or other contrivance for the treatment or processing of animal or vegetable matter, separately or in combination, unless all gaseous vapors and gas entrained effluents from such operations, equipment, or contrivance have been either:

1. Incinerated to destruction, as indicated by a temperature measuring device, at not less than 1,200 degrees Fahrenheit if constructed or reconstructed prior to January 1, 1989, or 1,600 degrees Fahrenheit with a minimum residence time of 0.5 seconds if constructed or reconstructed thereafter; or
2. Passed through such other device which is designed, installed and maintained to prevent the emission of odors or other air contaminants and which is approved by the Director.

F. Materials including solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizers and manure shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory.

G. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

H. No person shall allow hydrogen sulfide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.

I. No person shall cause, allow or permit discharge from any stationary source carbon monoxide emissions without the use of complete secondary combustion of waste gases generated by any process source.

J. No person shall allow hydrogen cyanide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.3 parts per million by volume for any averaging period of eight hours.

K. No person shall allow sodium cyanide dust or dust from any other solid cyanide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 140 micrograms per cubic meter for any averaging period of eight hours.

L. No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may operate a coating application system subject to this Section that emits volatile organic compounds in excess of any of the following:

1. 4.3 pounds per gallon (0.5 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies clear coatings.
2. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to 194°F (90°C).
3. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings.
4. 3.0 pounds per gallon (0.36 kilograms per liter) of coating, excluding water, delivered to a coating applicator for all other coatings and application systems.

M. If more than one emission limitation in subsection (L) applies to a specific coating, then the least stringent emission limitation shall be applied.

N. All VOC emissions from solvent washings shall be considered in the emission limitations in subsection (L), unless the solvent is directed into containers that prevent evaporation into the atmosphere.

APPENDIX 10. REPEALED

~~**A10. EVALUATION OF AIR QUALITY DATA**~~

~~A10.1. General Statistical Requirements~~

~~A10.1.1. The measurements of air quality shall be corrected to a reference temperature of 298°K (25°C) and to a reference pressure of 101.3 kilopascals (760 millimeters of mercury). For these reference conditions the following conversion factors shall be used:~~

~~Carbon monoxide: ppm x 1.145 = mg/m^3~~
~~Hydrocarbons: ppm x 656 = ug/m^3~~
~~Nitrogen dioxide: ppm x 1882 = ug/m^3~~
~~Sulfur dioxide: ppm x 2620 = ug/m^3~~

~~mg/m^3 and ug/m^3 are abbreviations for milligrams per cubic meter and micrograms per cubic meter, respectively.~~

~~A10.1.2. For purposes of reporting and determining compliance with ambient air quality standards, all ambient air quality~~

~~data shall be expressed in micrograms per cubic meter, except for carbon monoxide which shall be expressed in milligrams per cubic meter, and for ozone which shall be expressed in parts per million.~~

~~A10.1.3. Significant Figures~~

~~A10.1.3.1. Continuous Monitoring Instrument Data~~

~~Ambient air quality data from continuous monitoring instruments shall be measured, and processed and recorded to the following degrees of precision:~~
~~For analog recorders, 1% of full scale~~
~~For digital recorders, 0.1% of full scale~~

~~A10.1.3.2. Manual Sampling Data~~

~~Data from manual samplers shall be reported to the following degrees of precision:~~
~~Nitrogen dioxide, 1.0 ug/m^3~~
~~Sulfur dioxide, 1.0 ug/m^3~~
~~Particulate matter, 1.0 ug/m^3~~
~~Benzene soluble organics, 0.1 ug/m^3~~
~~Lead, 0.1 ug/m^3~~
~~Nitrates, 0.1 ug/m^3~~
~~Sulfates, 0.1 ug/m^3~~

~~A10.1.3.3. Computational Procedures~~

~~All computations shall be made to one more decimal place than shown in A10.1.3.2. above. If the least significant figure is 5 or greater, the computed value shall be rounded up to the required number of decimal places. If the least significant figure is 4 or less, the computed value shall be rounded down to the required number of decimal places.~~

~~A10.1.4. Annual mean pollutant concentrations and compliance with the annual ambient air quality standards shall be based on calendar year means only.~~

~~A10.2. Statistical Requirements for Manual Sampling Techniques-High Volume Samplers and Gas Bubblers.~~

~~A10.2.1. For computing annual means there shall be at least 11 samples per quarter, based on a sampling frequency of at least one sample every six days. The sampling period shall be 24 hours, starting at midnight and ending the following midnight.~~

~~A10.2.2. For determining compliance with 24-hour ambient air quality standards, the sampling period shall be 24 hours, starting at midnight and ending on the following midnight.~~

~~A10.3. Statistical Requirements for Continuous Monitors~~

~~A10.3.1. Hourly averages shall be computed for each discrete clock hour using the data measured for the preceding 60-minute period. All measurements of the analyzer shall be used for computing hourly averages which are the basis for all other averages.~~

~~A10.3.2. Determining Compliance with Ambient Air Quality Standards~~

~~Any three or 8, consecutive, hourly averages shall be used to determine compliance with the three or eight hour ambient air quality standards provided the minimum number of observations required in A10.3.4. are available. If a violation of a standard occurs, no hourly averages used to compute that violation shall be used to compute additional violations of the same standard. In other words, the time periods for violations of the same standard cannot overlap. For example, a maximum of two violations of the same three-hour standard could be recorded at the same monitor in any period of six consecutive hours. For determining compliance with 24-hour ambient air quality standards, 24 hourly averages for a calendar day shall be used provided the minimum number of observations required in A10.3.4. are available.~~

~~A10.3.3. Determining Maximum Concentrations~~

~~For determining maximum three- or eight-hour concentrations for information, planning, and reporting requirements, any three or 8, consecutive, hourly averages may be used provided the minimum number of observations required in A10.3.4. are available. The time period for the maximum concentration may overlap time periods for violations.~~

~~A10.3.4. Minimum requirements for statistical validity for averaging times shall be as follows:~~

~~Time Interval~~	~~Minimum Number of Observations~~
~~1 hour~~	~~45 minutes of measured concentrations~~
~~3 hours~~	~~consecutive valid hourly averages~~
~~8 hours~~	~~6 valid hourly averages~~
~~24 hours~~	~~18 valid hourly averages within a calendar day~~
~~Monthly~~	~~Valid hourly data for at least 75% of the hours in the month~~
~~Quarterly~~	~~3 consecutive valid monthly averages~~
~~Annual~~	~~6,570 hourly averages with at least two months, each having~~

~~75% data recovery, per quarter, and at least nine months, each having 75% data recovery per year. All valid hourly averages shall be used to compute the annual averages.~~

APPENDIX 11. REPEALED

~~A11. ALLOWABLE PARTICULATE EMISSIONS COMPUTATIONS~~

~~A11.1. Figure 1, hereto, plots the formulae for determining allowable particulate emissions from fuel burning equipment, based on the heat input to the equipment.~~

~~A11.2. Figure 2, hereto, plots the formulae for determining allowable particulate emissions from process industries, based on the process weight rate of the industry.~~

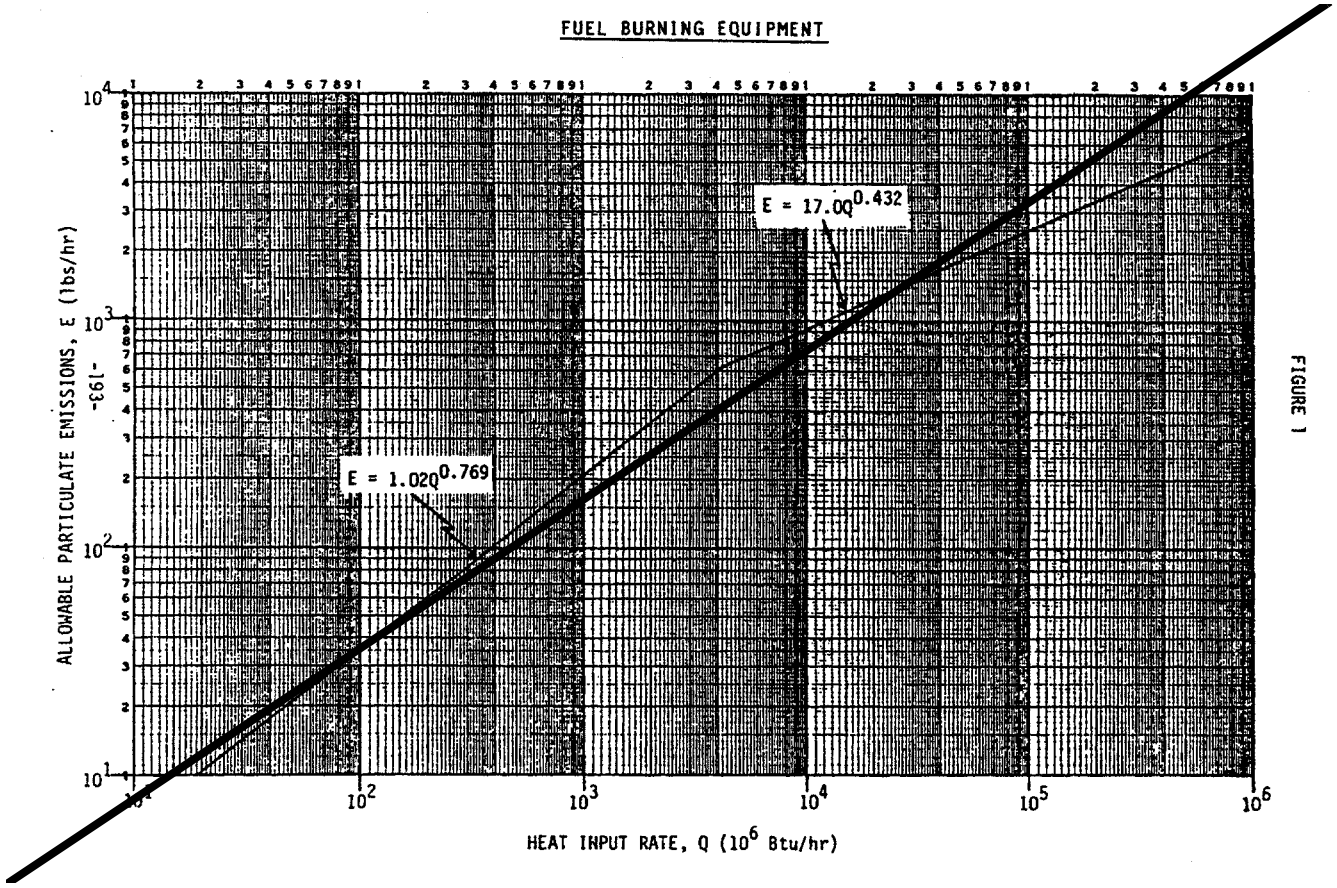

FIGURE 1

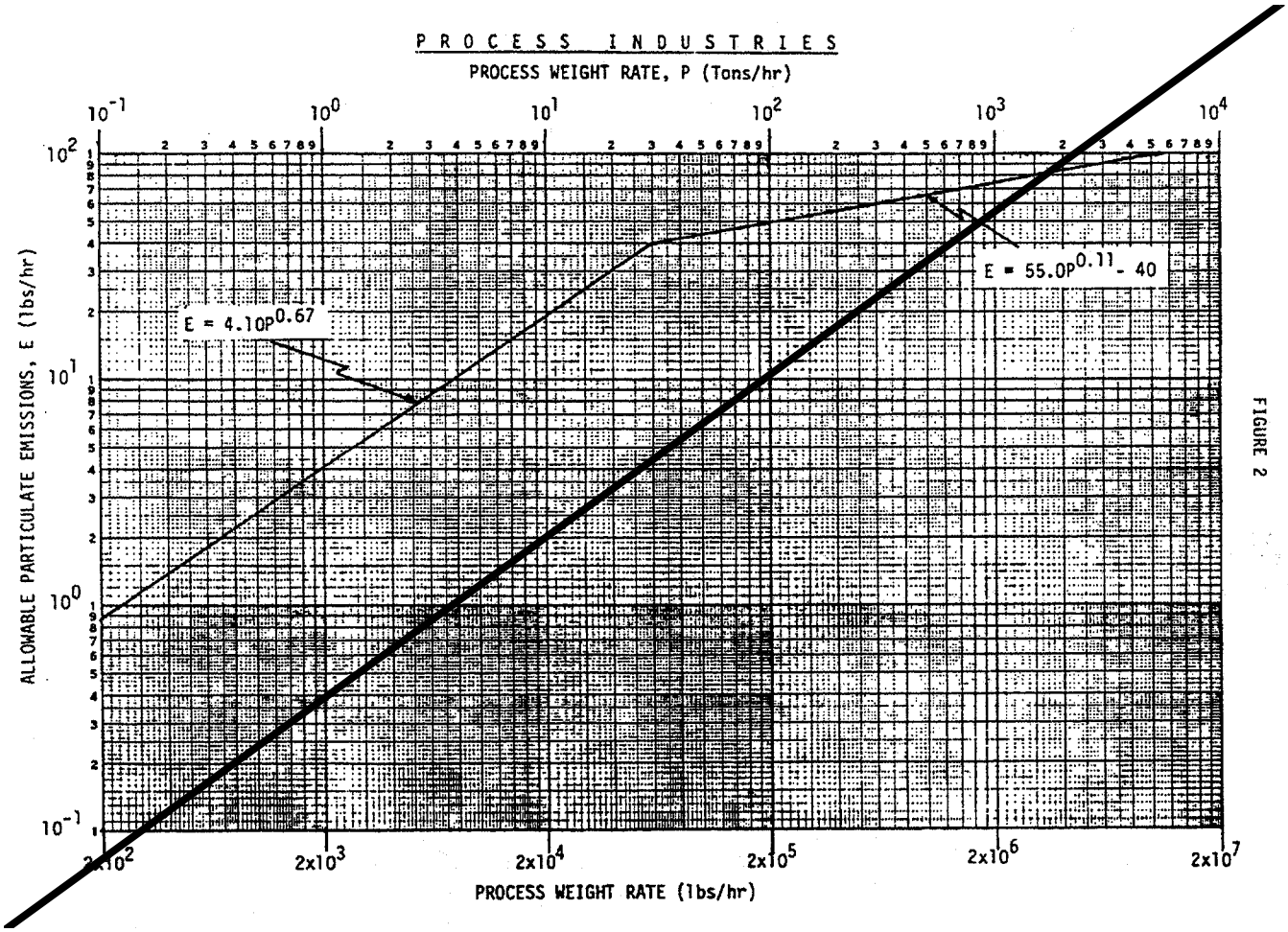

FIGURE 2

NOTICE OF PROPOSED RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY AIR POLLUTION CONTROL

[R08-252]

PREAMBLE

1. Sections Affected **Rulemaking Action**
R18-2-608 Amend

2. The statutory authority for the rulemaking, including both the authorizing statute and the statutes the rules are implementing:
Authorizing statute: A.R.S. § 49-104(A)(10)
Implementing statutes: A.R.S. §§ 49-404, 49-424, 49-425

3. A list of all previous notices appearing in the *Register* addressing the proposed rule:
Notice of Rulemaking Docket Opening: 14 A.A.R. 1144, April 11, 2008

4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking.
Name: Danielle M. Dancho

Address: Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007

Telephone: (602) 771-4210 (This number may be reached in-state by dialing 1-800-234-5677 and requesting the seven digit number.)

Fax: (602) 771-2366

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

Summary.

The Arizona Department of Environmental Quality (ADEQ) is proposing to add the phrase "or own or otherwise operate" in order to clarify that pollution control measures should continue after the construction of mineral tailings piles and for times when tailings piles are inactive.

Background.

The Memorandum of Agreement (MOA) between ADEQ and Phelps Dodge in the early 1990s addressed construction of the mineral tailings piles; however, the agreement was silent concerning the issue of continuing maintenance. Continuing maintenance is required due to the deteriorating effects of stormwater, wind and mechanical damage sustained by the piles over time. The MOA has since expired, and ADEQ is currently working on a Maintenance Plan in effort to convince EPA to re-designate the Ajo area to Attainment Status based on permanent and enforceable control measures.

Explanation of proposed rule changes.

ADEQ has determined that the current Mineral Tailings rule, Section R18-2-608, needs to be expanded to expressly address maintenance operations at existing mineral tailings piles. The current version of the rule expressly applies to construction and implies rather than states that requirements continue after construction of tailings piles and when they are no longer active. ADEQ recommends that the rulemaking update the current Mineral Tailings, rule R18-2-608, to include the language "or own or otherwise operate." ADEQ proposes to begin an informal stakeholder involvement process prior to filing a Notice of Proposed Rulemaking which initiates the formal rulemaking process.

6. A reference to any study relevant to the rules that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

None

7. 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 of a political subdivision of this state:

The rule does not diminish a previous grant of authority of a political subdivision of this state.

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

A. Rule Identification

Title 18, Chapter 2, Article 6, Section 608, "Mineral Tailings." This Section was renumbered from R18-2-408, effective November 15, 1993.

B. Summary

ADEQ does not expect the addition of "or own or otherwise operate" to the requirement for controlling particulates in mineral-tailings piles to create significant compliance costs to individual facilities, unless facilities currently are not adequately maintaining their tailings piles. The amendment clarifies that measures to control particulates need to continue after the tailings piles are formed. Control measures that are considered reasonable include: wetting, chemical stabilization, and revegetation.

ADEQ anticipates a public health benefit to accrue from reduced particulate matter (PM10) emissions in Arizona. Individuals with asthma and other diseases could be at greater risk from exposure to PM10. Thus, any efforts undertaken to reduce or mitigate particulates potentially could have a greater benefit for these sensitive subpopulations. ADEQ anticipates that probable benefits will outweigh probable costs of the rulemaking.

C. Entities Directly Affected

ADEQ anticipates this rulemaking to impact facilities that currently are not maintaining, or inadequately maintaining their mineral-tailing piles. It is presumed that the majority of facilities are adequately maintaining their tailing piles. Because "mineral tailings" encompass a broad category that could include any size accumulations of waste rock, an unknown number of smaller facilities could be impacted by this rulemaking. In addition, ADEQ and the general public will be directly impacted.

D. Cost-Benefit Analysis

1. Public Health Impacts

The general public accrues benefits from cleaner air. Air quality regulations that lower concentrations of particulates, for example, have the potential to reduce adverse-health effects from missed school days to premature mortality. Scientific evidence links exposure to ambient particulate matter (PM) to airway inflammation that produces systemic effects. Individuals with asthma and chronic obstructive pulmonary disease could be at greater risk from exposure to particulates. Other sensitive subpopulations include the following: infants, children, elderly, and persons with congenital defects.

Asthma, which is a significant health burden in the U.S., is an inflammation of the lungs that results in intermittent narrowing and blockage of the airways, causing wheezing, coughing, chest tightness, and shortness of breath. Childhood asthma causes missed school days, visits to the emergency room and doctors' offices, as well as hospitalizations (Rimsza et al. 2006).

Asthma rates for 2003 were as follows: 8% for Maricopa County, 8.3% for Arizona, and 7.5% for the U.S. (Rimsza et al. 2006). Although asthma results in lost school days, lost work days, emergency room visits, and hospitalization, the symptoms are not always severe enough to require an emergency room visit or hospitalization. Asthma symptoms; however, can prevent children from living a fully active life.

Between 2006 and 2016, the population of Arizona is projected to grow from 6,239,482 to 8,093,110 (ADES 2006). With the anticipated population growth of the state, pediatric and adult cases of asthma are expected to expand in Arizona from approximately 517,900 to 671,700.

Reducing PM10 can lead to potential cost-saving benefits to the general public, based on a variety of avoided and mitigated adverse-health effects. Thus, reducing PM10 from becoming airborne from these mining-tailing piles has a potential to provide both human health and environmental benefits. The extent of the health benefits involves assessing the probability of the exposure rate to inhabitants living near the mineral-tailing piles and the harm experienced, viz., the value of the monetized, adverse-health effects eliminated or mitigated. Avoided incidents of hospital admissions, for example, for cardiovascular, chronic obstructive pulmonary disease, and asthma are worth $18,387, $12,378, and $6,634, respectively in 1999 dollars (U.S. EPA RIA 2002, pp. 8-23, 8-24).

Some of health effects of human exposure to PM can be quantified while others cannot. Quantified adverse-health effects include: mortality, bronchitis (chronic and acute), new asthma cases, hospital admissions (respiratory and cardiovascular), emergency room visits for asthma, lower and upper respiratory illness, shortness of breath, respiratory symptoms, minor restricted activity days, days of work loss, moderate or worse asthma status of asthmatics. Unquantifiable adverse-health effects include: neonatal mortality, changes in pulmonary function, chronic respiratory diseases (other than chronic bronchitis), morphological changes, altered host defense mechanisms, cancer, and non-asthma respiratory emergency room visits (U.S. EPA 1999, Table 5-1).

The issue is not that ambient air with reduced particulate matter (PM10) has the potential to lower adverse-health effects, but how much does adequately maintaining mining-tailing piles reduce these risks and for whom. The majority of the risk reductions were considered when the initial regulatory requirement was implemented. The reduction in health risks from facilities that maintained such tailing piles after they were formed likewise captured the risk reductions prior to this amendment. Risk characterization can only be explained following a dose-response assessment of particulates and the completion of an exposure assessment (U.S. EPA 2006, p. 15).

ADEQ anticipates that probable benefits will outweigh probable costs of the rulemaking.

2. Consumer Impacts

Impacts to consumers that purchase products from the inputs of mining activities are expected to be minimal given the current market characteristics and global economy. Generally, industry's response to higher compliance costs is to reduce output and increase prices.

3. Regulated Sources

Mineral tailings can be generated by both small and large facilities. The number of large tailings piles from copper mining in Arizona is approximately 10-20, with the majority being adequately maintained. Therefore, the majority of the economic impacts from this rulemaking could be attributed to smaller facilities, including operations that produce waste rock, and any larger facility that currently is not adequately maintaining its tailing piles.

ADEQ expects annual costs to vary by the type of mining operation and the size of the tailings pile. For larger facilities, the annualized cost could range $400 - $1,000 per acre (Freeport McMoRan Copper and Gold Inc. 2008). For smaller operations, costs could be minimal in comparison, e.g., $1,000 - $10,000 per site. If water is used, the cost could range $2.00 - $5.00 per thousand gallons, depending on the source and type of water.

Maintenance of control measures for tailings piles is also required for stormwater management. Stormwater is managed by individual permit or general permit under the Arizona Pollutant Discharge Elimination System (A.R.S. § 49.255.01).

4. Small Business Impacts

State statutes require agencies 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 of the rulemaking. Under § 41-1055(B)(5)(c)(i-iii), the

methods that agencies may employ to reduce the impact on small businesses include the following: (1) establish less costly compliance requirements; (2) establish less costly schedules or less stringent deadlines for compliance and (3) exempt small businesses from any or all requirements.

Furthermore, under A.R.S. § 41-1035, agencies must consider each of the methods set forth in that section and reduce the impact by using one or more, if the agency finds that the methods are legal and feasible in meeting the statutory objectives of the rulemaking. These methods include: (1) establish less stringent compliance or reporting requirements; (2) establish less stringent schedules or deadlines in the rule for compliance or reporting requirements; (3) consolidate or simplify compliance or reporting requirements; (4) establish performance standards to replace design or operational standards and (5) exempt small businesses from any or all rule requirements.

ADEQ could not exempt small businesses that generate mineral-tailings piles, or implement a less costly alternative to this rulemaking or less costly compliance options.

Some of the businesses impacted will be classified as small businesses. These facilities have several options to control PM10 emissions by taking reasonable precautions.

5. Other Businesses

Businesses that provide consulting services or products and materials to aid in the maintenance of tailing piles could be impacted by increased revenues. ADEQ expects that these businesses will not require additional employees to handle any increases in transactions. Some of these businesses could be classified as small businesses.

6. ADEQ; Other State Agencies; Political Subdivisions

ADEQ, as the implementing agency is expected to be impacted minimally. No other agency or political subdivision of the state is anticipated to be directly impacted by this rulemaking. If sources adequately maintained their mineral-tailing piles, ADEQ potentially could realize cost-saving benefits from avoided costs of preparing new nonattainment areas and maintenance plans.

7. Employment and Revenue Impacts

ADEQ does not expect this rulemaking to impact short- or long-run employment, production, or industrial growth in Arizona. No impacts are anticipated on either public or private employment; hence, no business is expected to close or reduce the level of employment.

Even though some facilities could be adversely affected, ADEQ does not expect this rule to impact energy, water usage, job creation, or the competitiveness of goods and services. In addition, ADEQ does not expect this rulemaking to impact business' accounts receivable, payroll, profitability, or capital availability.

For some facilities, compliance could result in expenditures for consulting services and capital expenditures for maintaining tailings piles. In most cases, ADEQ anticipates the impact will be minimal to none.

Due to the potential for this rule to impose real-resource costs upon a few facilities, some revenues may be affected, but they should be minimal in comparison to total revenues. As noted; however, expenditures by some facilities would represent revenues for other entities, such as service, equipment, or materials. Finally, this rulemaking is not expected to have an impact on state revenues.

8. County Impacts

No county government is anticipated to be impacted as a direct result of this rulemaking.

References

Arizona Department of Economic Security (ADES). 2006. Research Administration, Population Statistics Unit. Population projected by demographic cohort-component population model.

Freeport McMoRan Copper and Gold Inc. 2008. Telephone conversation with Sherry Burt-Kested (April 21).

Rimsza ME, Bartels A, Bannister W. 2006. Asthma in Maricopa County, a report to the Maricopa County community from Arizona HealthQuery, Center for Health Information and Research, Division of the Seidman Research Institute School of Health Management and Policy, ASU.

U.S. EPA 2006. 2006-2011 EPA strategic plan: charting our course. Washington, D.C. Available from: http://www.epa.gov/ocfo/plan/plan.htm.

U.S. EPA RIA. 2002. Regulatory impact analysis for the proposed reciprocating internal combustion engines NESHAP, OAQPS. Washington D.C. Report # EPA-452/R-02-012.

U.S. EPA 1999. The benefits and costs of the Clean Air Act, 1990-2010, Office of Air and Radiation/Office of Policy Analysis and Review. Washington, D.C. (November). Report # EPA-410-R-99-001.

9. 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: David Lillie

Address:	ADEQ 1110 W. Washington St. Phoenix, AZ 85007
Telephone:	(602) 771-4461 (This number may be reached in-state by dialing 1-800-234-5677 and requesting the seven digit number.)
Fax:	(602) 771-2366

10. The time, place, and nature of the proceedings for the making, 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:

Date:	October 2, 2008
Time:	2:00 p.m.
Location:	ADEQ 1110 W. Washington St. Phoenix, AZ 85007
Nature:	Oral Proceedings with opportunity for formal comments on the record
Close of Comment:	5:00 p.m., October 2, 2008

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

None

12. Incorporation by reference and their location in the rule:

There are no incorporations by reference in the Proposed Rulemaking.

13. The full text of the rule follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

Section
R18-2-608. Mineral Tailings

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

R18-2-608. Mineral Tailings

No person shall cause, suffer, allow, ~~or~~ permit construction of, or otherwise own or operate, mineral tailing piles without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director.

NOTICE OF PROPOSED RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 5. DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL REVIEWS AND CERTIFICATION

[R08-257]

PREAMBLE

1. Sections Affected	**Rulemaking Action**
R18-5-105	Amend
R18-5-109	Amend

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 49-104, 49-202, 49-351, 49-352, 49-353, 49-361

Implementing statutes: A.R.S. §§ 49-352, 49-361

3. A list of all previous notices appearing in the *Register* addressing the proposed rules:

Notice of Rulemaking Docket Opening: 14 A.A.R. 3296, August 22, 2008 *(in this issue)*

4. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Sean P. McCabe
Address:	Department of Environmental Quality 1110 W. Washington St. Phoenix, AZ 85007
Telephone:	(602) 771-4600
Fax:	(602) 771-4834
E-mail:	mccabe.sean@azdeq.gov

5. An explanation of the rules, including the agency's reasons for initiating the rules:

This rulemaking will improve the operator certification program administered by the Arizona Department of Environmental Quality for operators of both public water systems and sewage collection and treatment systems in Arizona. Specifically, the proposed change will give the Department the authority to permanently revoke the certification for an operator of a public water system or wastewater system. Currently, after revocation, an applicant can be recertified after one year of suspension or revocation, provided they meet specified minimum criteria and pass the examination. Due to the potential public health and environmental risks of recertifying an operator whose prior behavior justified revocation of the operator's certification, the Department plans to remove the provision currently in rule that would allow an operator whose license was revoked to be readmitted simply by passing the exam. The proposed rulemaking clarifies that a revocation is intended to be permanent, unless otherwise provided for by ADEQ.

The statutory authority for this rulemaking is provided by ADEQ's general rulemaking authority (A.R.S. § 49-104), the agency's designation of responsibility for the Clean Water Act and Safe Drinking Water Act in Arizona (A.R.S. § 49-202, which includes authorization to enter into contracts and agreements), ADEQ's designation as the agency responsible for ensuring the quality of potable water in public water systems in Arizona (A.R.S. §§ 49-351, 49-353), and ADEQ's responsibility for certifying operating personnel for potable water systems (A.R.S. § 49-352) and for sewage collection systems and treatment plants (A.R.S. § 49-361).

Certified operators are an important element in achieving the public health protection goals of the Safe Drinking Water Act and the Environmental Quality Act. Once a water system or sewage collection system and treatment plant have been designed and constructed, it is imperative that the system(s) be operated correctly as improper operation can result in public health threats and environmental degradation.

6. A reference to any study relevant to the rules that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

Not applicable

7. 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

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

The rule will primarily impact certified operators who have a certification(s) to operate water and/or wastewater system in Arizona revoked. It may have some impact on water or wastewater systems, especially in rural areas where the number of available, qualified operators is more limited. However, the rulemaking is needed to ensure the certification program maintains the high level of operator standings in order to protect public health and the environment.

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

A person may submit written comments to the person listed in item 4.

10. The time, place, and nature of the proceedings for the making, 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:

ADEQ has scheduled oral proceedings to receive oral comments on the rules, in accordance with A.R.S. § 41- 1023; the time, place and location of the hearing is listed below:

Date	Time	Location
September 25, 2008	1:30 p.m.	ADEQ 1110 W. Washington St., Room 250 Phoenix, AZ 85007

ADEQ is committed to complying with Americans with Disabilities Act. If any individual with a disability needs any type of accommodation, please contact Ms. Tricia Garland (602) 771- 4794 at least 72 hours before the hearing.

Anyone wishing to provide written comments regarding the rulemaking may submit their comments to ADEQ between 8:00 a.m. and 5:00 p.m., Monday through Friday, up until 5:00 p.m., September 25, 2008. The public comment period closes at 5:00 p.m. on September 28, 2008.

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

None

12. Incorporations by reference and their location in the rules:

None

13. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 5. DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL REVIEWS AND CERTIFICATION

ARTICLE 1. CLASSIFICATION OF TREATMENT PLANTS AND CERTIFICATION OF OPERATORS

Section
R18-5-105. Certification
R18-5-109. Denial, Suspension, Probation, and Revocation

ARTICLE 1. CLASSIFICATION OF TREATMENT PLANTS AND CERTIFICATION OF OPERATORS

R18-5-105. Certification

A. The Department shall issue an operator certificate to an applicant if the applicant:
1. Meets the experience and education requirements in R18-5-112 for the applicable class and grade, ~~and~~
2. Passes a written examination for the applicable class and grade~~.~~, and
3. Has not had an operator's license revoked in Arizona or permanently revoked in another jurisdiction.

B. To apply for operator certification, an applicant shall submit or arrange to have submitted to the Department the following information, as applicable, in a format acceptable to the Department:
1. The applicant's full name, ~~social security~~ Social Security number, and operator number;
2. The applicant's current mailing address, home and work telephone numbers, fax number, and e-mail address;
3. The applicant's place of employment, including the facility identification number;
4. The class and grade of the facility where the applicant is employed;
5. Proof of successful completion of the examination for the applicable class and grade; and
6. Documentation of the applicant's experience and education required under R18-5-112.

R18-5-109. Denial, Suspension, Probation, and Revocation

A. If the Department decides to deny, suspend, or revoke a certificate, or to place an operator on probation, the Department shall act in accordance with A.R.S. Title 41, Chapter 6, Article 10 and 18 A.A.C. 1, Article 2.

B. The Department may revoke or suspend a certificate, or place an operator on probation, if the Department finds that the operator:
1. Operates a facility in a manner that violates federal or state law;
2. Negligently operates a facility or negligently supervises the operation of a facility;
3. Fails to comply with a Department order or order of a court;
4. Obtains, or attempts to obtain, a certificate by fraud, deceit, or misrepresentation;
5. Engages in fraud, deceit, or misrepresentation in the operation or supervision of a facility;
6. Knowingly or negligently prepares a false or fraudulent report or record regarding the operation or supervision of a facility;

7. Endangers the public health, safety, or welfare;
8. Fails to comply with the terms or conditions of probation or suspension; or
9. Fails to cooperate with an investigation by the Department including failing or refusing to provide information required by this Article.

C. The Department shall deny certification to an applicant who does not meet the requirements of R18-5-105 or R18-5-110, or who is ineligible for certification pursuant to a Department order or order of a court.

~~**D.** In order to be recertified, an individual whose certificate is revoked shall reapply and be reexamined as a new applicant. An individual whose certificate is revoked is not eligible for admission to a certification examination for 12 months from the effective date of the revocation.~~

~~**E.**~~**D.** The Department may place an operator on probation or suspend an operator's certificate to address deficiencies in operator performance. The terms of probation, or readmission if suspended, may include completion of additional PDHs, increased reporting of operator activity, limitations on activities the operator may perform, or other terms to address deficiencies in operator performance.

~~**F.**~~**E.** During the period of suspension ~~or revocation~~, an individual whose certificate is suspended ~~or revoked~~ shall not operate a facility of ~~any~~ the class ~~or grade~~ of the suspended certificate.

~~**G.**~~**F.** An operator whose certificate is suspended or revoked, or who has been placed on probation, shall immediately notify the owner of a facility where the operator is employed of the suspension, ~~or~~ revocation, or probation.