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From the Publisher

ABOUT THIS PUBLICATION

The paper copy of the *Administrative Register* (A.A.R.) is the official publication for rules and rulemaking activity in the state of Arizona.

Rulemaking is defined in Arizona Revised Statues known as the Arizona Administrative Procedure Act (APA), A.R.S. Title 41, Chapter 6, Articles 1 through 10.

The Office of the Secretary of State does not interpret or enforce rules published in the *Arizona Administrative Register* or *Code*. Questions should be directed to the state agency responsible for the promulgation of the rule as provided in its published filing.

The *Register* is cited by volume and page number. Volumes are published by calendar year with issues published weekly. Page numbering continues in each weekly issue.

In addition, the *Register* contains the full text of the Governor's Executive Orders and Proclamations of general applicability, summaries of Attorney General opinions, notices of rules terminated by the agency, and the Governor's appointments of state officials and members of state boards and commissions.

ABOUT RULES

Rules can be: made (all new text); amended (rules on file, changing text); repealed (removing text); or renumbered (moving rules to a different Section number). Rules activity published in the *Register* includes: proposed, final, emergency, expedited, and exempt rules as defined in the APA.

Rulemakings initiated under the APA as effective on and after January 1, 1995, include the full text of the rule in the *Register.* New rules in this publication (whether proposed or made) are denoted with underlining; repealed text is stricken.

WHERE IS A "CLEAN" COPY OF THE FINAL OR EXEMPT RULE PUBLISHED IN THE *REGISTER*?

The *Arizona Administrative Code* (A.A.C) contains the codified text of rules. The A.A.C. contains rules promulgated and filed by state agencies that have been approved by the Attorney General or the Governor's Regulatory Review Council. The *Code* also contains rules exempt from the rulemaking process.

The printed *Code* is the official publication of a rule in the A.A.C. is prima facie evidence of the making, amendment, or repeal of that rule as provided by A.R.S. § 41-1012. Paper copies of rules are available by full Chapter or by subscription. The *Code* is posted online for free.

LEGAL CITATIONS AND FILING NUMBERS

On the cover: Each agency is assigned a Chapter in the *Arizona Administrative Code* under a specific Title. Titles represent broad subject areas. The Title number is listed first; with the acronym A.A.C., which stands for the *Arizona Administrative Code*; following the Chapter number and Agency name, then program name. For example, the Secretary of State has rules on rulemaking in Title 1, Chapter 1 of the *Arizona Administrative Code*. The citation for this chapter is 1 A.A.C. 1, Secretary of State, Rules and Rulemaking

Every document filed in the office is assigned a file number. This number, enclosed in brackets, is located at the top right of the published documents in the *Register*. The original filed document is available for 10 cents a copy.

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PUBLICATION DEADLINES
Publication dates are published in the back of the *Register.* These dates include file submittal dates with a three-week turnaround from filing to published document.

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Participate in the Process

Look for the Agency Notice

Review (inspect) notices published in the *Arizona Administrative Register*. Many agencies maintain stakeholder lists and would be glad to inform you when they proposed changes to rules. Check an agency's website and its newsletters for news about notices and meetings.

Feel like a change should be made to a rule and an agency has not proposed changes? You can petition an agency to make, amend, or repeal a rule. The agency must respond to the petition. (See A.R.S. § 41-1033)

Attend a public hearing/meeting

Attend a public meeting that is being conducted by the agency on a Notice of Proposed Rulemaking. Public meetings may be listed in the Preamble of a Notice of Proposed Rulemaking or they may be published separately in the *Register*. Be prepared to speak, attend the meeting, and make an oral comment.

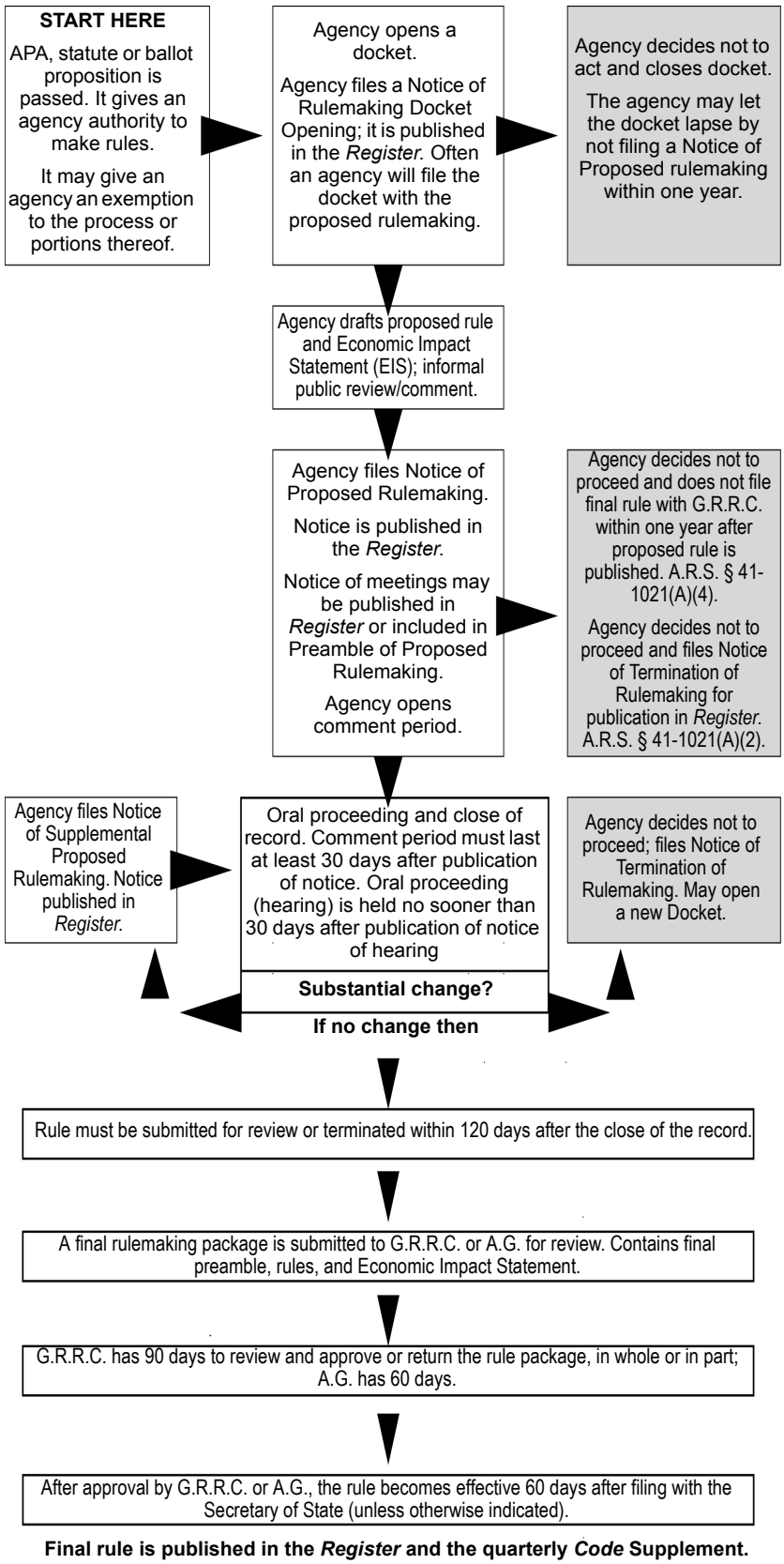
An agency may not have a public meeting scheduled on the Notice of Proposed Rulemaking. If not, you may request that the agency schedule a proceeding. This request must be put in writing within 30 days after the published Notice of Proposed Rulemaking.

Write the agency

Put your comments in writing to the agency. In order for the agency to consider your comments, the agency must receive them by the close of record. The comment must be received within the 30-day comment timeframe following the *Register* publication of the Notice of Proposed Rulemaking.

You can also submit to the Governor's Regulatory Review Council written comments that are relevant to the Council's power to review a given rule (A.R.S. § 41-1052). The Council reviews the rule at the end of the rulemaking process and before the rules are filed with the Secretary of State.

Arizona Regular Rulemaking Process



Definitions

***Arizona Administrative Code* (A.A.C.):** Official rules codified and published by the Secretary of State's Office. Available online at www.azsos.gov.

***Arizona Administrative Register* (A.A.R.)**: The official publication that includes filed documents pertaining to Arizona rulemaking. Available online at www.azsos.gov.

Administrative Procedure Act (APA): A.R.S. Title 41, Chapter 6, Articles 1 through 10. Available online at www.azleg.gov.

Arizona Revised Statutes (A.R.S.): The statutes are made by the Arizona State Legislature during a legislative session. They are complied by Legislative Council, with the official publication codified by Thomson West. Citations to statutes include Titles which represent broad subject areas. The Title number is followed by the Section number. For example, A.R.S. § 41-1001 is the definitions Section of Title 41 of the Arizona Administrative Procedures Act. The "§" symbol simply means "section." Available online at www.azleg.gov.

Chapter: A division in the codification of the *Code* designating a state agency or, for a large agency, a major program.

Close of Record: The close of the public record for a proposed rulemaking is the date an agency chooses as the last date it will accept public comments, either written or oral.

Code of Federal Regulations (CFR): The *Code of Federal Regulations* is a codification of the general and permanent rules published in the *Federal Register* by the executive departments and agencies of the federal government.

Docket: A public file for each rulemaking containing materials related to the proceedings of that rulemaking. The docket file is established and maintained by an agency from the time it begins to consider making a rule until the rulemaking is finished. The agency provides public notice of the docket by filing a Notice of Rulemaking Docket Opening with the Office for publication in the *Register*.

Economic, Small Business, and Consumer Impact Statement (EIS): The EIS identifies the impact of the rule on private and public employment, on small businesses, and on consumers. It includes an analysis of the probable costs and benefits of the rule. An agency includes a brief summary of the EIS in its preamble. The EIS is not published in the *Register* but is available from the agency promulgating the rule. The EIS is also filed with the rulemaking package.

Governor's Regulatory Review (G.R.R.C.): Reviews and approves rules to ensure that they are necessary and to avoid unnecessary duplication and adverse impact on the public. G.R.R.C. also assesses whether the rules are clear, concise, understandable, legal, consistent with legislative intent, and whether the benefits of a rule outweigh the cost.

Incorporated by Reference: An agency may incorporate by reference standards or other publications. These standards are available from the state agency with references on where to order the standard or review it online.

Federal Register (FR): The *Federal Register* is a legal newspaper published every business day by the National Archives and Records Administration (NARA). It contains federal agency regulations; proposed rules and notices; and executive orders, proclamations, and other presidential documents.

Session Laws or "Laws": When an agency references a law that has not yet been codified into the Arizona Revised Statutes, use the word "Laws" is followed by the year the law was passed by the Legislature, followed by the Chapter number using the abbreviation "Ch.", and the specific Section number using the Section symbol (§). For example, Laws 1995, Ch. 6, § 2. Session laws are available at www.azleg.gov.

United States Code (U.S.C.): The Code is a consolidation and codification by subject matter of the general and permanent laws of the United States. The Code does not include regulations issued by executive branch agencies, decisions of the federal courts, treaties, or laws enacted by state or local governments.

Acronyms

A.A.C. – *Arizona Administrative Code*

A.A.R. – *Arizona Administrative Register*

APA – Administrative Procedure Act

A.R.S. – Arizona Revised Statutes

CFR – *Code of Federal Regulations*

EIS – Economic, Small Business, and Consumer Impact Statement

FR – *Federal Register*

G.R.R.C. – Governor's Regulatory Review Council

U.S.C. – *United States Code*

About Preambles

The Preamble is the part of a rulemaking package that contains information about the rulemaking and provides agency justification and regulatory intent.

It includes reference to the specific statutes authorizing the agency to make the rule, an explanation of the rule, reasons for proposing the rule, and the preliminary Economic Impact Statement.

The information in the Preamble differs between rulemaking notices used and the stage of the rulemaking.

NOTICES OF FINAL RULEMAKING

This section of the *Arizona Administrative Register* contains Notices of Final Rulemaking. Final rules have been through the regular rulemaking process as defined in the Administrative Procedures Act. These rules were either approved by the Governor's Regulatory Review Council or the Attorney General's Office. Certificates of Approval are on file with the Office.

The final published notice includes a preamble and text of the rules as filed by the agency. Economic Impact Statements are not published.

The Office of the Secretary of State is the filing office and publisher of these rules. Questions about the interpretation of the final rules should be addressed to the agency that promulgated them. Refer to Item #5 to contact the person charged with the rulemaking. The codified version of these rules will be published in the *Arizona Administrative Code*.

NOTICE OF FINAL RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 14. DEPARTMENT OF HEALTH SERVICES LABORATORIES

[R16-183]

PREAMBLE

1. Article, Part, or Section Affected (as applicable)	Rulemaking Action
R9-14-601	Amend
R9-14-602	Amend
R9-14-603	Amend
R9-14-605	Amend
R9-14-606	Amend
R9-14-607	Amend
R9-14-608	Amend
R9-14-609	Amend
R9-14-610	Amend
R9-14-611	Amend
R9-14-612	Amend
R9-14-613	Amend
R9-14-614	Amend
R9-14-615	Amend
R9-14-616	Amend
R9-14-617	Amend
R9-14-620	Amend
R9-14-621	Amend
Table 1	Renumber
Table 6.1	Renumber
Table 6.1	Amend
Exhibit I	Repeal
Exhibit II	Repeal
Table 6.2.A	New Section
Table 6.2.B	New Section
Table 6.2.C	New Section
Table 6.2.D	New Section
Table 6.2.E	New Section
Table 6.3	New Section
Table 6.4	New Section

2. Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):

Authorizing statutes: A.R.S. §§ 36-132(A)(1), 36-136(F)

Implementing statutes: A.R.S. §§ 36-495.01 through 36-495.14

3. The effective date of the rules:

October 1, 2016

a. If the agency selected a date earlier than the 60 day effective date as specified in A.R.S. § 1032(A), include the earlier date and state the reason or reasons the agency selected the earlier effective date as provided in A.R.S. § 1032(A)(1) through (5):

The Arizona Department of Health Services (Department) requests an effective date of October 1, 2016 under A.R.S. § 41-1032 (A)(1), (2), (3), and (4). These rules protect public health by ensuring the competency of environmental laboratories conducting compliance testing. Having an effective date of October 1, 2016 will enable Arizona to retain primary authority to regulate (primacy) in the area of safe drinking water, as described in paragraph 6, rather than losing primacy and having the regulation of Arizona drinking water come under federal control. The effective date will also provide enough time for the Department and entities regulated under these rules time to prepare to implement the new rules. Since the Department requested an exception from the rulemaking moratorium soon after the Department learned that the Arizona Department of Environmental Quality (ADEQ) had received an exception from the rulemaking moratorium to revise the ADEQ rules related to primacy, the need for an immediate effective date was not created by the Department's delay or inaction.

b. If the agency selected a date later than the 60 day effective date as specified in A.R.S. § 1032(A), include the later date and state the reason or reasons the agency selected the later effective date as provided in A.R.S. § 1032(B):

Not applicable

4. Citations to all related notices published in the *Register* as specified in R1-1-409(A) that pertain to the record of the final rulemaking package:

Notice of Rulemaking Docket Opening: 22 A.A.R. 704, April 1, 2016

Notice of Proposed Rulemaking: 22 A.A.R 1415, June 10, 2016

5. The agency's contact person who can answer questions about the rulemaking:

Name: Steven Baker, Office Chief
Address: Arizona Department of Health Services
Division of Public Health Services
Office of Laboratory Licensure and Certification
250 N. 17th Ave.
Phoenix, AZ 85007
Telephone: (602) 364-0735
Fax: (602) 364-0759
E-mail: Steve.Baker@azdhs.gov

or

Name: Robert Lane, Manager
Address: Arizona Department of Health Services
Office of Administrative Counsel and Rules
150 N. 18th Ave., Suite 200
Phoenix, AZ 85007
Telephone: (602) 542-1020
Fax: (602) 364-1150
E-mail: Robert.Lane@azdhs.gov

6. An agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:

Arizona Revised Statutes (A.R.S.) § 36-495.01 requires the Department to license environmental laboratories engaged in compliance testing; establish minimum standards of proficiency, methodology, quality assurance, operation, and safety for environmental laboratories; and develop rules in cooperation with ADEQ that are consistent with A.R.S. Title 49 and rules adopted by ADEQ. The Department adopted rules implementing A.R.S. § 36-495.01 in Arizona Administrative Code (A.A.C.) Title 9, Chapter 14, Article 6. Federal Environmental Protection Agency (EPA) regulations 40 CFR parts 141 and 142 establish national drinking water standards. A state may obtain primacy in the area of safe drinking water under 40 CFR part 142 if the state establishes drinking water regulations that are no less stringent than the regulations in effect under 40 CFR part 141. ADEQ and the Department share primacy over Arizona's drinking water supply, meaning that the rules of both agencies need to be consistent with the federal requirements. Although Arizona currently has primacy, 40 CFR parts 141 and 142 have been changed to be more stringent than Arizona regulations, requiring changes to both ADEQ's rules related to drinking water and the rules in 9 A.A.C. 14, Article 6. ADEQ has recently revised its rules in 18 A.A.C. 4, Article 1 to conform to changes made to 40 CFR parts 141 and 142. In order to retain primacy and comply with A.R.S. § 36-495.01, which requires the Department to develop rules that are consistent with ADEQ's rules, the Department sought and obtained an exception from the rulemaking moratorium established by Executive Order 2016-03 and has revised the rules in 9 A.A.C. 14, Article 6 to be consistent with 40 CFR parts 141 and 142 and the ADEQ rules. The Department is also making changes to address written criticisms of the rules, update obsolete methodologies and references, and make other changes to the rules, as described in the recent five-year-review report for the rules, to reduce the regulatory burden while achieving the same regulatory objective. The amendments conform to rulemaking format and style requirements of the Governor's Regulatory Review Council (Council) and the Office of the Secretary of State.

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

The Department did not review or rely on any study for this rulemaking.

8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

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

The Department anticipates that cost bearers may include the Department, licensed environmental laboratories, and possibly the general public, if costs incurred by environmental laboratories are passed through to customers. Beneficiaries may include the Department, ADEQ, environmental laboratories, environmental organizations, and the general public. Annual costs/revenues changes are designated as minimal when more than $0 and $1,000 or less, moderate when between $1,000 and $10,000, and substantial when $10,000 or greater in additional costs or revenues. A cost is listed as significant when meaningful or important, but not readily subject to quantification. Under these rules, the Department licenses approximately 144 environmental laboratories, including 62 environmental laboratories that are located out-of-state. Of the 144 licensed environmental laboratories, 96 are private and 48 are governmental agencies.

The Department anticipates that rules changes may cause the Department to incur minimal costs due to additional time being spent providing technical assistance to environmental laboratories on the changes, especially the new methods being added and the obsolete methods being removed. However, having more up-to-date references and methods in the rules may also provide a significant benefit to the Department because these changes make the rules consistent with the EPA requirements for compliance testing, enabling Arizona to retain primacy, and should help to ensure compliance with those requirements. Updating the rules to include the Standard Methods added in R9-14-610 may also result in a moderate cost to the Department for obtaining permission to copy the Standard Methods, estimated to be approximately $3,600. The Department anticipates that the revision of R9-14-602 may cause no additional costs and a minimal benefit to the Department. The Department anticipates that the change to allow the Department to suspend the use of the installment payment plan in R9-14-608 under the circumstances described in the rule will result in a significant benefit to the Department. Allowing the Department to rescind approval of an alternate method or method alteration approved under R9-14-610(E), which would only be done when the reason the alternate method or method alteration was originally approved no longer exists, may result in a minimal benefit to the Department by helping to ensure compliance with EPA standards, and may cause, at most, a minimal decrease in fee revenue. Removing unnecessary requirements in R9-14-603 and R9-14-615 may result in a minimal benefit for the Department through a reduction in time to review an application or conduct an inspection. The Department anticipates that clarifying requirements in the rules may provide a significant benefit to the Department.

Although ADEQ has recently revised its rules in 18 A.A.C. 4, Article 1 to conform to changes made in 40 CFR parts 141 and 142, the Department's rules in 9 A.A.C. 14, Article 6, are currently in conflict with method and quality assurance requirements in 40 CFR 141 and 142 and the revised ADEQ rules. This puts ADEQ's ability to regulate Arizona's drinking water supply (primacy) in jeopardy. Because this rulemaking will resolve the conflict and enable Arizona to retain primacy, the Department believes that ADEQ will receive a significant benefit from having rules in 9 A.A.C. 14, Article 6, that are consistent with ADEQ rules and federal regulations and a significant benefit from having the flexibility to address local concerns through retaining primacy.

A regional or municipal water system performing in-house compliance testing is required to be licensed as an environmental laboratory. Many other governmental entities and many private facilities are licensed as environmental laboratories. These vary greatly in size and in the complexity of the compliance testing performed. The Department anticipates that being able to use up-to-date methods when testing water supplies may provide a minimal-to-moderate benefit to a regional or municipal water system and may cause minimal additional costs, depending on the parameters tested and the methods currently used. The Department anticipates that being able to use up-to-date methods when performing compliance testing may provide a minimal-to-substantial benefit to a governmental or private environmental laboratory, depending on the parameters tested and the methods currently used, and may cause minimal additional costs. An environmental laboratory, including a regional or municipal water system or an environmental laboratory owned by a governmental entity or a private person, that complies with the requirements in R9-14-602(4) or (5) may receive a minimal-to-moderate benefit from being exempt from the requirement to have every field/satellite site licensed as an environmental laboratory. The Department anticipates that the elimination of unnecessary requirements and having rules that are clearer and easier to understand may provide a significant benefit to an environmental laboratory. An environmental laboratory may also receive a significant benefit from Arizona retaining primacy since ADEQ and the Department may have more flexibility when addressing issues specific to Arizona. A health care institution, adding chlorine to its water supply to reduce cross-infection rates and increase patient safety and monitoring the effect of the chlorine addition on the water, may receive a minimal-to-moderate benefit from not having to be licensed as an environmental laboratory.

Environmental organizations include organizations representing water/wastewater professionals and the water-treatment industry, as well as consulting firms representing construction projects that impact the environment. The amended rules may provide a significant benefit to an environmental organization in several ways. The updated methods in the new rules meet minimum federal standards, meaning that the data produced are considered to be in compliance with federal requirements and are defensible in court. The new methods also rely on more sophisticated

technology; which help ensure that pollutants in the air, wastewater, and other environmental media are adequately assessed and enhance the professionalism of those using them. In addition, the improved clarity of the rules makes the rules easier to use because the requirements are easier to understand.

The general public may receive a significant benefit from having safe water to drink and being assured that pollutants in the air, wastewater, and other environmental media are adequately assessed. It is possible that any costs incurred by regional or municipal water systems may be passed on to the customers of the water systems. The Department anticipates that these additional costs would be, at most, minimal.

10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:

The Department moved two incorporations by reference into R9-14-610(B), so all incorporations by reference are in one location. In doing so, the Department identified a typographical error in one of the incorporations by reference being moved, Key Reference H, and for which the web-address had changed. Additional web-addresses for EPA methods were also found to have been changed since the Notice of Proposed Rulemaking had been filed. These typographical errors and others identified by Council staff were corrected in the Notice of Final Rulemaking.

11. An agency's summary of the public stakeholder comments made about the rulemaking and the agency response to the comments:

The Department received no written comments. The Department held an oral proceeding for the proposed rules on July 13, 2016, at which no stakeholders or members of the public attended.

12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

The rule requires a permit as specified in A.R.S. § 36-495.01. However, A.R.S. § 36-495.03 requires a license application to be for a specific location and for specific services and tests, so a general permit is not used.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

Not applicable

c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:

No business competitiveness analysis was received by the Department.

13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:

Reference materials incorporated by reference are listed in R9-14-610(B).

14. Whether the rule was previously made, amended or repealed as an emergency rule. If so, cite the notice published in the Register as specified in R1-1-409(A). Also, the agency shall state where the text was changed between the emergency and the final rulemaking packages:

Not applicable

15. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

CHAPTER 14. DEPARTMENT OF HEALTH SERVICES LABORATORIES

ARTICLE 6. LICENSING OF ENVIRONMENTAL LABORATORIES

Section

ARTICLE 6. LICENSING OF ENVIRONMENTAL LABORATORIES

R9-14-601. Definitions

In addition to the definitions in A.R.S. § 36-495, the following definitions apply in this Article, unless otherwise specified:

1. "Acceptance criteria" means the range of satisfactory test results for a parameter.
2. "ADEQ" means the Arizona Department of Environmental Quality.
3. "Affiliate" means a business organization that:
   a. Controls or has the power to control the business organization that owns the laboratory,
   b. Is controlled by or could be controlled by the business organization that owns the laboratory, or
   c. Could be controlled by a third business organization that could also control the business organization that owns the laboratory.
4. "Alternate method" means an analytical test procedure or technique that is not an approved method and for which approval is requested under R9-14-610(C).
5. "Analyst" means an individual who performs compliance testing at a laboratory.
6. "Analyte" means the substance or chemical constituent being sought or measured in an analytical procedure.
7. "Applicant" means a person or persons requesting an initial or renewal license under R9-14-603, approval of an alternate method or method alteration under R9-14-610(C), or approval of an exemption under R9-14-615(D), and includes, as required under A.R.S. § 36-495.03(D), the owner and, if the owner is not the laboratory director, the laboratory director.
8. "Approved method" means an analytical test procedure or technique authorized by the Department to test for the presence of a particular contaminant or characteristic and includes:
   a. ~~an~~ An alternate method approved by the Department under ~~R9-14-610(C)~~ R9-14-610(E), and
   b. ~~an approved method~~ An analytical test procedure or technique currently authorized by the Department that is used with a method alteration approved by the Department under ~~R9-14-610(C)~~ R9-14-610(E).
9. "ASTM" means American Society for Testing and Materials.
10. "Blind proficiency testing" means the Department's determination of a laboratory analyst's ability to analyze samples correctly, accomplished by submitting samples for testing in such a manner that the laboratory analyst is not aware that the proficiency testing is occurring.
11. "Business organization" means an entity such as a sole proprietorship, an unincorporated association, a corporation, a limited liability company, a partnership, or a governmental entity.
12. "Calibration curve" means a graphical display of the functional relationship between the instrument or analytical device response and the analyte amount.
13. "Calibration model" means a mathematical form for a calibration curve.
14. "CCC" means calibration check compounds.
15. "CCV" means continuing calibration verification standard.
16. "Client" means a person that submits a sample to a laboratory for compliance testing.
17. "Contaminant" means a matter, pollutant, hazardous substance, or other substance for which a sample is being tested.
18. "Contiguous grounds" means real property that can be enclosed by a single unbroken boundary line that does not enclose property owned or leased by another.
19. "Critical step" means a task in the testing procedure that is required to be performed within a specified time period by regulation, method, standard operating procedure, or quality assurance plan.
20. "Current" means up-to-date and extending to the present time.
21. "Data outlier" means a test result that falls outside of acceptance criteria.
22. "Days" means calendar days, excluding the day of the act, event, or default from which a designated period of time begins to run and excluding the last day of the period if it is a Saturday, a Sunday, or a legal holiday, in which event the period runs until the end of the next day that is not a Saturday, a Sunday, or a legal holiday.
23. "DBCP" means 1,2-Dibromo-3-chloropropane.
24. "DDT" means dichloro-diphenyl-trichloroethane.

25. "DOC" means dissolved organic carbon.
26. "ECD" means electron capture detector.
27. "EDB" means 1,2-Dibromoethane.
28. "Effluent" means an outflow, as of a stream that flows out of a facility.
29. "EOX" means extractable organic halides.
30. "EP" means extraction procedure.
31. "EPA" means the United States Environmental Protection Agency.
32. "FID" means flame ionization detector.
33. "FL" means fluorescence.
34. "FT-IR" means Fourier transform infrared.
35. "GC" means gas chromatography.
36. "HEM" means n-Hexane extractable material.
37. "HPLC" means high performance liquid chromatography.
38. "HRGC" means high resolution gas chromatography.
39. "HRMS" means high resolution mass spectrometry.
40. "ICV" means initial calibration verification.
41. ~~"IDOC" means initial demonstration of capability.~~
42.41. "Initial Demonstration of Capability" or "IDOC" means a test performed by an analyst, as prescribed by a method, to document the analyst's ability to perform the method.
43.42. "Investigation" means an evaluation of a licensee's or applicant's compliance with A.R.S. Title 36, Chapter 4.3 and this Article conducted by the Department upon its own initiative or upon receipt of a written complaint and may include a laboratory inspection.
44.43. "IPC" means instrument performance check.
45.44. "Key reference" means a document incorporated by reference in R9-14-610(B).
46.45. "Laboratory inspection" means the Department's assessment of operations at a laboratory to determine an applicant's or a licensee's compliance with A.R.S. Title 36, Chapter 4.3 and this Article.
47.46. "LCS" means laboratory control sample.
47. "LDO" means Luminescence Measurement of Dissolved Oxygen.
48. "Level I license" means an approval issued by the Department authorizing compliance testing of one to nine total parameters at a laboratory.
49. "Level II license" means an approval issued by the Department authorizing compliance testing of 10 to 17 total parameters at a laboratory.
50. "Level III license" means an approval issued by the Department authorizing compliance testing of more than 17 total parameters at a laboratory.
51. "LFB" means laboratory fortified blank.
52. "LFM" means laboratory fortified sample matrix.
53. "Licensee" means a person or persons to whom the Department issues a license to operate a laboratory and includes, as required under A.R.S. § 36-495.03(D), the owner and, if the owner is not the laboratory director, the laboratory director.
54. "Limit of detection" means an analyte- and matrix-specific estimate of the minimum amount of a substance that an analytical process can reliably detect~~, which may be laboratory dependent and is developed according to R9-14-615(C)(7)~~.
55. "Limit of quantitation" or "LOQ" means the minimum levels, concentrations, or quantities of a target variable such as an analyte that can be reported with a specific degree of confidence.
56. ~~"LOQ" means limit of quantitation.~~
57.56. "LRMS" means low resolution mass spectrometry.
57. "Maximum holding time" means the greatest number of minutes, hours, or days that a sample may be kept between sampling and the beginning of analysis and still be considered a valid sample for compliance testing.
58. "Method" means an analytical test procedure or technique.
59. "Method alteration" means a change to an established method.
60. "Method reporting limit" means the minimum concentration of a contaminant reported after analyzing a sample in a given parameter, determined after corrections have been made for sample dilution and sample weight.
61. "Mobile laboratory" means a non-stationary facility where compliance testing is performed.
62. "MPN" means most probable number.
63. "MRL" means minimum reporting level.
64. "MS" means mass spectrometry.
65. "MSE" means microscale solvent extraction.
66. "MSRV" means Modified Semisolid Rappaport-Vassiliadis.
66.67. "NPD" means nitrogen phosphorous detector.
67.68. "NPDES" means national pollutant discharge elimination system.

69. "NTIS" means the National Technical Information Service, which is part of the U.S. Department of Commerce.
~~68.~~70. "NTU" means nephelometric turbidity units.
~~69.~~71. "ONPG-MUG" means ortho-nitrophenyl-ß-D-galactopyranoside-4-methylumbelliferyl-ß-D-glucuronide.
~~70.~~72. "Owner" means a person that has controlling legal or equitable interest in and authority over a laboratory's operations.
~~71.~~73. "PAH" means polynuclear aromatic hydrocarbon.
~~72.~~74. "Parameter" means the combination of a particular type of sample with a particular approved method by which the sample will be analyzed for a particular analyte or characteristic.
~~73.~~75. "PB" means particle beam.
~~74.~~76. "PCB" means polychlorinated biphenyls.
~~75.~~77. "PCDD" means polychlorinated dibenzodioxins.
~~76.~~78. "PCDF" means polychlorinated dibenzofurans.
~~77.~~79. "PDA" means photodiode array.
~~78.~~80. "PID" means photoionization detection.
~~79.~~81. "POX" means purgeable organic halides.
~~80.~~82. "Precision" means repeatability of measurement data, specifically the similarity of successive independent measurements of a single magnitude generated by repeated applications of a process under specified conditions.
~~81.~~83. "Proficiency testing" means a ~~proficiency testing service's determination of~~ mechanism in which samples with known characteristics are submitted to a laboratory for analysis to determine a laboratory analyst's ability to analyze samples correctly~~, accomplished by submitting samples to the laboratory for testing and then analyzing the acceptability of the results~~.
~~82.~~84. "Proficiency testing service" means an independent ~~service~~ company or other person acceptable to the EPA or, if the EPA has not indicated acceptance of ~~a proficiency testing service~~ an independent company or other person for a parameter, acceptable to the Department based on recognition from a national organization such as the National Environmental Laboratory Accreditation Program that:
    a. Is the source for samples with known characteristics for proficiency testing, and
    b. Assesses the acceptability of a laboratory analyst's results from the samples with known characteristics during proficiency testing.
~~83.~~85. "Qualified" means explained in documentation.
~~84.~~86. "Quality assurance plan" means documentation that meets the requirements of R9-14-615(B).
~~85.~~87. "Quality control checks" means the steps taken by laboratory analysts to monitor the accuracy and precision of sample analysis.
~~86.~~88. "QCS" means quality control sample.
~~87.~~89. "RDX" means Hexahydro-1,3,5-trinitro-1,3,5-triazine.
~~88.~~90. "Records" means all written, recorded, and electronic documentation necessary to reconstruct all laboratory activities that produce data and includes all information relating to the laboratory's equipment, analytical test methods, and related activities.
~~89.~~91. "RPD" means relative percent difference.
~~90.~~92. "Ruggedness" means the ability of a method to withstand changes in environmental factors and produce repeatable results.
~~91.~~93. "Sample" means a specimen that is a representative part of a whole or a single item from a group.
~~92.~~94. "Single laboratory" means an individual laboratory facility or multiple laboratory facilities located on contiguous grounds and having the same owner.
~~93.~~95. "Small business" means a business organization, including its affiliates, that is independently owned and operated, that is not dominant in its field, and that employs fewer than 100 full-time employees or had gross annual receipts of less than $4 million in its last fiscal year.
~~94.~~96. "SOUR" means specific oxygen uptake rate.
~~95.~~97. "SPE" means solid-phase extraction.
~~96.~~98. "SPLP" means synthetic precipitation leaching procedure.
~~97.~~99. "Standard operating procedure" means a documented process for carrying on business, analysis, or action, with instructions for performing routine or repetitive tasks.
~~98.~~100. "Statistical outlier" means an individual data point that has a value far from those of the other data points in a set and that has been determined through statistical analysis to have been derived from a different population than the other data points.
~~99.~~101. "TCLP" means toxicity characteristics leaching procedure.
~~100.~~102. "TDS" means total dissolved solids.
~~101.~~103. "TE" means thermal extraction.
~~102.~~104. "TNT" means trinitrotoluene.
~~103.~~105. "TOC" means total organic carbon.
~~104.~~106. "TOX" means total organic halides.

~~105.~~107. "Traceability" means the establishment of an unbroken chain of comparisons to the reference of origin.
~~106.~~108. "TS" means thermospray.
~~107.~~109. "TSS" means total suspended solids.
~~108.~~110. "UV" means ultraviolet.
~~109.~~111. "Valid" means that a license, certificate, or other form of authorization is in full force and effect and not suspended.
~~110.~~112. "VOC" means volatile organic compound.
~~111.~~113. "VOST" means volatile organic sampling train.

R9-14-602. Exemptions from Applicability

This Article does not apply to:

1. The laboratories exempted by A.R.S. § 36-495.02(A);
2. Compliance testing performed under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136-136y; ~~or~~
3. An out-of-state laboratory at which only microbiology testing of bottled water is performed and for which the owner holds a current and valid environmental laboratory license or certificate, issued by another state of the United States, that specifically authorizes drinking water testing~~.~~;
4. A person that:
   a. Employs methods approved by either ADEQ or the Department; and
   b. Tests compliance samples either:
      i. For turbidity or conductivity at the time of sampling, or
      ii. With a maximum holding time of 15 minutes after sampling; or
5. A laboratory that only performs compliance testing on daily chlorine dioxide or chlorite drinking water samples or ultra-low-range total residual chlorine wastewater samples as long as that laboratory is:
   a. Employing methods approved by either ADEQ or the Department; and
   b. Testing compliance samples immediately at the time of sampling, from which results may be obtained more than 15 minutes after sampling.

R9-14-603. License Application and Process; Transferability

A. To obtain an initial or renewal license to operate a laboratory, an applicant shall submit to the Department, within the time prescribed in subsection ~~(C)~~ (B), an application that contains:

1. ~~completed using~~ The following information in a Department-provided ~~form and including~~ format:
   ~~1.~~a. The name of the laboratory;
   ~~2.~~b. The current Arizona license number for the laboratory, if any;
   ~~3.~~c. The current EPA certification number for the laboratory, if any;
   d. Whether the applicant is applying to license:
      i. A single laboratory,
      ii. Multiple laboratories located on contiguous grounds according to subsection (C)(2), or
      iii. One of multiple laboratories under a single license according to subsection (C)(3);
   ~~4.~~e. The physical and mailing addresses for ~~the~~ each laboratory for which the application is being submitted;
   ~~5.~~f. The telephone number~~;~~, fax number~~;~~, and e-mail address for the laboratory;
   g. The type of laboratory:
      i. Governmental;
      ii. Company, performing internal work only;
      iii. Commercial, for profit; or
      iv. Other, with a description of the type of laboratory operation;
   ~~6.~~h. ~~The~~ For a type of laboratory specified in subsection (A)(1)(g)(ii) through (iv):
      i. The name and address of the owner and of each additional person that has an ownership interest in the laboratory; and
      ~~7.~~ii. For ~~the owner and each additional business organization with an ownership interest in the laboratory~~ each person specified in subsection (A)(1)(h)(i), the name of each officer, principal, and statutory agent;
   ~~8.~~i. The name of the laboratory director;
9. ~~The type of laboratory:~~
   ~~a. Governmental;~~
   ~~b. Company, performing internal work only;~~
   ~~c. Commercial, for profit; or~~
   ~~d. Other, with a description of the type of laboratory operation;~~
   ~~10.~~j. ~~The license Level for which~~ Whether the applicant is applying for a:
      i. Level I license,
      ii. Level II license, or
      iii. Level III license;
11. ~~Whether the applicant is applying to license a single laboratory or multiple laboratories;~~

~~12.~~k. If the applicant is applying to license a mobile laboratory~~, the~~:
i. The vehicle make, vehicle identification number, and Arizona vehicle license number of the mobile laboratory; and
~~13.~~ii. If the ~~applicant is applying to license a~~ mobile laboratory ~~that~~ is affiliated with a non-mobile laboratory, the name of the non-mobile laboratory;
~~14. The name, title, and educational background of each individual authorized to sign final reports for the laboratory;~~
~~15.~~l. If the application is for an initial license:
i. A list of the parameters for which the applicant is requesting to be licensed ~~or, if an application for a renewal license, an indication that the applicant desires to be licensed for the same parameters as on the current license;~~,
~~16.~~ii. A list of the instruments and equipment to be used at the laboratory for compliance testing ~~or, if an application for a renewal license, an indication that the applicant is using the same instruments and equipment as used under the current license;~~,
~~17.~~iii. A list of the software to be used at the laboratory for instrument control and data reduction interpretation ~~or, if an application for a renewal license, an indication that the applicant is using the same software as used under the current license;~~, and
iv. A list of the states in which the laboratory is licensed or certified and the corresponding license or certificate number for each state;
m. If the application is for a renewal license, whether the applicant:
i. Is requesting to be licensed for the same parameters as on the current license;
ii. Is using the same instruments and equipment as used under the current license;
iii. Is using the same software as used under the current license; and
iv. Is requesting to make payments in installments, as permitted under R9-14-608, and, if so, an indication of the monthly, bimonthly, or quarterly schedule for the payments;
n. If the information provided according to subsection (A)(1)(m) indicates a change in parameters, instruments or equipment, or software for a renewal license, the changes to the:
i. Parameters on the current license,
ii. Instruments or equipment used under the current license, or
iii. Software used under the current license;
~~18.~~o. If the applicant is applying for an out-of-state laboratory, whether the applicant wants to receive technical updates at the laboratory by fax or ~~through the Internet~~ by e-mail;
p. Whether the applicant agrees to allow the Department to submit supplemental requests for information; and
~~19. If an application for an initial license:~~
~~a. A copy of a proficiency testing report, for the current or most recently completed year, for the state in which the laboratory is located or, if that state does not require proficiency testing, for another state in which the laboratory is licensed or certified, for each of the parameters for which licensure is requested;~~
~~b. A list of the states in which the laboratory is licensed or certified and the corresponding license or certificate number for each state; and~~
~~c. A copy of a current quality assurance plan for the laboratory;~~
~~20. If an application for a renewal license:~~
~~a. A copy of a current standard operating procedure, limit of detection, and proficiency testing report, if available, for each parameter newly requested on the application; and~~
~~b. If the applicant desires to make payments in installments, as permitted under R9-14-608, an indication of this and the monthly, bimonthly, or quarterly schedule for the payments;~~
~~21. Except as provided in subsection (J), the fees required under R9-14-607 and R9-14-608, payable to the Arizona Department of Health Services by credit card; certified check; business check; or money order; or, if the owner is an Arizona state agency, purchase order;~~
~~22. Attestation, made under oath, that the owner and the laboratory director are aware of all applicable requirements in A.R.S. Title 36, Chapter 4.3 and this Article and that the information provided in the application, including the information in the documents accompanying the application form, is accurate and complete; and~~
~~23.~~q. The dated ~~and notarized~~ signature of the laboratory director and:
~~a.~~i. If the owner is an individual, the individual;
~~b.~~ii. If the owner is a corporation, an officer of the corporation;
~~c.~~iii. If the owner is a partnership, one of the partners;
~~d.~~iv. If the owner is a limited liability company, a manager or, if the limited liability company does not have a manager, a member of the limited liability company;
~~e.~~v. If the owner is an association or cooperative, a member of the governing board of the association or cooperative;
~~f. If the owner is a joint venture, one of the individuals signing the joint venture agreement;~~

~~g.~~ vi. If the owner is a governmental agency, the individual in the senior leadership position with the agency or an individual designated in writing by that individual; or

~~h.~~ vii. If the owner is a business organization type other than those described in subsections ~~(A)(23)(b) through (f)~~ (A)(1)(q)(ii) through (v), an individual who is a member of the business organization~~.~~;

2. A notarized attestation in a Department-provided format, made under oath, and signed by the individuals in subsection (A)(1)(q) stating that:
   a. The owner and the laboratory director will comply with all applicable requirements in A.R.S. Title 36, Chapter 4.3 and this Article; and
   b. The information and documents provided as part of the application are true and accurate;
3. If the application is for an initial license:
   a. A copy of a proficiency testing report, for the current or most recently completed year, for the state in which the laboratory is located or, if that state does not require proficiency testing, for another state in which the laboratory is licensed or certified, for each of the parameters for which licensure is requested; and
   b. A copy of a current quality assurance plan for the laboratory;
4. If the application is for a renewal license, a copy of a current standard operating procedure, limit of detection, and, if available, proficiency testing report for each new parameter specified according to subsection (A)(1)(n)(i); and
5. Except as provided in subsection (I), the fees required under R9-14-607 and R9-14-608, payable to the Arizona Department of Health Services by credit card; certified check; business check; money order; or, if the owner is an Arizona state agency, purchase order.

~~**B.** An application may include an agreement between the applicant and the Department that the Department may submit supplemental requests for additional information.~~

~~**C.**~~**B.** An applicant shall submit an application:

1. For an initial license for an in-state laboratory, at least 30 days before the applicant intends to begin operating the in-state laboratory;
2. For an initial license for an out-of-state laboratory, at least 60 days before the applicant intends to begin performing Arizona compliance testing;
3. For a renewal license for an in-state laboratory, at least 30 days before the expiration date of the current license; and
4. For a renewal license for an out-of-state laboratory, at least 60 days before the expiration date of the current license.

~~**D.**~~**C.** The Department may issue a single laboratory license for:

1. A single laboratory;
2. Multiple laboratories that are located on contiguous grounds and have the same owner, if the applicant submits one application and combined fees for the laboratories; or
3. Multiple laboratories, including mobile laboratories, that have the same owner but are not located on contiguous grounds, if:
   a. The applicant submits a separate application and fees for each laboratory,
   b. Each non-mobile laboratory is located in Arizona, and
   c. Each mobile laboratory has a current and valid Arizona vehicle registration.

~~**E.**~~**D.** The Department shall not issue a single laboratory license for multiple laboratories that do not meet the requirements of subsection ~~(D)(2) or (3)~~ (C)(2) or (3).

~~**F.**~~**E.** The Department shall not consider an applicant to be in compliance with the requirements for licensure, as provided under A.R.S. § 36-495.09(A)(5), if the applicant does not pay the appropriate fees required under R9-14-607 and R9-14-608.

~~**G.**~~**F.** The Department shall process an application as provided in R9-14-621.

~~**H.**~~**G.** A laboratory license is valid only for the facility or facilities for which the license is issued and cannot be transferred to another facility.

~~**I.**~~**H.** A laboratory license is valid only in the name of the persons to whom it is issued and expires upon a change in laboratory name, laboratory director, or ownership, unless within 20 business days after the change, the Department receives written notice of the change and an application for a new license.

~~**J.**~~**I.** The Department shall not charge a fee for a license application submitted under subsection ~~(I)~~ (H) and shall issue a new license reflecting the change upon determining continued compliance with A.R.S. Title 36, Chapter 4.3 and this Article.

R9-14-605. Compliance Monitoring

A. The Department may conduct a laboratory inspection, investigation, or proficiency testing, or any combination of the three, at any time before or during a laboratory's license period.

B. The Department shall conduct at least ~~two laboratory inspections~~ an initial laboratory inspection and a follow-up annual laboratory inspection before determining ~~whether~~ how often to conduct ~~annual~~ subsequent laboratory inspections, as provided under subsection (C).

C. In determining ~~whether~~ how often to conduct ~~an annual~~ a laboratory inspection, the Department shall consider:

1. The Department's findings at the last two laboratory inspections;
2. The licensee's adherence to any corrective action plans created as a result of the last two laboratory inspections;
3. Whether there has been a change in ownership or laboratory director since the last laboratory inspection;
4. The extent to which the compliance testing performed at the laboratory has changed since the last laboratory inspection or would change as a result of a renewal application; and

5. Performance on the most recent proficiency testing completed at the laboratory.

D. For a laboratory at which drinking water compliance testing is performed, the Department shall conduct a laboratory inspection at least once every three years or as otherwise required by the EPA.

E. The Department shall comply with A.R.S. § 41-1009 in conducting laboratory inspections and investigations that occur at a laboratory.

F. If the Department determines, based on a laboratory inspection, investigation, or proficiency testing, or any combination of the three, that a laboratory owner, officer, agent, or employee has engaged in conduct described under A.R.S. § 36-495.09(A), the Department shall request that the licensee or applicant submit to the Department a written corrective action plan, unless the Department determines one of the following, in which case the Department may take action under A.R.S. § 36-495.09:
1. That the deficiencies were committed intentionally;
2. That the deficiencies cannot be corrected within a reasonable period of time;
3. That the deficiencies are evidence of a pattern of noncompliance;
4. That the deficiencies are a risk to any person; the public health, safety, or welfare; or the environment; or
5. That there is a reasonable belief, as stated in A.R.S. § 36-495.09(B), that a violation of A.R.S. § 36-495.09(A)(5) has occurred and that the life or safety of the public is immediately affected.

G. Within 30 days after receiving a request for a written corrective action plan, a licensee or applicant shall submit to the Department a written corrective action plan that includes the following for each identified deficiency:
1. A description of how the deficiency will be corrected, and
2. A date of correction for the deficiency.

H. The Department shall accept a written corrective action plan if the plan:
1. Describes how each identified deficiency will be corrected, and
2. Includes a date for correcting each deficiency as soon as practicable based upon the actions necessary to correct the deficiency.

I. If the Department disapproves a corrective action plan, the Department shall send to the licensee or applicant a written notice of disapproval requesting that the licensee or applicant submit to the Department a revised corrective action plan for the items that the Department disapproves.
1. A licensee or applicant shall submit a revised corrective action plan to the Department within 21 days after the date of a written notice of disapproval.
2. If a licensee or applicant does not submit a revised corrective action plan within 21 days after the date of a written notice of disapproval, the Department may take action under A.R.S. § 36-495.09.

J. A licensee or applicant shall notify the Department when corrective action has been completed.

K. Within 30 days after receiving notice that corrective action has been completed, the Department shall determine whether each deficiency has been corrected and whether the corrective action brings the laboratory operations into substantial compliance with A.R.S. Title 36, Chapter 4.3 and this Article.

L. If the Department determines that a licensee or applicant has not corrected a deficiency or that the licensee or applicant has not corrected a deficiency within a reasonable period of time, the Department may take any enforcement action authorized by law as a result of the deficiency.

M. Under A.R.S. § 41-1009(G), the Department's decision regarding whether a licensee or applicant may submit a corrective action plan or whether a deficiency has been corrected or has been corrected within a reasonable period of time is not an appealable agency action as defined by A.R.S. § 41-1092.

R9-14-606. Provisional Licensing

A. The Department may issue a provisional license to a licensee when the Department suspends the licensee's regular license because of deficiencies identified in an investigation, laboratory inspection, or proficiency testing, or any combination of the three, if the licensee agrees to carry out a corrective action plan acceptable to the Department to eliminate the deficiencies.

B. In determining whether to issue a provisional license, the Department shall consider:
1. The nature of the deficiencies upon which the suspension is based;
2. The licensee's history of compliance with A.R.S. Title 36, Chapter 4.3 and this Article;
3. The extent to which the public health and safety may be impacted by the continued operation of the laboratory with a provisional license; and
4. The extent to which the public's interests are served by allowing the licensee the opportunity to correct the deficiencies and continue operating with a provisional license.

C. The Department shall issue an amended list of parameters for a provisional license.

D. A licensee shall return its regular license to the Department within 14 days after receiving written notification of license suspension.

E. A provisional license is valid for a period established by the Department, not to exceed 12 months.

F. A licensee with a provisional license ~~who desires~~ may submit an application to obtain a regular initial license ~~shall apply for an initial license~~ according to R9-14-603 at least 30 days before the provisional license expires.

G. The Department shall issue a regular initial license as described in subsection (F) only upon determining that a licensee is in full compliance with the corrective action plan developed according to subsection (A); A.R.S. Title 36, Chapter 4.3; and this Article.

H. The Department shall not issue a provisional license to an applicant ~~for an initial license~~ submitting an application for an

initial license according to R9-14-603.

R9-14-607. Fees

A. Except as provided in R9-14-608, an applicant shall submit the following fees to the Department with each application for an initial or renewal license:
1. The cumulative method and instrumentation fees for each laboratory, as determined according to Tables ~~1 and 2 in Exhibit I~~ 6.2.A, 6.2.B, 6.2.C, 6.2.D, 6.2.E, and 6.3;
2. The following application fees:
   a. If applying for a single license for a single laboratory, which may include multiple laboratories located on contiguous grounds and having the same owner, the following fee:
      i. For a Level I license, $1,677;
      ii. For a Level II license, $2,130; or
      iii. For a Level III license, $2,348; or
   b. If applying for a single license for multiple laboratories not located on contiguous grounds, the following fee for each laboratory:
      i. For a Level I license, $1,442;
      ii. For a Level II license, $1,895; and
      iii. For a Level III license, $2,130;
3. An administrative fee of $130 for the proficiency testing to occur during the license period; and
4. If applying for an out-of-state laboratory, an annual information update fee of $126.

B. The fees paid to the Department under this Article are nonrefundable, unless A.R.S. § 41-1077 applies.

R9-14-608. Installment Payment of Fees by Small Businesses

A. A licensee may, for license renewal, pay the fees calculated under R9-14-607(A)(1), (3), and (4) to the Department in 12 or fewer installments if the ~~laboratory~~ owner is a small business.

B. A licensee who desires to make payments in installments as described in subsection (A) shall indicate this on the application for license renewal and shall indicate a monthly, bimonthly, or quarterly schedule for the payments, which shall result in full payment within 12 or fewer months.

C. A licensee making installment payments shall submit the first installment payment to the Department along with the application for license renewal and the application fee calculated under R9-14-607(A)(2), and each subsequent installment payment on a monthly, bimonthly, or quarterly basis, as indicated on the application, or until the fees are paid in full, whichever comes first.

D. A licensee shall ensure that each installment payment is:
1. Paid by the first day of the month in which it is due; and
2. At least equal to the amount calculated by dividing the total fees due under R9-14-607(A)(1), (3), and (4) by the number of payments indicated on the application for license renewal.

E. If a licensee fails to submit an installment payment within seven days after its due date, the Department shall charge a $50 fee for processing the late payment.

F. If a licensee fails more than twice during the license period to submit an installment payment within seven days after the due date of the installment payment, the Department may suspend the licensee's authorization to make installment payments and require the licensee to pay all pending fees.

~~F.~~G. If a licensee fails to submit an installment payment within 30 days after its due date, the Department may initiate action under A.R.S. § 36-495.09.

R9-14-609. Proficiency Testing

~~**A.** At least once in each 12-month period, and more often if requested by the Department, each licensee or applicant that performs drinking water compliance testing shall have at least one laboratory analyst demonstrate proficiency in drinking water compliance testing by participating in proficiency testing provided by the Department, the EPA, or a proficiency testing service.~~

~~**B.** Each proficiency testing for drinking water compliance testing shall include at least one proficiency testing sample for each parameter for which an initial license or renewal license has been issued or requested. If more than one method is used to test for an analyte, a different lot shall be used for each method.~~

~~**C.** At least once in each 12-month period, and more often if requested by the Department, each licensee or applicant that performs non-drinking water compliance testing shall have at least one laboratory analyst demonstrate proficiency in non-drinking-water compliance testing by participating in proficiency testing provided by the Department, the EPA, or a proficiency testing service, if proficiency testing is available.~~

~~**D.** Each proficiency testing for non-drinking water compliance testing shall include at least one proficiency testing sample for each parameter for which an initial license or renewal license has been issued or requested and for which proficiency testing samples are available.~~

A. At least once in each 12-month period, and more often if requested by the Department, each licensee or applicant shall have at least one laboratory analyst participate in proficiency testing provided by the Department, the EPA, or a proficiency testing service that:
1. Includes at least one proficiency testing sample for each parameter for which an initial license or renewal license has been issued or requested and for which proficiency testing samples are available;
2. Demonstrates the laboratory analyst's proficiency in compliance testing of:
   a. Applicable drinking water parameters in Table 6.2.A, if:

i. The applicant plans to perform compliance testing of drinking water parameters, or
ii. The licensee is approved to perform compliance testing of drinking water parameters; and

b. Applicable parameters other than drinking water parameters, if:
i. The applicant plans to perform compliance testing of the parameters, or
ii. The licensee is approved to perform compliance testing of the parameters; and

3. If the licensee or applicant has been issued or has requested a license that includes approval for testing an analyte by different methods, may use the same proficiency testing sample for each method.

~~E.~~**B.** To demonstrate proficiency for a parameter, test results reported for the parameter shall be within acceptance limits established ~~by~~ for:
1. ~~For drinking~~ Drinking water inorganic chemistry parameters~~,~~ by the EPA, as provided in 40 CFR 141.23;
2. ~~For drinking~~ Drinking water organic chemistry parameters~~,~~ by the EPA, as provided in 40 CFR 141.24;
3. ~~For lead~~ Lead or copper in drinking water~~,~~ by the EPA, as provided in 40 CFR 141.89;
4. ~~For disinfection~~ Disinfection byproducts in drinking water~~,~~ by the EPA, as provided in 40 CFR 141.131; and
5. ~~For other~~ Other parameters~~,~~ by the EPA or the proficiency testing service.

~~F.~~**C.** A licensee or applicant shall ensure that:
1. Each proficiency testing sample accepted at the licensee's or applicant's laboratory is analyzed at the licensee's or applicant's laboratory;
2. Each proficiency testing sample is tested within the maximum holding times ~~required~~ allowed for its parameter, using the same procedures and techniques employed for routine sample testing, and calculating the holding time from the time the sample seal is broken or as indicated in the instructions accompanying the sample;
3. A proficiency testing service provides proficiency testing results directly to the Department;
4. If proficiency testing is provided by the Department, the licensee or applicant submits to the Department payment for the actual costs of the proficiency testing materials; and
5. If proficiency testing is not provided by the Department or the EPA, the licensee or applicant selects a proficiency testing service and contracts with and pays the proficiency testing service directly for proficiency testing.

~~G.~~**D.** The Department may submit blind proficiency testing samples to a licensed laboratory at any time during the license period.

R9-14-610. Approved Methods and References

A. A licensee or applicant shall ensure that compliance testing is performed according to an approved method and may use method alterations approved by the Department under subsection (C).

B. The approved methods listed by parameter in ~~Exhibit I, Table 1~~ Tables 6.2.A through 6.2.D are found in the following references, which are incorporated by reference with the modifications described below; are on file with the Department; include no future editions or amendments~~,~~; and are available as provided below.

Key Reference

A Environmental Monitoring and Support Laboratory–Cincinnati, EPA, Pub. No. EPA-/600/4-79-020 (600479020), Methods for Chemical Analysis of Water and Wastes (rev. March 1983), available at ~~http://nepis.epa.gov/pubtitleord.htm~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

A1 Environmental Monitoring and Support Laboratory–Cincinnati, EPA, Pub. No. EPA/600/R-94/111 (600R94111), Methods for the Determination of Metals in Environmental Samples: Supplement I (May 1994), available at ~~http://nepis.epa.gov/pubtitleord.htm~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

A2 Environmental Monitoring Systems Laboratory, EPA, Pub. No. EPA/600/R-93/100 (600R93100), Methods for the Determination of Inorganic Substances in Environmental Samples (August 1993), available at ~~http://nepis.epa.gov/pubtitleord.htm, modified to increase the maximum holding time from 48 hours to 14 days at 4° C for chlorinated, unacidified drinking water samples collected for determination of nitrate~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

~~A3 Technicon Industrial Systems, Industrial Method No. 380-75WE, Fluoride in Water and Wastewater (July 1977), available from Bran & Luebbe Analyzing Inc., 1025 Busch Parkway, Buffalo Grove, IL 60089.~~

~~A4 Office of Water, EPA, Pub. No. EPA 821 R 02 019, Method 1631, Revision E: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry (August 2002), available at http://www.epa.gov/waterscience/methods/1631.html.~~

~~A5 Technicon Industrial Systems, Industrial Method No. 129 71W, Fluoride in Water and Wastewater (December 1972), available from Bran & Luebbe Analyzing Inc., 1025 Busch Parkway, Buffalo Grove, IL 60089.~~

~~A6 Herbert P. Wagner et al., EPA, Pub. No. EPA 815 B 01 001, Method 317.0: Determination of Inorganic Oxyhalide Disinfection By Products in Drinking Water Using Ion Chromatography with the Addition of a Postcolumn Reagent for Trace Bromate Analysis (rev. 2.0 July 2001), available at www.epa.gov/safewater/methods/sourcalt.html.~~

~~A7 Herbert P. Wagner et al., EPA, Pub. No. EPA 815 R 05 007, Method 326.0: Determination of Inorganic Oxyhalide Disinfection By Products in Drinking Water Using Ion Chromatography Incorporating the Addition of a Suppressor Acidified Postcolumn Reagent for Trace Bromate Analysis (rev. 1.0 June 2002), available at www.epa.gov/safewater/methods/sourcalt.html.~~

~~A8 Teri A. Dattilio et al., EPA, Pub. No. EPA 815 R 05 008, Method 327.0: Determination of Chlorine Dioxide and Chlorite Ion in Drinking Water Using Lissamine Green B and Horseradish Peroxidase with Detection by Visible Spectrophotometry (rev. 1.1 May 2005), available at www.epa.gov/safewater/methods/sourcalt.html.~~

~~A9 B.B. Potter and J.C. Wimsatt, EPA, Pub. No. EPA/600/R 05/055, Method 415.3: Determination of Total Organic Carbon~~

~~and Specific UV Absorbance at 254 nm in Source and Drinking Water (rev. 1.1 February 2005), available at www.epa.gov/nerlcwww/ordmeth.htm.~~

A3 Technicon Industrial Systems, Industrial Method No. 380-75WE, Fluoride in Water and Wastewater (February 1976), available from Mequon Technology Center, 10520-C North Baehr Road, Mequon, WI 53092 or by calling (262) 241-7900.

A4 National Service Center for Environmental Publications (NSCEP), Online EPA Publication Title List available at http://nepis.epa.gov/EPA/html/Pubs/pubtitle.html or by calling (800) 490-9198. Publication numbers for the methods that are listed under this reference are:

1. Method 317.0, Rev 2.0, July 2001, EPA 815-B-01-001
2. Method 314.1, Rev 1.0, May 2005, EPA 815-R-05-009
3. Method 326.0, Rev 1.0, June 2000, EPA 815-R-03-007
4. Method 327.0, Rev 1.1, May 2005, EPA 815-R-05-008
5. Method 331.0, Rev 1.0, January 2005, EPA 815-R-05-007
6. Method 515.4, Rev 1.0, April 2000, EPA 800-R-00-016
7. Method 527, Rev 1.0, April 2005, EPA 815-R-05-005
8. Method 531.2, Rev 1.0, September 2001, EPA 815-B-01-002
9. Method 552.3, Rev 1.0, July 2003, EPA 815-B-03-002
10. Method 200.5, Rev 4.2, October 2003, EPA 600-R-06-115
11. Method 332, Rev 1.0, March 2005, EPA 600-R-05-049
12. Method 415.3, Rev 1.1, February2005, EPA 600-R-05-055
13. Method 415.3, Rev 1.2, September 2009, EPA 600-R-09-122
14. Method 521, Version 1.0, September 2004, EPA 600-R-05-054
15. Method 529, Rev 1.0, September 2002, EPA 600-R-05-052
16. Method 535, Rev 1.1, April 2005, EPA 600-R-05-053
17. Method 1631, Rev E, August 2002, EPA 821-R-02-019
18. Method 557, Version 1.0, September 2009, EPA 815-B-09-012
19. Method 524.4, May 2013, EPA 815-R-13-002
20. Method 524.3, Version 1.0, June 2009, EPA 815-B-09-009
21. Method 522, Version 1.0, September 2008, EPA 600-R-08-101
22. Method 1613, Rev B, October 1994, EPA 821-B-94-005
23. Method 245.7, Rev 2.0, February 2005, EPA 821-R-05-001
24. Method 1664, Rev B, February 2010, EPA 821-R-10-001
25. Method 1638, April 1995, EPA 821-R-95-031
26. Method OIA-1677 DW, January 2004, EPA 821-R-04-001
27. Method 1627, December 2011, Acid Mine Drainage, EPA 821-R-09-002
28. PCBs in Transformer Fluid and Oils, September 1982, EPA 600/4-81-045
29. Asbestos in Bulk Samples, December 1982, EPA 600/M4-82-020
30. Method 100.1, Asbestos Fibers, September 1993, EPA 600/4-83-043
31. Method 100.2, Asbestos Structures over 10m in Length, EPA/600/R-94/134
32. Method 1622, Cryptosporidium in Water, December 2005, EPA 815-R-05-001
33. Method 1623.1, Cryptosporidium and Giardia in Water, January 2012, EPA 816-R-12-001
34. Method 1682, Salmonella in Sewage Sludge, July 2006, EPA 821-R-06-014
35. Method 1605, Aeromonas in Finished Water by MF, October 2001, EPA 821-/R/01/034
36. Method 1604, Total coliforms and E.coli by MF, September 2002, EPA-821-02-024
37. Method 1601, Coliphage, April 2001, EPA 821-R-01-030
38. Method 1602, Coliphage, April 2001, EPA 821-R-01-029
39. Method 1623, Cryptosporidium and Giardia, December 2005, EPA 815-R-05-002
40. Method 537, September 2009, EPA/600/R-08/092
41. Method 302.0, September 2009, EPA-815-B-09-014
42. Method 539, November 2010, EPA 815-B-10-001
43. Method 218.7, November 2011, EPA 815-R-11-005
44. Method 334.0. September 2009, EPA 815-B-09-013

A5 EPA Pub. No. EPA 815-R-00-014 (815R00014), Volume 1, Methods for the Determination of Organic and Inorganic Compounds in Drinking Water (August 2000), available at http://nepis.epa.gov/EPA/html/Pubs/pubtitle.html or by calling (800) 490-9198, modified to require the following when testing for bromate using method 321.8: Samples must be preserved at the time of sampling with 50 mg ethylenediamine (EDA)/L of sample and must be analyzed within 28 days. Ion chromatography and post-column reaction or IC/ICP-MS must be used for monitoring of bromate for purposes of demonstrating eligibility of reduced monitoring, as prescribed in 40 CFR 141.132(b)(3)(ii).

A6 Lachat Instruments, QuikChem Method 10-204-00-1-X, Digestion and Distillation of Total Cyanide in Drinking and Wastewaters Using MICRO DIST and Determination of Cyanide by Flow Injection Analysis (rev. 2.1 November 30, 2000), available from Lachat Instruments, 6645 W. Mill Rd., Milwaukee, WI 53218-0204.

A7 Standard Test Methods for Trace Uranium in Water by Pulsed-Laser Phosphorimetry, ASTM D5174-97, 02, available

from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, W. Conshohocken, PA 19428-2959 or through www.astm.org.

B Herman L. Krieger, EPA, Pub. No. EPA-600/4-75-008 (6004755008), Interim Radiochemical Methodology for Drinking Water (March 1976), available ~~from National Technical Information Service, 5285 Prt. Royal Rd., Springfield, VA 22161~~ at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

C American Public Health Association et al., Standard Methods for the Examination of Water and Wastewater (~~19th ed. 1995~~ 22nd edition 2012), available from American Public Health Association, 800 I Street, NW, Washington, DC 20001~~.~~ or at http://www.standardmethods.org, with the approved method having the same last two digits in the method number as the year in which the method was approved by the Standard Methods Committee, as published for the individual methods in the 22nd edition.

C1 Hach Company, Hach Water Analysis Handbook (~~3rd ed. 1997~~ 5th edition 2008), available from Hach Company, P.O. Box 389, Loveland, CO 80539-0389.

C2 American Public Health Association et al., Standard Methods for the Examination of Water and Wastewater (~~20th ed. 1998~~ 21st edition 2005), available from American Public Health Association, 800 I St., NW, Washington, DC 20001~~, modified to require:~~.

~~a. For drinking water TOC testing:~~
~~i. That inorganic carbon be removed from each TOC sample before analysis,~~
~~ii. That each TOC sample not be filtered before analysis,~~
~~iii. That the pH of each TOC sample be checked and documented before analysis and that the test result be qualified in the final report if the sample pH was >2, and~~
~~iv. That each acidified TOC sample be analyzed within 28 days; and~~
~~b. For drinking water DOC testing:~~
~~i. That each DOC sample be filtered through a 0.45 um pore-diameter filter as soon as practical and no later than 48 hours after sampling,~~
~~ii. That each DOC sample be acidified after filtration to achieve a pH 2 with minimal addition of the acid specified in the method or by the instrument manufacturer,~~
~~iii. That each acidified DOC sample be analyzed within 28 days after sample collection,~~
~~iv. That inorganic carbon be removed from each DOC sample before analysis,~~
~~v. That water passed through the filter before filtration of the DOC sample serve as the filtered blank, and~~
~~vi. That the filtered blank be analyzed using procedures identical to those used for analysis of the DOC sample and have DOC < 0.5 mg/L;~~
~~c. For drinking water testing of UV-absorbing organic constituents:~~
~~i. That UV absorption be measured at 253.7 nm or 254 nm,~~
~~ii. That each UV sample be filtered through a 0.45 um pore-diameter filter before analysis,~~
~~iii. That the pH of UV samples not be adjusted, and~~
~~iv. That each UV sample be analyzed as soon as practical and no later than 48 hours after sampling; and~~
~~d. For drinking water disinfection byproducts testing by micro liquid-liquid extraction/GC-ECD using method 6251B, that each sample be extracted within 14 days after sample collection.~~

C3 Hach Method 10360, Luminescence Measurement of Dissolved Oxygen in Water and Wastewater and for Use in the Determination of BOD5 and cBOD5, Revision 1.2, October 2011, available from Hach Company, P.O. Box 389, Loveland, CO 80539-0389.

C4 Expedited Approval of Test Procedures for the Analysis of Contaminants Under the Safe Drinking Water Act, August 04, 2014, available at https://www.gpo.gov/fdsys/pkg/FR-2014-06-19/html/2014-14369.htm.

C5 Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; Analysis and Sampling Procedures; Final Rule, May 18, 2012, available at http://www.gpo.gov/fdsys/pkg/FR-2012-05-18/pdf/2012-10210.pdf.

C6 The quality control criteria and the modifications listed in the "Guidelines Establishing Test Procedures for the Analysis of Pollutants; Analytical Methods for Biological Pollutants in Wastewater and Sewage Sludge," March 26, 2007, available at http://www.epa.gov/fedrgstr/EPA-WATER/2007/March/Day-26/w1455.pdf.

C7 ChlordioX Plus "Chlorine Dioxide and Chlorite in Drinking Water by Amperometry using Disposable Sensors," November 2013, available from Palintest Ltd., Jamike Avenue, Suite 100, Erlanger, KY 41018.

C8 American Public Health Association et al., Standard Methods for the Examination of Water and Wastewater (20th ed. 1998), available from American Public Health Association, 800 I St., NW, Washington, DC 20001.

D Environmental Monitoring Systems Laboratory–Cincinnati, EPA, Pub. No. EPA/600/4-88/039 (600488039), Methods for the Determination of Organic Compounds in Drinking Water (rev. July 1991), available at ~~http://nepis.epa.gov/pubtitleord.htm~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

D1 Environmental Monitoring Systems Laboratory–Cincinnati, EPA, Pub. No. EPA/600/4-90/020 (600490020), Methods for the Determination of Organic Compounds in Drinking Water: Supplement I (July 1990), available at ~~http://nepis.epa.gov/pubtitleord.htm~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

D2 Environmental Monitoring Systems Laboratory–Cincinnati, EPA, Pub. No. EPA/600/R-92/129 (600R92129), Methods for the Determination of Organic Compounds in Drinking Water: Supplement II (August 1992), available at ~~http://nepis.epa.gov/pubtitleord.htm~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

D3 National Exposure Research Laboratory–Cincinnati, EPA, Pub. No. EPA/600/R-95/131 (600R95131), Methods for the Determination of Organic Compounds in Drinking Water: Supplement III (August 1995), available at ~~http://~~

~~nepis.epa.gov/pubtitleord.htm~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

D4 Office of Ground Water and Drinking Water Technical Support Center, EPA, Pub. No. EPA 815-R-05-004 (815R05004), Manual for the Certification of Laboratories Analyzing Drinking Water: Criteria and Procedures Quality Assurance (5th ~~ed.~~ edition January 2005), available at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

~~D5 J.W. Munch and W.J. Bashe, EPA, Method 549.2: Determination of Diquat and Paraquat in Drinking Water by Liquid-Solid Extraction and High Performance Liquid Chromatography with Ultraviolet Detection (rev. 1 June 1997), available at http://www.nemi.gov.~~

~~D6 Anne M. Pawlecki Vonderheide and David J. Munch, EPA, Method 515.3: Determination of Chlorinated Acids in Drinking Water by Liquid-Liquid Extraction, Derivatization and Gas Chromatography with Electron Capture Detection (rev. 1 July 1996), available at http://www.nemi.gov.~~

~~D7 M.V. Bassett et al., EPA, Pub. No. EPA 815-B-01-002, Method 531.2: Measurement of N-Methylcarbamoyloximes and N-Methylcarbamates in Water by Direct Aqueous Injection HPLC with Postcolumn Derivatization (rev. 1.0 September 2001), available at http://www.nemi.gov.~~

~~D8 S.C. Wendelken et al., EPA, Method 515.4: Determination of Chlorinated Acids in Drinking Water by Liquid Liquid Microextraction, Derivatization, and Fast Gas Chromatography with Electron Capture Detection (rev. 1.0 April 2000), available at http://www.nemi.gov.~~

~~D9 Ed K. Price et al., EPA, Pub. No. 815-R-05-005, Method 527: Determination of Selected Pesticides and Flame Retardants in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass Spectrometry (GC/MS) (rev. 1.0 April 2005), available at http://www.epa.gov/safewater/methods/sourcalt.html.~~

~~D10 J.W. Munch, EPA, Pub. No. 600/R-05/052, Method 529: Determination of Explosives and Related Compounds in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass Spectrometry (GC/MS) (rev. 1.0 September 2002), available at http://www.epa.gov/nerlcwww/ordmeth.htm.~~

~~D11 J.A. Shoemaker and M.V. Bassett, EPA, Pub. No. EPA/600/R-05/053, Method 535: Measurement of Chloroacetanilide and Other Acetamide Herbicide Degradates in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) (version 1.1 April 2005), available at http://www.epa.gov/nerlcwww/ordmeth.htm.~~

~~D12 J.W. Munch and M.V. Bassett, EPA, Pub. No. EPA/600/R-05/054, Method 521: Determination of Nitrosamines in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography with Large Volume Injection and Chemical Ionization Tandem Mass Spectrometry (MS/MS) (version 1.0 September 2004), available at http://www.epa.gov/nerlcwww/ordmeth.htm.~~

~~D13 M.M. Domino et al., EPA, Pub. No. EPA 815-B-03-002, Method 552.3: Determination of Haloacetic Acids and Dalapon in Drinking Water by Liquid-Liquid Extraction, Derivatization, and Gas Chromatography with Electron Capture Detection (rev. 1.0 July 2003), available at www.epa.gov/safewater/methods/sourcalt.html.~~

D5 Supplement I to the 5th edition of the Manual for the Certification of Laboratories Analyzing Drinking Water; EPA 815-F-08-006, June 2008, available at http://water.epa.gov/scitech/drinkingwater/labcert/index.cfm.

D6 Supplement II to the 5th edition of the Manual for the Certification of Laboratories Analyzing Drinking Water; EPA 815-F-12-006, November 2012, available at http://water.epa.gov/scitech/drinkingwater/labcert/index.cfm.

D7 LT2 Enhanced Surface Water Treatment Rule, January 05, 2006; available at http://water.epa.gov/lawsregs/rulesregs/sdwa/lt2/regulations.cfm.

D8 Modified Colitag®, ATP D05–0035—"Modified Colitag™ Test Method for the Simultaneous Detection of *E. coli* and other Total Coliforms in Water," August 28, 2009, available from CPI International, Inc., 5580 Skylane Blvd., Santa Rosa, CA, 95403 or by calling (800) 878–7654.

D9 Stage 2 Disinfectants and Disinfection Byproducts Rule, January 04, 2006, available at https://www.federalregister.gov/articles/2006/01/04/06-3/national-primary-drinking-water-regulations-stage-2-disinfectants-and-disinfection-byproducts-rule.

D10 National Primary Drinking Water Regulations: Ground Water Rule, 11/08/2006; available at https://www.federalregister.gov/articles/2006/11/08/06-8763/national-primary-drinking-water-regulations-ground-water-rule.

D11 Source Water Monitoring Guidance Manual for Public Water Systems for the Final Long Term 2 Enhanced Surface Water Treatment Rule; EPA 815-R06-005 (815R06005), February 2006, available at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

D12 Analytical Methods Recommended for Drinking Water Monitoring of Secondary Contaminants (PDF), EPA 815-B-14-005 (815B14005), January 2014, available at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

D13 Analytical Methods Approved for Drinking Water Compliance Monitoring under the Disinfection Byproduct Rules, EPA 815-B-14-004 (815B14004), January 2014, available at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

D14 National Primary Drinking Water Regulations: Revisions to the Total Coliform Rule; Final Rule; Federal Register / Vol. 78, No. 30 / Wednesday, February 13, 2013 / Rules and Regulations.

E 40 CFR Part 136 app. A (~~July 2005~~ January 2016), available ~~at~~ through ~~http://www.access.gpo.gov/nara/cfr/cfr-table-search.html)~~ http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr136_main_02.tpl.

E1 Office of Water Engineering and Analysis Division, EPA, Pub. No. EPA-821-R-93-010-A (821R93010A), Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater: Volume I (rev. 1 August 1993), available ~~from National Technical Information Service, 5285 Prt. Royal Rd., Springfield, VA 22161~~ at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

E2 EPA Methods 608.1, 608.2, 614, 614.1, 615, 617, 619, 622, 622.1, 627, and 632, found in Methods for the Determina-

tion of Nonconventional Pesticides in Municipal and Industrial Wastewater, EPA 821–R–92–002 (821R92002), April 1992, U.S. EPA, available at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

E3 "White House Document" Environmental Regulations and Technology-Control of Pathogens and Vector Attraction in Sewage Sludge, EPA 625/R-92/013 (625R92013), revised July 2003, available at http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

E4 Organochlorine Pesticides and PCBs in Wastewater Using Empore TM Disk; revised October 28, 1994, 3M Corporation, available from 3M Corporation, at http://www.horizontechinc.com/PDF/epa_methods/method_608_3m.pdf or by calling (800) 440-2966, ext. 67.

E5 American Public Health Association, et al., Standard Methods for the Examination of Water and Wastewater (18th edition 1992), available from American Public Health Association, 800 I St., NW, Washington, DC 20001.

E6 CEM Corporation, Closed Vessel Microwave Digestion of Wastewater Samples for Determination of Metals (April 1992), available from CEM Corporation, P.O. Box 200, 3100 Farm Road, Matthews, NC 28106-0200.

E7 Kelada-01, Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, and Thiocyanate, EPA 821–B–01–009, revision 1.2, August 2001, available from NTIS, 5285 Port Royal Road, Springfield, VA 22161 or by calling (800) 490-9198. EPA Note: A 450–W UV lamp may be used in this method instead of the 550–W lamp specified if it provides performance within the quality control acceptance criteria of the method in a given instrument. Similarly, modified flow cell configurations and flow conditions may be used in the method, provided that the quality control acceptance criteria are met.

E8 Methods for Analysis of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resource Investigations of the U.S. Geological Survey, Book 5, Chapter A1, 1985, USGS, available at U.S. Geological Survey Information Services, Box 25286, Federal Center, Denver, CO 80225-0425.

F Office of Solid Waste and Emergency Response, EPA, Pub. No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (3rd ~~ed.~~ edition 1986), as amended by Update I, July 1992; Update IIA, August 1993; Update II, September 1994; Update IIB, January 1995; Update III, December 1996; Update IIIA, ~~June 1999~~ April 1998; ~~and~~ Update IIIB, ~~July 2005~~ November 2004; Update IV, February 2007; and Update V, August 18, 2015, available from ~~National Technical Information Service~~ NTIS, 5285 ~~Prt.~~ Port Royal Rd., Springfield, VA 22161, by calling (800) 490-9198, and at http://www.epa.gov/epaoswer/hazwaste/test/main.htm.

F1 ~~Thomas A. Bellar and James J. Lichtenberg, EPA, Pub. No. EPA-600/4-81-045, The Determination of Polychlorinated Biphenyls in Transformer Fluid and Waste Oils (September 1982), available at http://nepis.epa.gov/pubtitleord.htm~~ 8260B AZ Vapor Method for the Determination of VOCs in Vapor Samples, Revision 0.0, dated April 14, 2009, available at http://www.azdhs.gov/documents/preparedness/state-laboratory/lab-licensure-certification/technical-resources/additional-resources/az-vapor-method.pdf.

F2 EPA, Method 5035A: Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples (draft rev. 1 July 2002), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~ https://www.epa.gov/homeland-security-research/epa-method-5035a-sw-846-closed-system-purge-and-trap-and-extraction.

F3 EPA, Method 4025: Screening for Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans (PCDD/Fs) by Immunoassay (rev. 0 October 2002), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~ https://www.epa.gov/hw-sw846/sw-846-test-method-4025-screening-polychlorinated-dibenzodioxins-and-polychlorinated.

F4 EPA, Method 3570: Microscale Solvent Extraction (MSE) (rev. 0 November 2002), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~https://www.epa.gov/homeland-security-research/epa-method-3570-sw-846-microscale-solvent-extraction-mse.

F5 EPA, Method 3511: Organic Compounds in Water by Microextraction (rev. 0 November 2002), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~https://www.epa.gov/hw-sw846/sw-846-test-method-3511-organic-compounds-water-microextraction.

F6 EPA, Method 5030C: Purge-and-Trap for Aqueous Samples (rev. 3 May 2003), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~https://www.epa.gov/homeland-security-research/epa-method-5030c-sw-846-purge-and-trap-aqueous-samples.

F7 EPA, Method 8015D: Nonhalogenated Organics Using GC/FID (rev. 4 June 2003), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~https://www.epa.gov/hw-sw846/validated-test-method-8015d-nonhalogenated-organics-using-gas-chromatographyflame.

F8 EPA, Method 5021A: Volatile Organic Compounds in Various Sample Matrices Using Equilibrium Headspace Analysis (rev. 1 June 2003), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~ https://www.epa.gov/hw-sw846/validated-test-method-5021a-volatile-organic-compounds-vocs-various-sample-matrices-using.

F9 EPA, Method 9015: Metal Cyanide Complexes by Anion Exchange Chromatography and UV Detection (rev. 0 November 2004), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~ https://www.epa.gov/hw-sw846/sw-846-test-method-9015-metal-cyanide-complexes-waters-and-waste-extracts-using-anion.

F10 EPA, Method 9013A: Cyanide Extraction Procedure for Solids and Oils (rev. 1 November 2004), available at ~~http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~https://www.epa.gov/hw-sw846/sw-846-test-method-9013a-cyanide-extraction-procedure-solids-and-oils.

~~F11 EPA, Method 7000B: Flame Atomic Absorption Spectrophotometry (rev. 2 January 1998), available at http://www.epa.gov/epaoswer/hazwaste/test/up4a.htm#7_series.~~

~~F12 EPA, Method 7010: Graphite Furnace Atomic Absorption Spectrophotometry (rev. 0 January 1998), available at http://www.epa.gov/epaoswer/hazwaste/test/up4a.htm#7_series.~~

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O 40 CFR Part 50, ~~(July 2006), available at http://www.access.gpo.gov/nara/cfr/cfr-table-search.html)~~ Chapter 1, Subchapter C (2015), available at http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr50_main_02.tpl.

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~~Z EPA, Pub. No. EPA 815-R-00-014, Volume 1, Methods for the Determination of Organic and Inorganic Compounds in Drinking Water (August 2000), available at http://nepis.epa.gov/pubtitleOW.htm, modified to require the following when testing for bromate using method 321.8:~~

~~a. That each sample be analyzed within 28 days after sampling, and~~

~~b. That the test result be qualified in the final report if the sample was not preserved with 50 mg of ethylenediamine per liter of sample at the time of sampling.~~

Z IDEXX Colilert*-18 and Quanti-Tray* Test Method for the Detection of Fecal Coliforms in Wastewater, available from IDEXX Laboratories, Inc., One IDEXX Dr., Westbrook, ME 04092 or by calling 1-800-548-6733.

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~~Z6 ASTM, Standard Test Methods for Determining Sediment Concentration in Water Samples (reapproved 2002), available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, W. Conshohocken, PA 19428-2959.~~

~~Z7 CEM Corporation, Closed Vessel Microwave Digestion of Wastewater Samples for Determination of Metals (April 1992), available from CEM Corporation, P.O. Box 200, Matthews, NC 28106-0200.~~

~~Z8 EPA, Pub. No. EPA-821-R-02-024, Method 1604: Total Coliforms and Escherichia coli in Water by Membrane Filtration Using a Simultaneous Detection Technique (MI Medium) (September 2002), available at http://www.epa.gov/safewater/methods/pdfs/met1604.pdf.~~

~~Z9 Lachat Instruments, QuikChem Method 10-204-00-1-X, Digestion and Distillation of Total Cyanide in Drinking and Wastewaters Using MICRO DIST and Determination of Cyanide by Flow Injection Analysis (rev. 2.1 November 30, 2000), available from Lachat Instruments, 6645 W. Mill Rd., Milwaukee, WI 53218.~~

Z5 CPI International Colitag® Product as a Test for Detection and Identification of Coliforms and *E. coli* Bacteria in Drinking Water and Source Water as Required in National Primary Drinking Water Regulations, August 2001, available from CPI International, 5580 Skylane Blvd, Santa Rosa, CA 95403, at http://www.cpiinternational.com, or by calling 1-800-878-7654.

Z6 m-ColiBlue 24 Test, Total Coliforms and *E. coli* Membrane Filtration Method with m-ColiBlue 24 Broth, Method No. 10029, Revision 2, August 17, 1999, available at Hach Company, P.O. Box 389, Loveland, Colorado 80539-0389 or by calling 1-800-227-4224.

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~~Z11~~Z10 OI Analytical/ALPKEM, Nitrogen, Total Kjeldahl, Method PAI-DK02 (Block Digestion, Steam Distillation, Colorimetric Detection) (rev. December 22, 1994), available from OI Analytical/ALPKEM, P.O. Box 9010, College Station, TX 77842.

~~Z12~~Z11 OI Analytical/ALPKEM, Nitrogen, Total Kjeldahl, Method PAI-DK03 (Block Digestion, Automated FIA Gas Diffusion) (rev. December 22, 1994), available from OI Analytical/ALPKEM, P.O. Box 9010, College Station, TX 77842.

~~Z13~~Z12 EPA, Pub. No. EPA-821-R-02-012, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (5th ~~ed.~~ edition October 2002), available ~~at www.epa.gov/waterscience/WET/disk2/~~ http://nepis.epa.gov/EPA/html/pubs/pubtitle.html or by calling (800) 490-9198.

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Z14 ReadyCult Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and *Escherichia coli* in Finished Waters, Version 1.1, January 2007, available from EM Science, EMD Millipore, 290 Concord Road, Billerica, MA 01821, at http://www.emdmillipore.com, or by calling 781-533-6000.

Z15 Chromocult® Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and *Escherichia coli* in Finished Waters, Version 1.0, November 2000, available from EM Science, EMD Millipore, 290 Concord Road, Billerica, MA 01821, at http://www.emdmillipore.com, or by calling 781-533-6000.

C. If an approved method is not available for a particular parameter, or a ~~different~~ method or method alteration that is not an approved method is required or authorized to be used for a particular parameter by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, a licensee or a person exempt under R9-14-602(4) or (5) may request approval

of an alternate method or method alteration by submitting to the Department ~~.~~ :

1. For an alternate method or method alteration required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, ~~the request shall include~~ the following information:
   a. The name, address, and telephone number of the licensee or person exempt under R9-14-602(4) or (5) submitting the request;
   b. The name, address, and telephone number of the laboratory for which approval of the alternate method or method alteration is requested;
   c. Identification of the parameter for which approval of the alternate method or method alteration is requested; and
   d. Reference to the EPA, ADEQ, U.S. Food and Drug Administration, or 9 A.A.C. 8 requirement or authorization for the use of the alternate method or method alteration for which approval is requested; ~~and~~
   ~~e. An alternate method or method alteration approval fee of $50, payable to the Arizona Department of Health Services, in the form of a certified check, business check, money order, or credit card payment.~~
2. For an alternate method or method alteration ~~that is not required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, the request shall include~~ to be used because an approved method is not available for a particular parameter, the following information:
   a. The name, address, and telephone number of the licensee or person exempt under R9-14-602(4) or (5) submitting the request;
   b. The name, address, and telephone number of the laboratory for which approval of the alternate method or method alteration is requested;
   c. Identification of the parameter for which approval of the alternate method or method alteration is requested; and
   d. Written justification for using the alternate method or method alteration for which approval is requested, including the following:
      i. A detailed description of the alternate method or method alteration;
      ii. References to published or other studies confirming the general applicability of the alternate method or method alteration to the parameter for which its use is intended;
      iii. Reference to the EPA, ADEQ, U.S. Food and Drug Administration, or 9 A.A.C. 8 requirement to test the parameter; and
      iv. Data that demonstrate the performance of the alternate method or method alteration in terms of accuracy, precision, reliability, ruggedness, ease of use, and ability to achieve a detection limit appropriate for the proposed use of the alternate method or method alteration; and

~~e.~~ 3. An alternate method or method alteration approval fee of $50, payable to the Arizona Department of Health Services, in the form of a certified check, business check, money order, or credit card payment.

~~3.~~ **D.** Before approving an alternate method or method alteration that is not required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8, the Department may require that the alternate method or method alteration be performed by a laboratory ~~at a~~ designated by the Department to verify that, using the parameter for which its use is intended, the alternate method or method alteration produces data that comply with subsection (C)(2)(d)(iv).

~~4.~~ **E.** The Department may approve an alternate method or method alteration if the Department determines:

~~a.~~ 1. One of the following:
   ~~i.~~ a. Use of the alternate method or method alteration is required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8; or
   ~~ii.~~ b. Use of the alternate method or method alteration is justified as described in subsection (C)(2)(d); and

~~b.~~ 2. If the alternate method or method alteration pertains to drinking water compliance testing, the EPA concurs that the alternate method or method alteration may be used.

F. The Department may rescind the approval of an alternate method or method alteration approved by the Department according to subsection (E), if, as applicable:
1. For an alternate method or method alteration requested under subsection (C)(1), the alternate method or method alteration is no longer required or authorized by the EPA, ADEQ, the U.S. Food and Drug Administration, or 9 A.A.C. 8; or
2. For an alternate method or method alteration requested under subsection (C)(2), an approved method becomes available for the particular parameter.

R9-14-611. Compliance Testing for Drinking Water ~~Compliance Testing~~ Parameters

A. A licensee for a laboratory at which compliance testing for drinking water ~~compliance testing~~ parameters is performed, including compliance testing performed according to 9 A.A.C. 8, Article 2, shall ensure that:
1. ~~The~~ Except as provided in subsection (B), the laboratory is operated in compliance with the guidelines in Key ~~Reference~~ References D4, D5, and D6, excluding the requirements for laboratory personnel education and experience;
2. Each sample for Arizona drinking water ~~sample for Arizona~~ parameter compliance testing is analyzed:
   a. ~~using~~ Using an approved method:
      ~~a.~~ i. Listed ~~under Exhibit I, Table 1, Section A,~~ in Table 6.2.A ~~Drinking Water Parameters~~; or

~~b.~~ ii. Approved by the Department for compliance testing for drinking water ~~compliance testing~~ parameters under ~~R9-14-610(C)~~ R9-14-610(E); and

b. If the approved method is from Key Reference C, following the quality control guidelines in Key Reference C associated with the approved method; and

3. If the licensee ~~desires to be licensed~~ requests approval to perform testing for vinyl chloride, the licensee also obtains ~~licensure~~ approval to perform testing for each of the analytes listed in 40 CFR 141.61(a)(2)-(21).

B. If an approved method does not include a specific quality control guideline, a licensee for a laboratory at which compliance testing for drinking water parameters is performed shall ensure that the laboratory is operated in compliance with the guidelines in Key References C4, D7, D9, D10, D11, D12, D13, or D14, as applicable.

R9-14-612. Compliance Testing for Wastewater ~~Compliance Testing~~ Parameters

A licensee for a laboratory at which ~~wastewater~~ compliance testing for wastewater parameters is performed shall ensure that:

1. The laboratory is operated in compliance with the guidelines in Key References C5 and C6; and
2. ~~each wastewater~~ Each sample for Arizona wastewater parameter compliance testing is analyzed:
   a. ~~using~~ Using an approved method:
      ~~1.~~ i. Listed ~~under Exhibit I, Table 1, Section B,~~ in Table 6.2.B ~~Wastewater Parameters~~; or
      ~~2.~~ ii. Approved by the Department for wastewater parameter compliance testing under ~~R9-14-610(C)~~ R9-14-610(E); and
   b. If the approved method is from Key Reference C, following the quality control guidelines in Key Reference C associated with the approved method.

R9-14-613. Compliance Testing for ~~Solid~~ Waste ~~Compliance Testing~~ Parameters

A. A licensee for a laboratory at which ~~solid waste~~ compliance testing for waste parameters is performed shall ensure that each ~~solid~~ waste sample for Arizona compliance testing is analyzed using an approved method:
1. Listed ~~under Exhibit I, Table 1, Section C,~~ in Table 6.2.C ~~Solid Waste Parameters~~; or
2. Approved by the Department for ~~solid~~ waste compliance testing under ~~R9-14-610(C)~~ R9-14-610(E).

B. A licensee for a laboratory at which ~~solid waste~~ compliance testing for waste parameters is performed using an 8000 series method from Key Reference F shall:
1. If the method includes specific quality control requirements, follow the specific quality control requirements in the method;
2. If the method does not include specific quality control requirements, follow all requirements in ~~EPA, Method 8000C: Determinative Chromatographic Separations (rev. 3 March 2003), incorporated by reference, on file with the Department, including no future editions or amendments, and available at http://www.epa.gov/epaoswer/hazwaste/test/new-meth.htm~~ Key Reference F14; and
3. If the method does not include specific sample extraction procedures, follow the procedures in the following from Key Reference F, as applicable:
   a. Method 3500B,
   b. Method 3600C, ~~and~~ or
   c. Method 5000.

C. A licensee for a laboratory at which ~~solid waste~~ compliance testing for waste parameters is performed using a non-8000 series method from Key Reference F shall comply with the following from Key Reference F, as applicable, according to the requirements of the specific method:
1. Method 4000, ~~and~~ or
2. ~~Method 7000A~~ Methods 7000B and 7010.

D. A licensee for a laboratory at which ~~solid waste~~ compliance testing for waste parameters is performed using a method from Key Reference F shall comply with Chapters 1 through 8 of Update IV, February 2007, of Key Reference F, as applicable, according to the requirements of the specific method.

R9-14-614. Compliance Testing for Air and Stack ~~Compliance Testing~~ Parameters

A licensee for a laboratory at which ~~air or stack~~ compliance testing for air or stack parameters is performed shall ensure that each air or stack sample for Arizona compliance testing is analyzed using an approved method:
1. Listed ~~under Exhibit I, Table 1, Section D,~~ in Table 6.2.D ~~Air and Stack Parameters~~; or
2. Approved by the Department for ~~air or stack~~ compliance testing for air or stack parameters under ~~R9-14-610(C)~~ R9-14-610(E).

R9-14-615. Quality Assurance

A. A licensee or applicant shall ensure that the analytical data produced at the licensee's or applicant's laboratory are of known and acceptable precision and accuracy, as prescribed by the approved method for each analysis or as prescribed by the limits described under subsection ~~(C)(9)~~ (C)(8), and are scientifically valid and defensible.

B. A licensee or applicant shall ~~have~~ establish, implement, and comply with a written quality assurance plan that contains the following and is available at the laboratory for Department review:
1. A title page identifying the laboratory and date of review and including the laboratory director's signature of approval;
2. A table of contents;

3. An organization chart or list of the laboratory personnel, including names, ~~line~~ lines of authority, and identification of principal quality assurance personnel;
4. A copy of the current laboratory license and a list of licensed parameters;
5. A statement of quality assurance objectives, including data quality objectives with precision and accuracy goals and the criteria for determining the acceptability of each testing;
6. Specifications for:
   a. Sample containers,
   b. Preparation of sample containers,
   c. Preservation of samples, and
   d. Maximum ~~allowable~~ holding times allowed;
7. A procedure for documenting laboratory receipt of samples and tracking of samples during laboratory testing;
8. A procedure for analytical instrument calibration, including frequency of calibration and complying with the requirements for calibration in subsection (C);
9. A procedure for compliance testing data reduction and validation and reporting of final results, including the identification and treatment of data outliers, the determination of the accuracy of data transcription, and all calculations;
10. A statement of the frequency of all quality control checks;
11. A statement of the acceptance criteria for all quality control checks;
12. Preventive maintenance procedures and schedules;
13. Assessment procedures for data acceptability, including appropriate procedures for manual integration of chromatograms and when manual integration is inappropriate;
14. Corrective action procedures to be taken when results from analytical quality control checks are unacceptable, including steps to demonstrate the presence of any interference if the precision, accuracy, or limit of quantitation of the reported compliance testing result is affected by the interference; and
15. Procedures for chain-of-custody documentation, including procedures for the documentation and reporting of any deviation from the sample handling or preservation requirements listed in this Section.

C. A licensee or applicant shall:

1. Have available at the laboratory all methods, equipment, reagents, and glassware necessary for the compliance testing for which the licensee or applicant is licensed or is requesting a license;
2. Use ~~and document the use of~~ only reagents of a grade equal to or greater than that required by the approved methods and document the use of the reagents;
3. Maintain and require each analyst to comply with a complete and current standard operating procedure that meets the requirements for each licensed method, which shall include at least:
   ~~a. A requirement that the method be performed in compliance with the requirements in the approved method;~~
   ~~b.~~a. A description of all procedures to be followed when the method is performed;
   ~~c.~~b. A list of the concentrations for calibration standards, check standards, and spikes;
   ~~d.~~c. Requirements for instrumental conditions and set up;
   ~~e.~~d. A requirement for frequency of calibration;
   ~~f.~~e. ~~Calculations for the quantitation of~~ The quantitative methods to be used to calculate the final concentration of an analyte in samples, ~~with the actual sample dilution~~ including any factors used in the calculations and the calibration algorithm used~~, which reflect the procedures followed~~; and
   ~~g.~~f. Requirements for preventative maintenance;
4. Calibrate each instrument as required by each approved method for which the equipment is used, as follows:
   a. If a calibration model is specified in the method, using the specified calibration model or, if another calibration model has been approved by the Department as a method alteration, using the calibration model approved as a method alteration;
   b. If multiple calibration models are included as options in the method, using one of the included calibration models or, if another calibration model has been approved by the Department as a method alteration, using the calibration model approved as a method alteration; or
   c. If the method does not include a calibration model, using the manufacturer's specifications for calibration;
5. Maintain calibration documentation, including documentation that demonstrates the calculations performed using each calibration model;
6. Develop, document, and maintain a current limit of detection and limit of quantitation for each compliance parameter for each instrument;
7. Develop each limit of detection using:
   a. The protocol in the applicable test method;
   b. The protocol in the applicable federal regulation; or
   c. A process that complies with the guidelines in Section D.1.2 of Chapter 5, Appendix D—Essential Quality Control Requirements, in ~~National Environmental Laboratory Accreditation Conference, EPA Pub. No. EPA/600/R-04/003, 2003 NELAC Standard (June 5, 2003), including no future editions or amendments, which is incorporated by reference, on file with the Department, and available from the National Environmental Labo-~~

~~ratory Accreditation Conference, US EPA ORD/NERL, Mailcode E243-05, RTP, NC 27711, or at www.epa.gov/nelac/~~ Key Reference H;

~~8. Maintain all compliance testing equipment in proper operating condition;~~

~~9.~~8. For each parameter tested at the laboratory for which quality control acceptance criteria are not specified in the approved method or by EPA or ADEQ:

a. Use default limits provided in ~~Exhibit H~~ Table 6.4; or

b. Statistically develop limits from historical data by:

i. Determining the mean and standard deviation for a minimum of 20 data points not invalidated for cause, excluding statistical outliers;

ii. Setting the limits no more than three standard deviations from the mean and in the detectable range, using as the lower end of the detectable range the limit of quantitation or the lowest standard value represented in the initial calibration; and

iii. Explaining the origin of the lower end of the detectable range in the laboratory's standard operating procedure;

~~10.~~9. Discard or segregate all expired standards or reagents;

~~11.~~10. Maintain a record showing the traceability of reagents; and

~~12.~~11. Ensure that a calibration model is not used or changed to avoid necessary instrument maintenance.

D. A licensee or applicant may submit a written request to the Department for an exemption from subsection (C)(1) for a specific parameter if the licensee or applicant documents:

1. ~~Documents that~~ That the approved method has been performed at the laboratory and that the analytical data generated were scientifically valid and defensible and of known and acceptable precision and accuracy; and
2. ~~Documents the~~ The licensee's or applicant's ability to obtain the equipment, reagent, or glassware necessary to perform the approved method.

E. The written request for an exemption under subsection (D) shall include:

1. The name, address, and main telephone number of the laboratory;
2. The name, address, and telephone number of the licensee or applicant submitting the request;
3. Identification of the parameter and the equipment, reagent, or glassware for which the licensee or applicant is requesting an exemption; and
4. The documentation described in subsections (D)(1) and (2).

F. The Department may approve a request for an exemption under subsection (D) if ~~it~~ the Department determines that the:

1. ~~That the approved~~ Approved method has been performed at the laboratory;
2. ~~That the analytical~~ Analytical data generated were scientifically valid and defensible and of known and acceptable precision and accuracy; and
3. ~~That the license~~ Licensee or applicant is able to obtain the equipment, reagent, or glassware necessary to perform the approved method.

G. A licensee or applicant shall ensure that a laboratory's written quality assurance plan is a separate document available at the laboratory and includes all of the components required in subsection (B), but a licensee or applicant may satisfy the components required in subsections (B)(3) through (15) through incorporating by reference provisions in separate documents, such as standard operating procedures.

H. ~~A~~ Except as provided in subsection (I), a licensee or applicant shall ensure that each laboratory standard operating procedure is a separate document available at the laboratory and includes all of the components required in subsection (C)(3)~~, but a licensee or applicant may satisfy the components required in subsections (C)(3)(f) and (g) through incorporating by reference provisions in separate documents such as other standard operating procedures~~.

I. A licensee or applicant may satisfy the components required in subsections (C)(3)(e) and (f) through incorporating by reference provisions in separate documents, such as other standard operating procedures.

R9-14-616. Operation

A licensee shall ensure that:

1. A compliance testing sample accepted at the licensee's laboratory is analyzed at:
   a. ~~At the~~ The licensee's laboratory,
   b. ~~At another~~ Another laboratory licensed under this Article, or
   c. ~~At a~~ A laboratory ~~exempted~~ exempt under ~~A.R.S. § 36-495.02(A) or~~ R9-14-602;
2. The facility and utilities required to operate equipment and perform compliance testing are maintained;
3. Environmental controls are maintained within the laboratory to ensure that laboratory environmental conditions do not affect analytical results beyond quality control limits established for the methods performed at the laboratory;
4. Storage, handling, and disposal of hazardous materials at the laboratory are in accordance with all state and federal regulations;
5. The following information is maintained for all supervisory, quality assurance, and analytical personnel:
   a. A summary of each individual's education and professional experience;
   b. Documentation of each individual's review of the quality assurance plan required under R9-14-615(B) and the approved methods and laboratory standard operating procedures for each area of testing performed by the individual or for which the individual has supervisory or quality assurance responsibility;

c. Documentation of each analyst's completion of training on the use of equipment and of proper laboratory technique, including the name of the analyst, the name of the instructor, the duration of the training, and the date of completion of the training;
d. Documentation of each analyst's completion of training classes, continuing education courses, seminars, and conferences that relate to the testing procedures used by the analyst for compliance testing;
e. Documentation of each analyst's completion of Initial Demonstration of Capability as required ~~by~~ for each approved method performed by the analyst, as applicable;
f. Documentation of each analyst's performance of proficiency testing, as applicable;
g. Documentation of each analyst's completion of training related to instrument calibration that includes:
i. Instruction on each calibration model that the analyst will use or for which the analyst will review data;
ii. For each calibration model described in subsection (5)(g)(i), the specific aspects of the calibration model that might compromise the data quality, such as detector saturation, lack of detector sensitivity, the calibration model's not accurately reflecting the calibration points, inappropriate extension of the calibration range, weighting factors, and dropping of mid-level calibration points without justification; and
iii. Instruction that a calibration model shall not be used or changed to avoid necessary instrument maintenance; and
h. Documentation of each individual's applicable certifications and specialized training; and
6. The licensee complies with all applicable federal, state, and local occupational safety and health regulations.

R9-14-617. Laboratory Records and Reports

A licensee or applicant shall ensure that:
1. Each record and report required to be maintained by this Article is available for inspection and copying by the Department during a laboratory's normal business hours;
2. The Department is permitted to remove copied records and reports from a laboratory;
3. The licensee or applicant maintains records and reports of compliance testing for at least five years after the date of compliance testing, with:
a. All records and reports for at least the most current two years maintained onsite at the laboratory and the remaining records and reports stored in a secure storage facility;
b. Each hard copy document containing data either maintained as a hard copy document or scanned into a PDF file or another electronic file format that preserves an exact copy of the hard copy data; and
c. All instrument-generated electronic data maintained in a reproducible format from which reports can be produced and printed;
4. No portion of a record or report of compliance testing is altered or deleted to hide or misrepresent any part of the data;
5. The licensee or applicant produces all records and reports requested by the Department within 24 hours after the request or, if the licensee or applicant requests a period longer than 24 hours, ~~a~~ the longer period of time agreed upon by the Department;
6. Upon Department request, the licensee or applicant makes available for inspection and copying the requested data from non-Arizona compliance samples;
7. A compliance testing record contains:
a. Sample information, including the following:
i. A unique sample identification assigned at the laboratory,
ii. The location or location code of sample collection,
iii. The sample collection date and time,
iv. The type of testing to be performed, and
v. The name of the individual who collected the sample;
b. The name and address of the client submitting the sample to the laboratory;
c. The name of the individual who submitted the sample to the laboratory;
d. The date and time of receipt of the sample at the laboratory;
e. The name of the individual who received the sample at the laboratory;
f. The dates and times of testing, including the date and time of each critical step;
g. The actual results of compliance testing, including all raw data, work sheets, and calculations performed;
h. The actual results of quality control data validating the test results, including the calibration and calculations performed;
i. The name of each analyst or who performed the testing; and
j. A copy of the final report; and
8. A final report of compliance testing contains:
a. The name, address, and telephone number of the laboratory;
b. The license number assigned to the laboratory by the Department;
c. Actual scientifically valid and defensible results of compliance testing in appropriate units of measure, obtained in accordance with an approved method and quality assurance plan;

d. Qualified results of compliance testing not obtained in accordance with an approved method and quality assurance plan;
e. A list of each approved method used to obtain the reported results;
f. Sample information, including the following:
i. The unique sample identification assigned at the laboratory,
ii. The location or location code of sample collection,
iii. The sample collection date and time,
iv. The name of the individual who collected the sample,
v. The name of the client that submitted the sample to the laboratory, and
vi. The name of the individual who submitted the sample to the laboratory;
g. The date of analysis for each parameter reported;
h. The date of the final report; and
i. The laboratory director's or designee's signature.

R9-14-620. Changes to a License

A. During the term of a license, a licensee may request to have one or more parameters added to the license.
B. To request to have one or more parameters added to a license, a licensee shall submit to the Department:
1. A written request that includes:
a. The name, address, and telephone number of the licensee submitting the request;
b. The name, address, and telephone number of the laboratory for which the addition is requested; and
c. Identification of each parameter requested to be added;
2. The applicable method and instrumentation fees, as determined according to Tables ~~1 and 2 in Exhibit I~~ 6.2.A, 6.2.B, 6.2.C, 6.2.D, 6.2.E, and 6.3, payable to the Arizona Department of Health Services by credit card; certified check; business check; or money order; or, if the owner is an Arizona state agency, purchase order;
3. If the addition results in a different Level of license, the difference between the application fee paid with the most recent application and the application fee for the new Level of license required under R9-14-607(A)(2), payable to the Arizona Department of Health Services as provided in subsection (B)(2); and
4. The following for each parameter requested to be added:
a. The limit of detection, if applicable;
b. A copy of a proficiency testing report; and
c. A copy of the standard operating procedure.
C. The Department may conduct a laboratory inspection during the substantive review period for a request to have one or more parameters added to a license.
D. The Department shall process a request to have one or more parameters added to a license as provided in R9-14-621.
E. A licensee may ~~request~~ submit up to three requests for deletion of parameters ~~at no charge three times~~ during a license period at no charge, but shall pay $17 per ~~parameter~~ request for ~~the fourth and~~ each subsequent request for deletion of parameters submitted ~~requested~~ during ~~a~~ the license period.

R9-14-621. Time-frames

A. The overall time-frame described in A.R.S. § 41-1072 for each type of approval granted by the Department under this Article is set forth in Table ~~1~~ 6.1.
1. An applicant and the Department may agree in writing to extend the substantive review time-frame and the overall time-frame.
2. An extension of the substantive review time-frame and the overall time-frame may not exceed 25% of the overall time-frame.
B. The administrative completeness review time-frame described in A.R.S. § 41-1072 for each type of approval granted by the Department under this Article is set forth in Table ~~1~~ 6.1 and begins on the date that the Department receives an application or request for approval.
1. The Department shall send a notice of administrative completeness or deficiencies to an applicant within the administrative completeness review time-frame.
a. A notice of deficiencies shall list each deficiency and the information or items needed to complete the application or request for approval.
b. The administrative completeness review time-frame and the overall time-frame are suspended from the date that a notice of deficiencies is sent until the date that the Department receives all of the missing information or items from an applicant.
2. If an applicant fails to submit to the Department all of the information and items listed in a notice of deficiencies within 60 days after the date that the Department sent the notice of deficiencies, the Department shall consider the application or request for approval withdrawn ~~and deny the license or other approval requested~~.
3. If the Department issues a license or other approval to an applicant during the administrative completeness review time-frame, the Department shall not issue a separate written notice of administrative completeness.
C. The substantive review time-frame described in A.R.S. § 41-1072 is set forth in Table ~~1~~ 6.1 and begins on the date of a notice of administrative completeness.

1. As part of the substantive review for an initial license application, the Department may conduct a laboratory inspection, investigation, or proficiency testing, or a combination of the three, as described in R9-14-605.
   a. The Department shall commence a laboratory inspection, investigation, or proficiency testing, or combination of the three, no more than 30 days after notice of administrative completeness has been mailed for an in-state laboratory or no more than 60 days after notice of administrative completeness has been mailed for an out-of-state laboratory.
   b. The Department and an applicant may mutually agree in writing to schedule a laboratory inspection, proficiency testing, or investigation later than the date required under subsection (C)(1)(a).
2. The Department shall send written notification of approval or denial of a license or other approval to an applicant within the substantive review time-frame.
3. During the substantive review time-frame, the Department may make one comprehensive written request for additional information, unless the Department and applicant have agreed in writing to allow the Department to submit supplemental requests for information.
4. If the Department issues a comprehensive written request or a supplemental request for information, the substantive review time-frame and the overall time-frame are suspended from the date that the Department issues the request until the date that the Department receives all of the information requested.
5. If an applicant fails to submit to the Department all of the information and items listed in a comprehensive written request or a supplemental request for information within 60 days after the date that the Department sent the comprehensive written request or supplemental request for information, the Department shall deny the license or other approval requested.
6. The Department shall grant a license or other approval unless:
   a. An applicant fails to submit requested information or a requested item as described in subsection (B)(2) or (C)(5);
   b. For an initial license application or a regular license renewal application where the regular license is not suspended, the Department determines that grounds to deny the license exist under A.R.S. § 36-495.09;
   c. For a regular license renewal application where the regular license is suspended, the Department determines that the licensee is not in full compliance with the corrective action plan; A.R.S. Title 36, Chapter 4.3; or this Article;
   d. For a request for approval of an alternate method or method alteration, the Department determines that the alternate method or method alteration does not meet the standard for approval under ~~R9-14-610(C)(4)~~ R9-14-610(E); or
   e. For a request for approval of an exemption under R9-14-615(D), the Department determines that the request does not meet the standard for approval under R9-14-615(F).
7. If the Department denies a license or other approval, the Department shall send to the applicant a written notice of denial setting forth the reasons for denial and all other information required by A.R.S. § 41-1076.

Table ~~1.~~6.1. Time-frames (in days)

Type of Approval	Statutory Authority	Overall Time-frame	Administrative Completeness Review Time-frame	Substantive Review Time-frame
Initial License–In-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	201	21	180
Initial License–Out-of-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	231	21	210
Regular License Renewal–In-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	37	14	23
Regular License Renewal–Out-of-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07, 36-495.14	67	14	53
Regular License Renewal–In-State Laboratory with Provisional License	A.R.S. §§ 36-495.01, 36-495.03, 36-495.05, 36-495.06, 36-495.07	70	21	49

Regular License Renewal–Out-of-State Laboratory with Provisional License	A.R.S. §§ 36-495.01, 36-495.03, 36-495.05, 36-495.06, 36-495.07, 36-495.14	100	21	79
Request for Approval of an Alternate Method or Method Alteration–Required or Authorized by EPA/ADEQ	A.R.S. §§ 36-495.01, 36-495.06	105	15	90
Request for Approval of an Alternate Method or Method Alteration ~~Not Required or Authorized by EPA/ADEQ~~ Due to an Approved Method Not Being Available	A.R.S. §§ 36-495.01, 36-495.06	210	30	180
Request for Approval of an Exemption under R9-14-615(D)	A.R.S. § 36-495.01	60	15	45
Request to Have One or More Parameters Added to a License under R9-14-620 – In-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	91	21	70
Request to Have One or More Parameters Added to a License under R9-14-620 – Out-of-State Laboratory	A.R.S. §§ 36-495.01, 36-495.03, 36-495.06, 36-495.07	121	21	100

EXHIBIT I. ~~**APPROVED METHODS; METHOD FEES; INSTRUMENTATION FEES**~~ **Repealed**

~~**Table 1. Approved Methods; Method Fees**~~

~~**SECTION A. DRINKING WATER PARAMETERS**~~			
~~**1. Microbiology of Drinking Water**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Aeromonas~~	~~Z1~~	~~1605~~	~~$228~~
~~Coliforms, Fecal~~	~~C2~~	~~9221E~~	~~$228~~
		~~9222D~~	~~$228~~
	~~C1~~	~~Hach 8001~~	~~$228~~
~~Coliforms, Total, by Colilert (ONPG-MUG)~~	~~C2~~	~~9223B~~	~~$152~~
~~Coliforms, Total, by Colisure~~	~~C2~~	~~9223B~~	~~$152~~
~~Coliforms, Total, by Membrane Filtration~~	~~C2~~	~~9222B~~	~~$228~~
		~~9222C~~	~~$228~~
~~Coliforms, Total and *E. coli*, by Membrane Filtration~~	~~Z8~~	~~1604~~	~~$228~~
~~Coliforms, Total, by Multiple Tube Fermentation~~	~~C2~~	~~9221B and C~~	~~$228~~
	~~C1~~	~~Hach 8001~~	~~$228~~
~~Coliforms, Total, by Presence/Absence~~	~~C2~~	~~9221D~~	~~$228~~
~~*Escherichia coli*~~	~~X~~	~~Tube Procedure~~	~~$228~~
		~~Membrane Filter Procedure~~	~~$228~~
~~*Cryptosporidium*~~	~~P4~~	~~1622~~	~~$381~~
~~*Giardia* and *Cryptosporidium*~~	~~P5~~	~~1623~~	~~$381~~

~~Heterotrophic Plate Count~~	~~C2~~	~~9215B~~	~~$152~~
	~~Z4~~	~~SimPlate~~	~~$152~~
~~Microscopic Particulate Analysis~~	~~P1~~	~~910/9-92-029~~	~~$228~~
~~Viruses~~	~~P2~~	~~600/R-95/178~~	~~$381~~
~~2. Inorganic Chemistry and Physical Properties of Drinking Water~~			
~~Description~~	**~~Reference~~**	**~~Method/s~~**	**~~Fee Per Method~~**
~~Alkalinity~~	~~C2~~	~~2320B~~	~~$19~~
~~Asbestos~~	~~H1~~	~~100.1~~	~~$503~~
	~~H2~~	~~100.2~~	~~$503~~
~~Bromate~~	~~A6~~	~~317.0~~	~~$76~~
	~~A7~~	~~326.0~~	~~$76~~
	~~Z~~	~~300.1~~	~~$26~~
		~~321.8~~	~~$152~~
~~Bromide~~	~~A2~~	~~300.0~~	~~$26~~
	~~A6~~	~~317.0~~	~~$76~~
	~~A7~~	~~326.0~~	~~$76~~
	~~Z~~	~~300.1~~	~~$26~~
~~Calcium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
		~~3500-Ca D~~	~~$76~~
~~Carbon, Dissolved Organic~~	~~A9~~	~~415.3~~	~~$76~~
	~~C2~~	~~5310B~~	~~$39~~
		~~5310C~~	~~$39~~
		~~5310D~~	~~$39~~
~~Carbon, Total Organic~~	~~A9~~	~~415.3~~	~~$76~~
	~~C2~~	~~5310B~~	~~$39~~
		~~5310C~~	~~$39~~
		~~5310D~~	~~$39~~
~~Chloride~~	~~A2~~	~~300.0~~	~~$26~~
	~~C2~~	~~4500-Cl B~~	~~$39~~
		~~4500-Cl D~~	~~$39~~
		~~4110B~~	~~$26~~
~~Chloramine~~	~~C2~~	~~4500-Cl D~~	~~$39~~
		~~4500-Cl F~~	~~$39~~
		~~4500-Cl G~~	~~$76~~

~~Chlorine~~	~~C2~~	~~4500-Cl D~~	~~$39~~
		~~4500-Cl E~~	~~$39~~
		~~4500-Cl F~~	~~$39~~
		~~4500-Cl G~~	~~$39~~
		~~4500-Cl H~~	~~$39~~
		~~4500-Cl I~~	~~$39~~
	~~C1~~	~~Hach 8168~~	~~$39~~
		~~Hach 8167~~	~~$39~~
		~~Hach 8370~~	~~$39~~
		~~Hach 8021~~	~~$39~~
~~Chlorine Dioxide~~	~~A8~~	~~327.0~~	~~$76~~
	~~C2~~	~~4500-ClO2 C~~	~~$39~~
		~~4500-ClO2 D~~	~~$76~~
		~~4500-ClO2 E~~	~~$39~~
~~Chlorite~~	~~A2~~	~~300.0~~	~~$26~~
	~~A6~~	~~317.0~~	~~$76~~
	~~A7~~	~~326.0~~	~~$76~~
	~~A8~~	~~327.0~~	~~$76~~
	~~Z~~	~~300.1~~	~~$26~~
~~Color~~	~~C2~~	~~2120B~~	~~$32~~
~~Corrosivity~~	~~C2~~	~~2330B~~	~~$39~~
~~Cyanide~~	~~A2~~	~~335.4~~	~~$76~~
	~~C2~~	~~4500-CN B~~	~~$7~~
		~~4500-CN C~~	~~$13~~
		~~4500-CN E~~	~~$76~~
		~~4500-CN F~~	~~$76~~
	~~Z9~~	~~QuikChem 10-204-00-1-X~~	~~$76~~
~~Cyanide, Amenable~~	~~C2~~	~~4500-CN G~~	~~$76~~
~~Fluoride~~	~~A2~~	~~300.0~~	~~$26~~
	~~A3~~	~~380-75WE~~	~~$39~~
	~~C2~~	~~4500-F B~~	~~$39~~
		~~4500-F C~~	~~$26~~
		~~4500-F D~~	~~$39~~
		~~4500-F E~~	~~$39~~
		~~4110B~~	~~$26~~
	~~C1~~	~~Hach 8029~~	~~$39~~

~~Hardness~~	~~A1~~	~~200.7, Sum of Ca and Mg as their carbonates~~	~~$10~~
	~~C2~~	~~2340 B, Sum of Ca and Mg as their carbonates~~	~~$10~~
		~~2340 C~~	~~$39~~
~~Magnesium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
~~Methylene Blue Active Substances~~	~~C2~~	~~5540 C~~	~~$39~~
~~Nitrate~~	~~A2~~	~~353.2~~	~~$76~~
		~~300.0~~	~~$26~~
	~~C2~~	~~4500-NO_3 D~~	~~$39~~
		~~4500-NO_3 E~~	~~$76~~
		~~4500-NO_3 F~~	~~$76~~
		~~4110B~~	~~$26~~
~~Nitrite~~	~~A2~~	~~353.2~~	~~$76~~
		~~300.0~~	~~$26~~
	~~C2~~	~~4500-NO_2 B~~	~~$76~~
		~~4500-NO_3 E~~	~~$76~~
		~~4500-NO_3 F~~	~~$76~~
		~~4110B~~	~~$26~~
~~Odor~~	~~C2~~	~~2150B~~	~~$32~~
~~Orthophosphate~~	~~A2~~	~~365.1~~	~~$76~~
		~~300.0~~	~~$26~~
	~~C2~~	~~4500-P E~~	~~$76~~
		~~4500-P F~~	~~$76~~
		~~4110B~~	~~$26~~
~~Ozone~~	~~C~~	~~4500-O_3 B~~	~~$39~~
~~Perchlorate~~	~~Z~~	~~314.0~~	~~$76~~
		~~314.1~~	~~$76~~
		~~331~~	~~$152~~
		~~332~~	~~$152~~
~~pH (Hydrogen Ion)~~	~~A~~	~~150.1~~	~~$39~~
		~~150.2~~	~~$39~~
	~~C2~~	~~4500-H B~~	~~$39~~
	~~C1~~	~~Hach 8156~~	~~$39~~
~~Residue, Filterable (TDS)~~	~~C2~~	~~2540 C~~	~~$39~~
~~Sediment Concentration~~	~~Z6~~	~~D 3977-979~~	~~$13~~

~~Silica~~	~~A1~~	~~200.7~~	~~$10~~
	~~C2~~	~~4500-Si C~~	~~$76~~
		~~4500-Si D~~	~~$76~~
		~~4500-Si E~~	~~$76~~
~~Sodium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
~~Specific Conductance~~	~~C2~~	~~2510B~~	~~$39~~
	~~C1~~	~~Hach 8160~~	~~$39~~
~~Sulfate~~	~~A2~~	~~300.0~~	~~$26~~
		~~375.2~~	~~$76~~
	~~C2~~	~~4500-SO4 C~~	~~$76~~
		~~4500-SO4 D~~	~~$76~~
		~~4500-SO4 E~~	~~$76~~
		~~4500-SO4 F~~	~~$76~~
		~~4110B~~	~~$26~~
~~Temperature, Degrees Celsius~~	~~C2~~	~~2550~~	~~$13~~
~~Turbidity, Nephelometric (NTU)~~	~~A2~~	~~180.1~~	~~$39~~
	~~C2~~	~~2130B~~	~~$39~~
~~UV-Absorbing Organic Constituents~~	~~C2~~	~~5910B~~	~~$76~~
~~**3. Metals in Drinking Water**~~			
~~**a. Sample Preparation for Metals in Drinking Water**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Acid Extractable Metals~~	~~C~~	~~3030C~~	~~$7~~
~~Microwave Assisted Digestion~~	~~C~~	~~3030K~~	~~$7~~
~~Nitric Acid~~	~~C~~	~~3030E~~	~~$7~~
~~Nitric Acid/Hydrochloric Acid~~	~~C~~	~~3030F~~	~~$7~~
~~Nitric Acid/Perchloric Acid~~	~~C~~	~~3030H~~	~~$7~~
~~Nitric Acid/Perchloric Acid/Hydrofluoric Acid~~	~~C~~	~~3030I~~	~~$7~~
~~Nitric Acid/Sulfuric Acid~~	~~C~~	~~3030G~~	~~$7~~
~~Preliminary Filtration~~	~~C~~	~~3030B~~	~~$7~~
~~**b. Methods to Analyze Metals in Drinking Water**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Aluminum~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
		~~3113B~~	~~$26~~

~~Antimony~~	~~A1~~	~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
~~Arsenic~~	~~A1~~	~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
		~~3114B~~	~~$76~~
~~Barium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
		~~3113B~~	~~$26~~
~~Beryllium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
~~Cadmium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
~~Chromium, Total~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
~~Copper~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
~~Iron~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
~~Lead~~	~~A1~~	~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~

~~Manganese~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
~~Mercury~~	~~A~~	~~245.2~~	~~$52~~
	~~A1~~	~~245.1~~	~~$52~~
		~~200.8~~	~~$26~~
	~~C~~	~~3112B~~	~~$52~~
~~Nickel~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
~~Selenium~~	~~A1~~	~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
		~~3114B~~	~~$76~~
~~Silver~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
~~Strontium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3500-Sr B~~	~~$26~~
		~~3500-Sr C~~	~~$20~~
		~~3500-Sr D~~	~~$26~~
~~Thallium~~	~~A1~~	~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
~~Uranium~~	~~A1~~	~~200.8~~	~~$26~~
~~Zinc~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
~~**4. Organic Chemistry of Drinking Water**~~			
~~**a. Methods to Comply with National Primary Drinking Water Regulations**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~

~~Disinfectant Byproducts, Solvents and Pesticides:~~ ~~Alachlor~~ ~~Atrazine~~ ~~Dibromochloropropane~~ ~~Endrin~~ ~~Ethylene dibromide~~ ~~Heptachlor~~ ~~Heptachlorepoxide~~ ~~Hexachlorobenzene~~ ~~Hexachlorocyclopentadiene~~ ~~Lindane~~ ~~Methoxychlor~~ ~~Simazine~~ ~~1,1,2-Trichloroethane~~ ~~Trichloroethylene~~ ~~1,1,1-Trichloroethane~~ ~~Tetrachloroethylene~~ ~~Carbontetrachloride~~ ~~Chloroform~~ ~~Bromodichloromethane~~ ~~Dibromochloromethane~~ ~~Bromoform~~ ~~Total Trihalomethanes~~	~~D3~~	~~551.1 (1.0)~~	~~$116~~
~~VOCs by GC:~~ ~~Benzene~~ ~~Carbon Tetrachloride~~ ~~(mono) Chlorobenzene~~ ~~o-Dichlorobenzene~~ ~~para-Dichlorobenzene~~ ~~1,2-Dichloroethane~~ ~~cis-1,2-Dichloroethylene~~ ~~Trans-1,2-Dichloroethylene~~ ~~Dichloromethane~~ ~~1,2-Dichloropropane~~ ~~Ethylbenzene~~ ~~Styrene~~ ~~Tetrachloroethylene~~ ~~1,1,1-Trichlorothane~~ ~~Trichloroethylene~~ ~~Toluene~~ ~~1,2,4-Trichlorobenzene~~ ~~1,1-Dichloroethylene~~ ~~1,1,2-Trichloroethane~~ ~~Vinyl chloride~~ ~~Xylenes, Total~~ ~~Chloroform~~ ~~Bromodichloromethane~~ ~~Dibromochloromethane~~ ~~Bromoform~~ ~~Total Trihalomethanes~~	~~D3~~	~~502.2 (2.1)~~	~~$152~~

~~VOCs by GC-MS:~~ ~~Benzene~~ ~~Carbon Tetrachloride~~ ~~(mono) Chlorobenzene~~ ~~o-Dichlorobenzene~~ ~~para-Dichlorobenzene~~ ~~1,2-Dichloroethane~~ ~~cis-1,2-Dichloroethylene~~ ~~Trans-1,2-Dichloroethylene~~ ~~Dichloromethane~~ ~~1,2-Dichloropropane~~ ~~Ethylbenzene~~ ~~Styrene~~ ~~Tetrachloroethylene~~ ~~1,1,1-Trichlorothane~~ ~~Trichloroethylene~~ ~~Toluene~~ ~~1,2,4-Trichlorobenzene~~ ~~1,1 Dichloroethylene~~ ~~1,1,2-Trichloroethane~~ ~~Vinyl Chloride~~ ~~Xylenes, Total~~ ~~Chloroform~~ ~~Bromodichloromethane~~ ~~Dibromochloromethane~~ ~~Bromoform~~ ~~Total Trihalomethanes~~	~~D3~~	~~524.2 (4.1)~~	~~$152~~
~~EDB/DBCP~~	~~D3~~	~~504.1 (1.1)~~	~~$116~~
~~Pesticides and PCBs by GC (Microextraction):~~ ~~Alachlor~~ ~~Atrazine~~ ~~Chlorodane~~ ~~Endrin~~ ~~Heptachlor~~ ~~Heptachlor Epoxide~~ ~~Hexachlorobenzene~~ ~~Hexachlorocyclopentadiene~~ ~~Lindane~~ ~~Methoxychlor~~ ~~Aroclor 1016~~ ~~Aroclor 1221~~ ~~Aroclor 1232~~ ~~Aroclor 1242~~ ~~Aroclor 1248~~ ~~Aroclor 1254~~ ~~Aroclor 1260~~ ~~Simazine~~ ~~Toxaphene~~	~~D3~~	~~505 (2.1)~~	~~$152~~
~~Phthalate and Adipate Esters by GC-PID:~~ ~~Di (2-ethylhexyl)adipate~~ ~~Di (2-ethylhexyl)phthalate~~	~~D3~~	~~506 (1.1)~~	~~$116~~
~~Pesticides by GC-NPD~~ ~~Atrazine~~ ~~Alachlor~~ ~~Simazine~~	~~D3~~	~~507 (2.1)~~	~~$116~~

~~Chlorinated Pesticides by GC-ECD:~~ ~~Chlordane~~ ~~Endrin~~ ~~Heptachlor~~ ~~Heptachlor Epoxide~~ ~~Hexachlorobenzene~~ ~~Hexachlorocyclopentadiene~~ ~~Lindane~~ ~~Methoxychlor~~ ~~Aroclor 1016~~ ~~Aroclor 1221~~ ~~Aroclor 1232~~ ~~Aroclor 1242~~ ~~Aroclor 1248~~ ~~Aroclor 1254~~ ~~Aroclor 1260~~ ~~Toxaphene~~	~~D3~~	~~508 (3.1)~~	~~$152~~
~~Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD:~~ ~~Alachlor~~ ~~Atrazine~~ ~~Chlorodane~~ ~~Endrin~~ ~~Heptachlor~~ ~~Heptachlor Epoxide~~ ~~Hexachlorobenzene~~ ~~Hexachlorocyclopentadiene~~ ~~Lindane~~ ~~Methoxychlor~~ ~~Aroclor 1016~~ ~~Aroclor 1221~~ ~~Aroclor 1232~~ ~~Aroclor 1242~~ ~~Aroclor 1248~~ ~~Aroclor 1254~~ ~~Aroclor 1260~~ ~~Simazine~~ ~~Toxaphene~~	~~D3~~	~~508.1(2.0)~~	~~$152~~
~~Organics by GC-MS:~~ ~~Alachlor~~ ~~Atrazine~~ ~~Benzo(a)pyrene~~ ~~Chlorodane~~ ~~Di (2-ethylhexyl)adipate~~ ~~Di (2-ethylhexyl)phthalate~~ ~~Endrin~~ ~~Heptachlor~~ ~~Heptachlor Epoxide~~ ~~Hexachlorobenzene~~ ~~Hexachlorocyclopentadiene~~ ~~Lindane~~ ~~Methoxychlor~~ ~~Aroclor 1016~~ ~~Aroclor 1221~~ ~~Aroclor 1232~~ ~~Aroclor 1242~~ ~~Aroclor 1248~~ ~~Aroclor 1254~~ ~~Aroclor 1260~~ ~~Pentachlorophenol~~ ~~Simazine~~ ~~Toxaphene~~	~~D3~~	~~525.2 (2.0)~~	~~$152~~

~~Carbamates by HPLC/Post Column:~~ ~~Carbofuran~~ ~~Oxamyl~~	~~D3~~	~~531.1 (3.1)~~	~~$116~~
	~~D7~~	~~531.2~~	~~$116~~
~~Chlorinated Acids and Dalapon by GC-ECD:~~ ~~2,4-D~~ ~~Dalapon~~ ~~Dinoseb~~ ~~Pentachlorophenol~~ ~~Picloram~~ ~~Silvex (2,4,5-TP)~~	~~D~~	~~515.1 (4.0)~~	~~$116~~
	~~D6~~	~~515.3 (1.0)~~	~~$116~~
	~~D8~~	~~515.4 (1.0)~~	~~$116~~
~~Chlorinated Acids By GC-ECD~~ ~~2,4-D~~ ~~Dinoseb~~ ~~Pentachlorophenol~~ ~~Picloram~~ ~~Silvex (2,4,5-TP)~~	~~D3~~	~~515.2 (1.1)~~	~~$116~~
~~PAHs By HPLC/UV/FL:~~ ~~Benzo(a)pyrene~~	~~D1~~	~~550~~	~~$116~~
		~~550.1~~	~~$116~~
~~Haloacetic Acids and Dalapon by GC-ECD:~~ ~~Dalapon~~ ~~Monochloroacetic Acid~~ ~~Dichloroacetic Acid~~ ~~Trichloroacetic Acid~~ ~~Monobromoacetic Acid~~ ~~Dibromoacetic Acid~~ ~~HAA5~~	~~D2~~	~~552.1 (1.0)~~	~~$116~~
	~~D3~~	~~552.2 (1.0)~~	~~$116~~
~~Haloacetic Acids:~~ ~~Monochloroacetic Acid~~ ~~Dichloroacetic Acid~~ ~~Trichloroacetic Acid~~ ~~Monobromoacetic Acid~~ ~~Dibromoacetic Acid~~ ~~HAA5~~	~~D13~~	~~552.3~~	~~$116~~
~~Disinfection Byproducts by Micro Liquid-Liquid Extraction/GC-ECD~~	~~C2~~	~~6251B~~	~~$116~~
~~Chlorinated Acids By HPLC/PDA/UV:~~ ~~2,4-D~~ ~~Dinoseb~~ ~~Pentachlorophenol~~ ~~Picloram~~ ~~Silvex (2,4,5-TP)~~	~~D2~~	~~555 (1.0)~~	~~$116~~
~~Dioxin~~	~~E~~	~~1613~~	~~$258~~
~~Diquat~~	~~D5~~	~~549.2 (1.0)~~	~~$116~~
~~Endothall~~	~~D2~~	~~548.1 (1.0)~~	~~$116~~
~~Glyphosate~~	~~D1~~	~~547~~	~~$116~~
~~PCBs (as decachlorobiphenyl)~~	~~D~~	~~508A (1.0)~~	~~$152~~

~~b. Additional Methods and Compounds Required by Other Programs~~

~~Description~~	**~~Reference~~**	**~~Method/s~~**	**~~Fee Per Method~~**
~~Disinfectant Byproducts, Solvents and Pesticides~~	~~D3~~	~~551.1 (1.0)~~	~~$26~~
~~VOCs by GC~~	~~D3~~	~~502.2 (2.1)~~	~~$26~~
~~VOCs by GC-MS~~	~~D3~~	~~524.2 (4.1)~~	~~$26~~

~~EDB/DBCP~~	~~D3~~	~~504.1 (1.1)~~	~~$26~~
~~Pesticides and PCBs by GC (Microextraction)~~	~~D3~~	~~505 (2.1)~~	~~$26~~
~~Phthalate and Adipate Esters by GC-PID~~	~~D3~~	~~506 (1.1)~~	~~$26~~
~~Pesticides by GC-NPD~~	~~D3~~	~~507 (2.1)~~	~~$26~~
~~Chlorinated Pesticides by GC-ECD~~	~~D3~~	~~508 (3.1)~~	~~$26~~
~~Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD~~	~~D3~~	~~508.1(2.0)~~	~~$26~~
~~Organics by GC-MS~~	~~D3~~	~~525.2 (2.0)~~	~~$26~~
~~Carbamates by HPLC/Post Column~~	~~D3~~	~~531.1 (3.1)~~	~~$26~~
	~~D7~~	~~531.2~~	~~$26~~
~~Chlorinated Acids and Dalapon by GC-ECD~~	~~D~~	~~515.1 (4.0)~~	~~$26~~
	~~D6~~	~~515.3 (1.0)~~	~~$26~~
	~~D8~~	~~515.4 (1.0)~~	~~$26~~
~~Chlorinated Acids By GC-ECD~~	~~D3~~	~~515.2 (1.1)~~	~~$26~~
~~PAHs By HPLC/UV/FL~~	~~D1~~	~~550~~	~~$26~~
		~~550.1~~	~~$26~~
~~Haloacetic Acids and Dalapon by GC-ECD~~	~~D2~~	~~552.1 (1.0)~~	~~$26~~
	~~D3~~	~~552.2 (1.0)~~	~~$26~~
~~Chlorinated Acids By HPLC/PDA/UV~~	~~D2~~	~~555 (1.0)~~	~~$26~~
~~Dioxins and Furans~~	~~E~~	~~1613~~	~~$65~~
~~Diquat and Paraquat~~	~~D5~~	~~549.2 (1.0)~~	~~$26~~
~~Benzidines and Nitrogen Compounds~~	~~D2~~	~~553 (1.1)~~	~~$116~~
~~Carbonyl Compounds~~	~~D2~~	~~554 (1.0)~~	~~$116~~
~~Phenols~~	~~Z~~	~~528~~	~~$152~~
~~Phenylurea Compounds~~	~~Z~~	~~532~~	~~$116~~
~~Selected Semivolatiles~~	~~Z~~	~~526~~	~~$152~~
~~Pesticides and Flame Retardants by GCMS~~	~~D9~~	~~527~~	~~$152~~
~~Explosives and Related Compounds~~	~~D10~~	~~529~~	~~$152~~
~~Acetanilide Degradation Products~~	~~D11~~	~~535 (1.1)~~	~~$194~~
~~Acetanilide Parent Compound~~	~~D3~~	~~525.2 (2.0)~~	~~$26~~
~~Nitrosamines by MS/MS~~	~~D12~~	~~521~~	~~$194~~
~~5. Radiochemistry of Drinking Water~~			
~~Description~~	**~~Reference~~**	**~~Method/s~~**	**~~Fee Per Method~~**

~~Cesium~~	~~B~~	~~Cesium-134~~	~~$206~~
	~~C2~~	~~7500-Cs B~~	~~$206~~
		~~7120~~	~~$206~~
	~~J1~~	~~R-1110-76~~	~~$206~~
		~~R-1111-76~~	~~$206~~
	~~L~~	~~901~~	~~$206~~
		~~901.1~~	~~$206~~
	~~U~~	~~4.5.2.3~~	~~$206~~
	~~W~~	~~Gamma Spectra~~	~~$206~~
~~Gamma Emitting Isotopes~~	~~C2~~	~~7500-Cs B~~	~~$206~~
		~~7500-I B~~	~~$206~~
		~~7120~~	~~$206~~
	~~L~~	~~901.1~~	~~$206~~
		~~901~~	~~$206~~
		~~902~~	~~$206~~
	~~W~~	~~Gamma Spectra~~	~~$206~~
~~Gross Alpha~~	~~B~~	~~Gross Alpha~~	~~$206~~
	~~C2~~	~~7110B~~	~~$206~~
		~~7110C~~	~~$206~~
	~~J1~~	~~R-1120-76~~	~~$206~~
	~~L~~	~~900~~	~~$206~~
	~~V~~	~~00-01~~	~~$206~~
		~~00-02~~	~~$206~~
	~~W~~	~~Gross Alpha~~	~~$206~~
~~Gross Beta~~	~~B~~	~~Gross Beta~~	~~$206~~
	~~C2~~	~~7110B~~	~~$206~~
	~~J1~~	~~R-1120-76~~	~~$206~~
	~~L~~	~~900~~	~~$206~~
	~~V~~	~~00-01~~	~~$206~~
	~~W~~	~~Gross Beta~~	~~$206~~

~~Iodine~~	~~B~~	~~Precipitation Method, Distillation Method~~	~~$206~~
	~~C2~~	~~7500-I B~~	~~$206~~
		~~7500-I C~~	~~$206~~
		~~7500-I D~~	~~$206~~
		~~7120~~	~~$206~~
	~~L~~	~~902~~	~~$206~~
		~~901.1~~	~~$206~~
	~~U~~	~~4.5.2.3~~	~~$206~~
	~~W~~	~~Gamma Spectra~~	~~$206~~
~~Radium 226~~	~~B~~	~~Radon Emanation, Precipitation Method~~	~~$206~~
	~~C2~~	~~7500-Ra B~~	~~$206~~
		~~7500-Ra C~~	~~$206~~
	~~J1~~	~~R-1140-76~~	~~$206~~
		~~R-1141-76~~	~~$206~~
	~~L~~	~~903~~	~~$206~~
		~~903.1~~	~~$206~~
	~~U~~	~~Ra-05~~	~~$206~~
	~~V~~	~~Ra-03~~	~~$206~~
		~~Ra-04~~	~~$206~~
	~~W~~	~~Radium 226~~	~~$206~~
~~Radium 228~~	~~B~~	~~Radium 228~~	~~$206~~
	~~C2~~	~~7500-Ra D~~	~~$206~~
	~~J1~~	~~R-1142-76~~	~~$206~~
	~~L~~	~~904~~	~~$206~~
	~~V~~	~~Ra-05~~	~~$206~~
	~~W~~	~~Radium 228~~	~~$206~~
~~Strontium~~	~~B~~	~~Strontium~~	~~$206~~
	~~C2~~	~~7500-Sr B~~	~~$206~~
	~~J1~~	~~R-1160-76~~	~~$206~~
	~~L~~	~~905~~	~~$206~~
	~~U~~	~~Sr-01~~	~~$206~~
		~~Sr-02~~	~~$206~~
	~~V~~	~~Sr-04~~	~~$206~~
	~~W~~	~~Strontium~~	~~$206~~

Tritium	B	Tritium	$206
	C2	7500-3H B	$206
	J1	R-1171-76	$206
	L	906	$206
	V	H-02	$206
	W	Tritium	$206
Uranium	C2	7500-U B	$206
	I	D5174-91	$206
	J1	R-1180-76	$206
		R-1181-76	$206
		R-1182-76	$206
	L	908	$206
		908.1	$206
	U	U-02	$206
		U-04	$206
	V	00-07	$206
	W	Uranium	$206
SECTION B. WASTEWATER PARAMETERS			
1. Microbiology of Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Ascaris lumbricoides	C2	10550	$228
	P3	UofA2000	$228
Coliforms, Fecal, by Membrane Filter	C2	9222D	$228
Coliforms, Fecal, by Multiple Tube Fermentation (may be used for sludge)	C2	9221E	$228
Coliforms, Total, by Membrane Filter	C2	9222B	$228
Coliforms, Total, by Multiple Tube Fermentation	C2	9221B	$228
Entamoeba histolytica	C2	10550	$228
	C	9711C	$228
Enteric viruses	I	D4994-89	$381
Escherichia coli (NPDES) by Colilert MPN, in conjunction with SM 9221B and 9221C	C2	9223B	$152
Escherichia coli (NPDES) in conjunction with SM 9221B and 9221C	C2	9221F	$152
Giardia and *Cryptosporidium*	C2	9711B	$381
	P2	600/R-95/178	$381
Helminth Ova in sludge	Z5	600/1-87-014	$381
Salmonella in sludge	C2	9260D	$228
Streptococcus, Fecal, by Membrane Filter	C2	9230C	$194

~~Streptococcus, Fecal, by Multiple Tube Fermentation~~	~~C2~~	~~9230B~~	~~$194~~
~~Tapeworm, Common~~	~~C2~~	~~10550~~	~~$228~~
~~Viruses~~	~~C2~~	~~9510~~	~~$381~~
	~~P~~	~~Methods for Virology~~	~~$381~~
	~~P2~~	~~600/R-95/178~~	~~$381~~
~~**2. Wastewater Inorganic Chemistry, Nutrients and Demand**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Acidity~~	~~C2~~	~~2310B~~	~~$39~~
	~~C1~~	~~Hach 8010~~	~~$39~~
~~Alkalinity, Total~~	~~A~~	~~310.2~~	~~$19~~
	~~C2~~	~~2320B~~	~~$19~~
~~Ammonia~~	~~A2~~	~~350.1~~	~~$39~~
	~~C2~~	~~4500-NH3 B~~	~~$39~~
		~~4500-NH3 C~~	~~$39~~
		~~4500-NH3 D~~	~~$39~~
		~~4500-NH3 E~~	~~$39~~
		~~4500-NH3 G~~	~~$39~~
	~~C1~~	~~Hach 8038~~	~~$39~~
~~Biochemical Oxygen Demand~~	~~C2~~	~~5210B~~	~~$152~~
	~~C1~~	~~Hach 8043~~	~~$152~~
~~Boron~~	~~A1~~	~~200.7~~	~~$10~~
	~~C2~~	~~4500-B B~~	~~$76~~
~~Bromide~~	~~A2~~	~~300.0~~	~~$26~~
~~Calcium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
		~~3500-Ca D~~	~~$39~~
	~~C1~~	~~Hach 8222~~	~~$39~~
~~Carbon, Total Organic (TOC)~~	~~C2~~	~~5310 B~~	~~$39~~
		~~5310 C~~	~~$39~~
		~~5310D~~	~~$39~~
~~Chemical Oxygen Demand~~	~~A~~	~~410.3~~	~~$39~~
	~~A2~~	~~410.4~~	~~$76~~
	~~C2~~	~~5220 C~~	~~$39~~
		~~5220 D~~	~~$76~~
	~~C1~~	~~Hach 8000~~	~~$39~~
		~~Hach 8230~~	~~$39~~

~~Chloride~~	~~A2~~	~~300.0~~	~~$26~~
	~~C2~~	~~4500-Cl B~~	~~$39~~
		~~4500-Cl C~~	~~$39~~
		~~4500-Cl E~~	~~$39~~
	~~C1~~	~~Hach 8225~~	~~$39~~
~~Chlorine, Free~~	~~C1~~	~~Hach 8021~~	~~$39~~
~~Chlorine, Total Residual~~	~~C2~~	~~4500-Cl B~~	~~$39~~
		~~4500-Cl C~~	~~$39~~
		~~4500-Cl D~~	~~$39~~
		~~4500-Cl F~~	~~$39~~
		~~4500-Cl G~~	~~$39~~
	~~C1~~	~~Hach 8167~~	~~$39~~
		~~Hach 8168~~	~~$39~~
		~~Hach 10014~~	~~$39~~
~~Color~~	~~C2~~	~~2120 B~~	~~$32~~
		~~2120 C~~	~~$32~~
		~~2120 E~~	~~$32~~
~~Cyanide, Amenable to Chlorination~~	~~A~~	~~335.1~~	~~$76~~
	~~C2~~	~~4500-CN G~~	~~$76~~
~~Cyanide, Available~~	~~Y~~	~~OIA-1677~~	~~$76~~
~~Cyanide, Total~~	~~A~~	~~335.3~~	~~$76~~
	~~C2~~	~~4500-CN B and either (a) 4500-CN C, (b) 4500-CN D, or (c) 4500-CN E~~	~~$89~~
~~Fluoride~~	~~A2~~	~~300.0~~	~~$26~~
	~~C2~~	~~4500-F B~~	~~$39~~
		~~4500-F C~~	~~$39~~
		~~4500-F D~~	~~$39~~
		~~4500-F E~~	~~$39~~
	~~C1~~	~~Hach 8029~~	~~$39~~
~~Hardness~~	~~A~~	~~130.1~~	~~$10~~
	~~A1~~	~~200.7~~	~~$10~~
	~~C2~~	~~2340B~~	~~$39~~
		~~2340C~~	~~$39~~
	~~C1~~	~~Hach 8226~~	~~$39~~

~~Kjeldahl, Total Nitrogen~~	~~A~~	~~351.1~~	~~$76~~
		~~351.4~~	~~$76~~
	~~A2~~	~~351.2~~	~~$76~~
	~~C2~~	~~Combination of 4500-NH3 B and either (a) 4500-Norg B or (b) 4500-N org C~~	~~$115~~
		~~4500-NH3 C~~	~~$39~~
	~~Z10~~	~~PAI-DK01~~	~~$76~~
	~~Z11~~	~~PAI-DK02~~	~~$76~~
	~~Z12~~	~~PAI-DK03~~	~~$76~~
~~Methylene Blue Active Substances~~	~~C2~~	~~5540C~~	~~$39~~
~~Nitrate (as N)~~	~~A~~	~~352.1~~	~~$76~~
	~~A2~~	~~300.0~~	~~$26~~
~~Nitrate-Nitrite (as N)~~	~~A2~~	~~300.0~~	~~$26~~
		~~353.2~~	~~$76~~
	~~C2~~	~~4500-NO3 E~~	~~$76~~
		~~4500-NO3 F~~	~~$76~~
		~~4500-NO3 H~~	~~$76~~
~~Nitrite (as N)~~	~~A~~	~~354.1~~	~~$76~~
	~~A2~~	~~300.0~~	~~$26~~
	~~C2~~	~~4500-NO2 B~~	~~$76~~
	~~C1~~	~~Hach 8507~~	~~$76~~
~~Oil and Grease and Total Petroleum Hydrocarbons~~	~~C2~~	~~5520B~~	~~$76~~
	~~K1~~	~~1664A~~	~~$76~~
~~Orthophosphate~~	~~A~~	~~365.3~~	~~$76~~
	~~A2~~	~~300.0~~	~~$26~~
		~~365.1~~	~~$76~~
	~~C2~~	~~4500-P E~~	~~$76~~
		~~4500-P F~~	~~$76~~
	~~C1~~	~~Hach 8048~~	~~$39~~
~~Oxygen-consumption Rate (SOUR)~~	~~C2~~	~~2710B~~	~~$39~~
~~Oxygen, Dissolved~~	~~C2~~	~~4500-O C~~	~~$26~~
		~~4500-O G~~	~~$26~~
	~~C1~~	~~Hach 8229~~	~~$26~~
~~pH (Hydrogen Ion)~~	~~A~~	~~150.1~~	~~$39~~
	~~C2~~	~~4500-H B~~	~~$39~~
	~~C1~~	~~Hach 8156~~	~~$39~~
~~Phenols~~	~~A~~	~~420.1~~	~~$116~~
	~~C1~~	~~Hach 8047~~	~~$116~~

~~Phosphorus, Total~~	~~A~~	~~365.3~~	~~$76~~
		~~365.4~~	~~$76~~
	~~A2~~	~~365.1~~	~~$76~~
	~~C2~~	~~4500-P B~~	~~$76~~
		~~4500-P E~~	~~$76~~
		~~4500-P F~~	~~$76~~
	~~C1~~	~~Hach 8190~~	~~$76~~
~~Potassium~~	~~A~~	~~258.1~~	~~$26~~
	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
		~~3500-K D~~	~~$26~~
~~Residue, Filterable (TDS)~~	~~C2~~	~~2540C~~	~~$39~~
~~Residue, Nonfilterable (TSS)~~	~~C2~~	~~2540D~~	~~$39~~
	~~C1~~	~~Hach 8158~~	~~$39~~
~~Residue, Settleable Solids~~	~~A~~	~~160.5~~	~~$39~~
	~~C2~~	~~2540F~~	~~$39~~
~~Residue, Total~~	~~A~~	~~160.3~~	~~$39~~
	~~C2~~	~~2540B~~	~~$39~~
~~Residue, Volatile~~	~~A~~	~~160.4~~	~~$39~~
~~Silica, Dissolved~~	~~A~~	~~370.1~~	~~$76~~
	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~4500-Si D~~	~~$76~~
	~~C2~~	~~4500-SiO2 C~~	~~$76~~
~~Sodium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
~~Sodium Azide~~	~~C2~~	~~4110C~~	~~$76~~
~~Specific Conductance~~	~~A~~	~~120.1~~	~~$39~~
	~~C2~~	~~2510B~~	~~$39~~
	~~C1~~	~~Hach 8160~~	~~$39~~
~~Sulfate~~	~~A~~	~~375.1~~	~~$76~~
	~~A2~~	~~300.0~~	~~$26~~
	~~C2~~	~~4500-SO4 C~~	~~$76~~
		~~4500-SO4 D~~	~~$76~~
	~~C1~~	~~Hach 8051~~	~~$39~~
~~Sulfide (includes total and soluble)~~	~~C2~~	~~4500-S D~~	~~$76~~
		~~4500-S F~~	~~$39~~
	~~C1~~	~~Hach 8131~~	~~$39~~
~~Sulfite~~	~~C2~~	~~4500-SO3 B~~	~~$76~~
	~~C1~~	~~Hach 8071~~	~~$39~~

~~Temperature, Degrees Celsius~~	~~C2~~	~~2550B~~	~~$13~~
~~Total, Fixed and Volatile Solids in Solid and Semi-solid Samples in Sludge~~	~~C2~~	~~2540G~~	~~$39~~
~~Turbidity, NTU~~	~~A2~~	~~180.1~~	~~$39~~
	~~C2~~	~~2130B~~	~~$39~~
~~**3. Metals in Wastewater**~~			
~~**a. Sample Preparation for Metals in Wastewater**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Acid Extractable Metals~~	~~C~~	~~3030C~~	~~$7~~
~~Microwave Digestion~~	~~Z7~~	~~CEM Microwave Digestion~~	~~$7~~
~~Nitric Acid~~	~~C~~	~~3030E~~	~~$7~~
~~Nitric Acid/Hydrochloric Acid~~	~~C~~	~~3030F~~	~~$7~~
~~Nitric Acid/Perchloric Acid~~	~~C~~	~~3030H~~	~~$7~~
~~Nitric Acid/Perchloric Acid/Hydrofluoric Acid~~	~~C~~	~~3030I~~	~~$7~~
~~Nitric Acid/Sulfuric Acid~~	~~C~~	~~3030G~~	~~$7~~
~~Preliminary Filtration~~	~~C~~	~~3030B~~	~~$7~~
~~**b. Methods to Analyze Metals in Wastewater**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Aluminum~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
		~~3111D~~	~~$26~~
~~Antimony~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
~~Arsenic~~	~~A~~	~~206.5~~	~~$39~~
	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
		~~3500-As C~~	~~$76~~
	~~C1~~	~~Hach 8013~~	~~$39~~
~~Barium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
		~~3113B~~	~~$26~~

~~Beryllium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
		~~3113B~~	~~$26~~
		~~3500-Be D~~	~~$76~~
~~Cadmium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
		~~3500-Cd D~~	~~$76~~
~~Chromium (VI) Hexavalent~~	~~A~~	~~218.4~~	~~$26~~
	~~C~~	~~3500-Cr D~~	~~$39~~
		~~3111C~~	~~$26~~
	~~C1~~	~~Hach 8023~~	~~$39~~
~~Chromium, Total~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
		~~3500-Cr D~~	~~$76~~
	~~C1~~	~~Hach 8023~~	~~$39~~
~~Cobalt~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
~~Copper~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
		~~3500-Cu D~~	~~$76~~
	~~C1~~	~~Hach 8506~~	~~$39~~

~~Gold~~	~~A~~	~~231.2~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
~~Iridium~~	~~A~~	~~235.2~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
~~Iron~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
		~~3500-Fe D~~	~~$76~~
	~~C1~~	~~Hach 8008~~	~~$39~~
~~Lead~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
		~~3500-Pb D~~	~~$76~~
	~~C1~~	~~Hach 8033~~	~~$39~~
~~Lithium~~	~~A1~~	~~200.7~~	~~$10~~
~~Magnesium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
		~~3500-Mg D~~	~~$76~~
~~Manganese~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
		~~3500-Mn D~~	~~$76~~
	~~C1~~	~~Hach 8034~~	~~$39~~
~~Mercury~~	~~A~~	~~245.2~~	~~$52~~
	~~A1~~	~~245.1~~	~~$52~~
	~~A4~~	~~1631E~~	~~$152~~
	~~C~~	~~3112B~~	~~$52~~
~~Molybdenum~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
		~~3113B~~	~~$26~~

~~Nickel~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
	~~C1~~	~~Hach 8037~~	~~$39~~
~~Osmium~~	~~A~~	~~252.2~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
~~Palladium~~	~~A~~	~~253.2~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
~~Platinum~~	~~A~~	~~255.2~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
~~Rhodium~~	~~A~~	~~265.2~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
~~Ruthenium~~	~~A~~	~~267.2~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
~~Selenium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3113B~~	~~$26~~
		~~3114B~~	~~$76~~
~~Silver~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3113B~~	~~$26~~
~~Strontium~~	~~A1~~	~~200.7~~	~~$10~~
	~~C~~	~~3111B~~	~~$26~~
		~~3500-Sr B~~	~~$26~~
		~~3500-Sr C~~	~~$20~~
		~~3500-Sr D~~	~~$26~~
~~Thallium~~	~~A~~	~~279.2~~	~~$26~~
	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~

~~Tin~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3113B~~	~~$26~~
~~Titanium~~	~~A~~	~~283.2~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
~~Vanadium~~	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
	~~C~~	~~3111D~~	~~$26~~
		~~3500-V D~~	~~$76~~
~~Zinc~~	~~A~~	~~289.2~~	~~$26~~
	~~A1~~	~~200.7~~	~~$10~~
		~~200.8~~	~~$26~~
		~~200.9~~	~~$26~~
	~~C~~	~~3111B~~	~~$26~~
		~~3111C~~	~~$26~~
		~~3500-Zn E~~	~~$76~~
		~~3500-Zn F~~	~~$76~~
	~~C1~~	~~Hach 8009~~	~~$39~~
~~4. Aquatic Toxicity Bioassay of Wastewater~~			
~~Description~~	**~~Reference~~**	**~~Method/s~~**	**~~Fee Per Method~~**
~~Toxicity, Acute~~	~~M1~~	~~EPA/600/4-90/027F~~	~~$194~~
	~~Z13~~	~~821-R-02-012~~	~~$194~~
~~Toxicity, Chronic~~	~~N1~~	~~EPA/600/4-91/002~~	~~$194~~
	~~Z3~~	~~821-R-02-013~~	~~$194~~
~~5. Organic Chemicals of Wastewater~~			
~~Description~~	**~~Reference~~**	**~~Method/s~~**	**~~Fee Per Method~~**
~~Volatile Organics for Pharmaceuticals~~	~~D3~~	~~524.2 (4.1)~~	~~$152~~
~~Purgeable Hydrocarbons~~	~~E~~	~~601~~	~~$76~~
~~Purgeable Aromatics~~	~~E~~	~~602~~	~~$76~~
~~Acrolein and Acrylonitrile~~	~~E~~	~~603~~	~~$76~~
		~~624 (Approved for screening only, not for quantification)~~	~~$152~~
		~~1624B~~	~~$152~~
~~Phenols~~	~~E~~	~~604~~	~~$116~~
~~Phthalate ester~~	~~E~~	~~606~~	~~$116~~
~~Nitrosamines~~	~~E~~	~~607~~	~~$116~~
~~Organochlorine Pesticides and PCBs~~	~~E~~	~~608~~	~~$152~~
~~Nitroaromatics and Isophorone~~	~~E~~	~~609~~	~~$116~~

~~PAHs~~	~~E~~	~~610~~	~~$116~~
~~Haloethers~~	~~E~~	~~611~~	~~$116~~
~~Chlorinated Hydrocarbons~~	~~E~~	~~612~~	~~$116~~
~~2, 3, 7, 8-Tetrachlorodibenzo-p-Dioxin~~	~~E~~	~~613~~	~~$457~~
~~Carbon-, Hydrogen-, and Oxygen-Containing Pesticides~~	~~Z2~~	~~616~~	~~$116~~
~~Purgeables~~	~~E~~	~~624~~	~~$152~~
~~Base/Neutrals and Acids (all analytes excluding pesticides)~~	~~E~~	~~625~~	~~$152~~
~~Base/Neutrals and Acids (pesticides only)~~	~~E~~	~~625~~	~~$152~~
~~Tetra- through Octa-Chlorinated Dioxins and Furans~~	~~E~~	~~1613B~~	~~$258~~
~~VOCs by Isotope Dilution GC/MS~~	~~E~~	~~1624B~~	~~$152~~
~~Semivolatile Organic Compounds by Isotope Dilution GC/MS~~	~~E~~	~~1625B~~	~~$152~~
~~Organophosphorus Pesticides~~	~~E~~	~~1657~~	~~$116~~
~~VOCs Specific to the Pharmaceutical Manufacturing Industry by Isotope Dilution GC/MS~~	~~K2~~	~~1666 (A)~~	~~$152~~
~~Herbicides~~	~~C2~~	~~6640B~~	~~$116~~
~~Ethylene Glycol~~	~~K~~	~~BLS-188~~	~~$152~~
~~**6. Radiochemistry of Wastewater**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Gross Alpha~~	~~C2~~	~~7110B~~	~~$206~~
	~~L~~	~~900~~	~~$206~~
~~Gross Beta~~	~~C2~~	~~7110B~~	~~$206~~
	~~L~~	~~900.0~~	~~$206~~
~~Radium, Total~~	~~C2~~	~~7500-Ra B~~	~~$206~~
	~~L~~	~~903.0~~	~~$206~~
~~Radium 226~~	~~C2~~	~~7500-Ra C~~	~~$206~~
	~~L~~	~~903.1~~	~~$206~~
~~**SECTION C. SOLID WASTE PARAMETERS**~~			
~~**1. Microbiology of Solid Waste**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Coliforms, Total, by Membrane Filter~~	~~F~~	~~9132~~	~~$228~~
~~Coliforms, Total, by Multiple Tube Fermentation~~	~~F~~	~~9131~~	~~$228~~
~~**2. Physical Properties Testing of Solid Waste**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Corrosive to Steel~~	~~F~~	~~1110A~~	~~$63~~
~~Corrosivity - pH Determination~~	~~F~~	~~9040C~~	~~$63~~
~~EP Toxicity~~	~~F~~	~~1310B~~	~~$76~~

~~Ignitability (Flashpoint Determination)~~	~~F~~	~~1010A~~	~~$32~~
		~~1020B~~	~~$32~~
~~Paint Filter Liquids Test~~	~~F~~	~~9095B~~	~~$19~~
~~TCLP~~	~~F~~	~~1311~~	~~$303~~
~~**3. Sample Preparation for Metals in Solid Waste**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Dissolved in Water~~	~~F~~	~~3005A~~	~~$7~~
~~Microwave Assisted Digestions~~	~~F~~	~~3015A~~	~~$7~~
		~~3051~~	~~$7~~
		~~3052~~	~~$7~~
~~Oils, Greases, and Waxes~~	~~F~~	~~3040A~~	~~$7~~
		~~3031~~	~~$7~~
~~Sediments, Sludges, and Soils~~	~~F~~	~~3050B~~	~~$7~~
~~Total Metals~~	~~F~~	~~3010A~~	~~$7~~
		~~3020A~~	~~$7~~
~~Total Recoverable in Water~~	~~F~~	~~3005A~~	~~$7~~
~~**4. Inorganic Chemistry and Metals of Solid Waste**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Aluminum~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
~~Ammonia~~	~~A~~	~~350.3~~	~~$39~~
~~Antimony~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
		~~7062~~	~~$76~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Arsenic~~	~~F~~	~~6010B~~	~~$10~~
		~~7061A~~	~~$76~~
		~~7062~~	~~$76~~
		~~7063~~	~~$76~~
		~~6020~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Barium~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~

~~Beryllium~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Bomb Preparation Method for Solid Waste~~	~~F~~	~~5050~~	~~$7~~
~~Boron~~	~~F~~	~~6010B~~	~~$10~~
~~Bromide~~	~~F~~	~~9056~~	~~$26~~
		~~9211~~	~~$39~~
~~Cadmium~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Calcium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Cation Exchange Capacity of Soils~~	~~F~~	~~9080~~	~~$34~~
		~~9081~~	~~$34~~
~~Chloride~~	~~F~~	~~9056~~	~~$26~~
		~~9057~~	~~$76~~
		~~9212~~	~~$39~~
		~~9250~~	~~$76~~
		~~9251~~	~~$76~~
		~~9253~~	~~$39~~
~~Chlorine, Total, in New and Used Petroleum Products~~	~~F~~	~~9075~~	~~$76~~
		~~9076~~	~~$39~~
		~~9077~~	~~$39~~
~~Chromium, Hexavalent~~	~~F~~	~~7195~~	~~$26~~
		~~7196A~~	~~$76~~
		~~7197~~	~~$26~~
		~~7198~~	~~$40~~
		~~7199~~	~~$76~~
~~Chromium, Total~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Cobalt~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~

~~Compatibility Test for Wastes and Membranes Liners~~	~~F~~	~~9090A~~	~~$152~~
~~Copper~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Cyanide~~	~~F~~	~~9010C~~	~~$13~~
		~~9012B~~	~~$76~~
		~~9213~~	~~$76~~
		~~9014~~	~~$76~~
	~~F9~~	~~9015~~	~~$76~~
~~Cyanide Extraction for Solids and Oils~~	~~F10~~	~~9013A~~	~~$39~~
~~Dermal Corrosion~~	~~F~~	~~1120~~	~~$63~~
~~EP for Oily Wastes~~	~~F~~	~~1330A~~	~~$76~~
~~Flashpoint Determination~~	~~F~~	~~1030~~	~~$32~~
~~Fluoride~~	~~F~~	~~9056~~	~~$26~~
		~~9214~~	~~$39~~
~~Iron~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Kjeldahl Total, Nitrogen~~	~~A~~	~~351.4~~	~~$76~~
~~Lead~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Liquid Release Test Procedure~~	~~F~~	~~9096~~	~~$39~~
~~Lithium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Magnesium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Manganese~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Mercury~~	~~F~~	~~7470A~~	~~$52~~
		~~7471A~~	~~$52~~
		~~7472~~	~~$152~~

~~Molybdenum~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Multiple EP~~	~~F~~	~~1320~~	~~$152~~
~~Nickel~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Nitrate~~	~~F~~	~~9210~~	~~$39~~
		~~9056~~	~~$26~~
~~Nitrite~~	~~F~~	~~9056~~	~~$26~~
~~Oil and Grease and Petroleum Hydrocarbons~~	~~K1~~	~~1664A~~	~~$76~~
~~O-Phosphate-P~~	~~F~~	~~9056~~	~~$26~~
~~Osmium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Paint Filter Liquids Test~~	~~F~~	~~9095B~~	~~$19~~
~~Perchlorate~~	~~Z~~	~~314.0~~	~~$76~~
~~pH (Hydrogen Ion)~~	~~F~~	~~9041A~~	~~$39~~
		~~9045D~~	~~$39~~
~~Phosphorus~~	~~F~~	~~6010B~~	~~$10~~
~~Phosphorus, Total~~	~~A~~	~~365.3~~	~~$76~~
~~Potassium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Saturated Hydraulic and Leachate Conductivity and Intrinsic Permeability~~	~~F~~	~~9100~~	~~$152~~
~~Selenium~~	~~F~~	~~6010B~~	~~$10~~
		~~7741A~~	~~$26~~
		~~7742~~	~~$76~~
	~~F12~~	~~7010~~	~~$26~~
~~Silica~~	~~F~~	~~6010B~~	~~$10~~
~~Silver~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Sodium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Sodium Azide~~	~~C2~~	~~4110C~~	~~$76~~
~~Specific Conductance~~	~~F~~	~~9050A~~	~~$39~~
~~SPLP~~	~~F~~	~~1312~~	~~$303~~

~~Strontium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Sulfate~~	~~F~~	~~9035~~	~~$76~~
		~~9036~~	~~$76~~
		~~9038~~	~~$76~~
		~~9056~~	~~$26~~
~~Sulfides~~	~~F~~	~~9030B~~	~~$76~~
		~~9031~~	~~$76~~
		~~9215~~	~~$76~~
		~~9034~~	~~$76~~
~~Thallium~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~Tin~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
~~Titanium~~	~~F~~	~~6010B~~	~~$10~~
~~Vanadium~~	~~F~~	~~6010B~~	~~$10~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~White Phosphorus by GC~~	~~F~~	~~7580~~	~~$116~~
~~Zinc~~	~~F~~	~~6010B~~	~~$10~~
		~~6020~~	~~$26~~
	~~F11~~	~~7000B~~	~~$26~~
	~~F12~~	~~7010~~	~~$26~~
~~**5. Organics Procedures in Solid Waste**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Separatory Funnel Liquid-Liquid Extraction~~	~~F~~	~~3510C~~	~~$13~~
~~Organic Compounds in Water by Microextraction~~	~~F5~~	~~3511~~	~~$13~~
~~Continuous Liquid-Liquid Extraction~~	~~F~~	~~3520C~~	~~$13~~
~~SPE~~	~~F~~	~~3535~~	~~$13~~
~~Soxhlet Extraction~~	~~F~~	~~3540C~~	~~$13~~
~~Automated Soxhlet Extraction~~	~~F~~	~~3541~~	~~$13~~
~~Pressurized Fluid Extraction~~	~~F~~	~~3545~~	~~$13~~
~~Ultrasonic Extraction~~	~~F~~	~~3550B~~	~~$13~~
~~Supercritical Fluid Extraction of Total Recoverable Petroleum Hydrocarbons~~	~~F~~	~~3560~~	~~$13~~
~~Supercritical Fluid Extraction of PAHs~~	~~F~~	~~3561~~	~~$13~~
~~MSE~~	~~F4~~	~~3570~~	~~$13~~

~~Waste Dilution~~	~~F~~	~~3580A~~	~~$13~~
~~Waste Dilution for Volatile Organics~~	~~F~~	~~3585~~	~~$13~~
~~Alumina Cleanup~~	~~F~~	~~3610B~~	~~$13~~
~~Alumina Column Cleanup and Separation of Petroleum Wastes~~	~~F~~	~~3611B~~	~~$13~~
~~Florisil Cleanup~~	~~F~~	~~3620B~~	~~$13~~
~~Silica Gel Cleanup~~	~~F~~	~~3630C~~	~~$13~~
~~Gel Permeation Cleanup~~	~~F~~	~~3640A~~	~~$13~~
~~Acid Base Partition Cleanup~~	~~F~~	~~3650B~~	~~$13~~
~~Sulfur Cleanup~~	~~F~~	~~3660B~~	~~$13~~
~~Sulfuric Acid/Permanganate Cleanup~~	~~F~~	~~3665A~~	~~$13~~
~~Screening for Pentachlorophenol by Immunoassay~~	~~F~~	~~4010A~~	~~$76~~
~~Screening for 2,4 Dichlorophenoxyacetic Acid by Immunoassay~~	~~F~~	~~4015~~	~~$76~~
~~Screening for PCBs by Immunoassay~~	~~F~~	~~4020~~	~~$76~~
~~Screening for PCDDs and PCDFs by Immunoassay~~	~~F3~~	~~4025~~	~~$76~~
~~Soil Screening for Petroleum Hydrocarbons by Immunoassay~~	~~F~~	~~4030~~	~~$76~~
~~Soil Screening for PAHs by Immunoassay~~	~~F~~	~~4035~~	~~$76~~
~~Soil Screening for Toxaphene by Immunoassay~~	~~F~~	~~4040~~	~~$76~~
~~Soil Screening for Chlordane by Immunoassay~~	~~F~~	~~4041~~	~~$76~~
~~Soil Screening for DDT by Immunoassay~~	~~F~~	~~4042~~	~~$76~~
~~TNT Explosives in Soil by Immunoassay~~	~~F~~	~~4050~~	~~$76~~
~~RDX in Soil by Immunoassay~~	~~F~~	~~4051~~	~~$76~~
~~VOCs in Various Sample Matrices Using Equilibrium Headspace Analysis~~	~~F8~~	~~5021A~~	~~$13~~
~~Purge and Trap for Aqueous Samples~~	~~F6~~	~~5030C~~	~~$13~~
~~Volatile, Nonpurgeable, Water Soluble Compounds by Azeotropic Distillation~~	~~F~~	~~5031~~	~~$13~~
~~VOCs by Vacuum Distillation~~	~~F~~	~~5032~~	~~$13~~
~~Closed System Purge and Trap and Extraction for Volatile Organics in Soil and Waste Samples~~	~~F2~~	~~5035A~~	~~$13~~
~~Analysis for Desorption of Sorbent Cartridges from VOST~~	~~F~~	~~5041A~~	~~$13~~
~~EDB and DBCP by Microextraction and GC~~	~~F~~	~~8011~~	~~$116~~
~~C_{10} C_{32} Hydrocarbons~~	~~K~~	~~8015AZ 1~~	~~$116~~
~~Nonhalogenated Organics Using GC/FID~~	~~F7~~	~~8015D~~	~~$116~~
~~Aromatic and Halogenated Volatiles by GC Using Photoionization and/or Electrolytic Conductivity Detectors~~	~~F~~	~~8021B~~	~~$152~~
~~Acrylonitrile by GC~~	~~F~~	~~8031~~	~~$76~~
~~Acrylamide by GC~~	~~F~~	~~8032A~~	~~$76~~

~~Acetonitrile by GC with Nitrogen-Phosphorus Detection~~	~~F~~	~~8033~~	~~$76~~
~~Phenols by GC~~	~~F~~	~~8041~~	~~$116~~
~~Phthalate Esters by GC/ECD~~	~~F~~	~~8061A~~	~~$116~~
~~Nitrosamines by GC~~	~~F~~	~~8070A~~	~~$116~~
~~Organochlorine Pesticides by GC~~	~~F~~	~~8081A~~	~~$152~~
~~PCBs by GC~~	~~F~~	~~8082~~	~~$152~~
~~Nitroaromatics and Cyclic Ketones by GC~~	~~F~~	~~8091~~	~~$116~~
~~PAHs~~	~~F~~	~~8100~~	~~$116~~
~~Haloethers by GC~~	~~F~~	~~8111~~	~~$116~~
~~Chlorinated Hydrocarbons by GC: Capillary Column Technique~~	~~F~~	~~8121~~	~~$116~~
~~Aniline and Selected Derivatives by GC~~	~~F~~	~~8131~~	~~$116~~
~~Organophosphorus Compounds by GC~~	~~F~~	~~8141A~~	~~$152~~
~~Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization~~	~~F~~	~~8151A~~	~~$152~~
~~VOCs by GC/MS~~	~~F~~	~~8260B~~	~~$152~~
~~Semivolatile Organic Compounds by GC/MS~~	~~F~~	~~8270C~~	~~$152~~
~~Semivolatile Organic Compounds (PAHs and PCBs) in Soils/Sludges and Solid Wastes Using TE/GC/MS~~	~~F~~	~~8275A~~	~~$152~~
~~8280A: Polychlorinated Dibenzo-p-Dioxins and PCDFs by HRGC/LRMS~~	~~F~~	~~8280A~~	~~$258~~
~~PCDDs and PCDFs by HRGC/HRMS~~	~~F~~	~~8290~~	~~$258~~
~~PAHs~~	~~F~~	~~8310~~	~~$116~~
~~Determination of Carbonyl Compounds by HPLC~~	~~F~~	~~8315A~~	~~$116~~
~~Acrylamide, Acrylonitrile, and Acrolein by HPLC~~	~~F~~	~~8316~~	~~$116~~
~~N-Methylcarbamates by HPLC~~	~~F~~	~~8318~~	~~$116~~
~~Solvent-Extractable Nonvolatile Compounds by HPLC/TS/MS or UV Detection~~	~~F~~	~~8321A~~	~~$152~~
~~Solvent Extractable Nonvolatile Compounds by HPLC/PB/MS~~	~~F~~	~~8325~~	~~$152~~
~~Nitroaromatics and Nitramines by HPLC~~	~~F~~	~~8330~~	~~$116~~
~~Tetrazene by Reverse Phase HPLC~~	~~F~~	~~8331~~	~~$116~~
~~Nitroglycerine by HPLC~~	~~F~~	~~8332~~	~~$116~~
~~GC/FT-IR Spectrometry for Semivolatile Organics: Capillary Column~~	~~F~~	~~8410~~	~~$116~~
~~Analysis of Bis (2-chloroethyl) Ether and Hydrolysis Products by Direct Aqueous Injection GC/FT-IR~~	~~F~~	~~8430~~	~~$116~~
~~Total Recoverable Petroleum Hydrocarbons by Infrared Spectrophotometry~~	~~F~~	~~8440~~	~~$116~~
~~Colorimetric Screening Method for TNT in Soil~~	~~F~~	~~8515~~	~~$76~~
~~TOX~~	~~F~~	~~9020B~~	~~$76~~

POX	F	9021	$76
TOX by Neutron Activation Analysis	F	9022	$114
EOX in Solids	F	9023	$114
TOCs	F	9060A	$76
Phenolics	F	9065	$152
		9066	$152
		9067	$152
HEM for Aqueous Samples	F	9070A	$76
HEM for Sludge, Sediment, and Solid Samples	F	9071B	$76
PCBs in Waste Oil	F1	600/4-81-045	$152
6. Bulk Asbestos Analysis of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Bulk Asbestos Analysis	G	9002	$228
	H	Bulk Asbestos	$228
Fiber Counting	G	7400	$228
		7402	$228
7. Radiochemistry of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Alpha-Emitting Radium Isotopes	F	9315	$206
Gross Alpha and Beta	F	9310	$206
Radium-228	F	9320	$206
SECTION D. AIR AND STACK PARAMETERS			
1. Ambient Air Primary and Secondary Pollutants			
Description	**Reference**	**Method/s**	**Fee Per Method**
Carbon Monoxide	O	Appendix C	$393
Formaldehyde	F	8520	$393
Hydrocarbons	O	Appendix E	$393
Lead	O	Appendix G	$393
Nitrogen Dioxide	O	Appendix F	$393
Ozone	O	Appendix D	$393
		Appendix H	$393
Particulate Matter	O	Appendix B	$393
		Appendix J	$393
		Appendix K	$393
Sulfur Oxides	O	Appendix A	$393
2. Stationary and Stack Sources			
Description	**Reference**	**Method/s**	**Fee Per Method**
Carbon Dioxide, Oxygen, and Excess Air	Q	Method 3	$393

~~Carbon Monoxide~~	~~Q~~	~~Method 10~~	~~$393~~
		~~Method 10A~~	~~$393~~
		~~Method 10B~~	~~$393~~
~~Carbonyl Sulfide, Hydrogen Sulfide, and Carbon Disulfide~~	~~Q~~	~~Method 15~~	~~$393~~
~~Fluoride~~	~~Q~~	~~Method 13A~~	~~$393~~
		~~Method 13B~~	~~$393~~
		~~Method 14~~	~~$393~~
~~Fugitive Emissions~~	~~Q~~	~~Method 22~~	~~$393~~
~~Gaseous Organic Compounds~~	~~Q~~	~~Method 18~~	~~$393~~
		~~Method 25~~	~~$393~~
		~~Method 25A~~	~~$393~~
		~~Method 25B~~	~~$393~~
~~Hydrogen Sulfide~~	~~Q~~	~~Method 11~~	~~$393~~
~~Inorganic Lead~~	~~Q~~	~~Method 12~~	~~$393~~
~~Moisture Content~~	~~Q~~	~~Method 4~~	~~$393~~
~~Nitrogen Oxide~~	~~Q~~	~~Method 7~~	~~$393~~
		~~Method 7A~~	~~$393~~
		~~Method 7B~~	~~$393~~
		~~Method 7C~~	~~$393~~
		~~Method 7D~~	~~$393~~
		~~Method 7E~~	~~$393~~
		~~Method 19~~	~~$393~~
		~~Method 20~~	~~$393~~
~~Particulate Emissions by Asphalt Processing~~	~~Q~~	~~Method 5A~~	~~$152~~
~~Particulate Emissions by Fiberglass Insulation~~	~~Q~~	~~Method 5E~~	~~$152~~
~~Particulate Emissions by Nonsulfate~~	~~Q~~	~~Method 5F~~	~~$152~~
~~Particulate Emissions by Nonsulfuric Acid~~	~~Q~~	~~Method 5B~~	~~$152~~
~~Particulate Emissions by Pressure Filters~~	~~Q~~	~~Method 5D~~	~~$152~~
~~Particulate Emissions by Stationary Sources~~	~~Q~~	~~Method 5~~	~~$152~~
		~~Method 17~~	~~$152~~
~~Particulate Emissions by Sulfur Dioxide~~	~~Q~~	~~Method 19~~	~~$152~~
~~Particulate Emissions by Wood Heaters~~	~~Q~~	~~Method 5G~~	~~$152~~
		~~Method 5H~~	~~$152~~
~~Petroleum Products, Heat of Combustion~~	~~I~~	~~D240-92~~	~~$76~~
		~~D240-87~~	~~$76~~
~~Petroleum Products, Hydrometer Method~~	~~I~~	~~D287-92~~	~~$76~~
~~Petroleum Products, Sulfur~~	~~I~~	~~D4294-90~~	~~$152~~

~~Sulfur and Total Reduced Sulfur~~	~~Q~~	~~Method 15A~~	~~$393~~
		~~Method 16~~	~~$393~~
		~~Method 16A~~	~~$393~~
		~~Method 16B~~	~~$393~~
~~Sulfur Dioxide~~	~~Q~~	~~Method 6~~	~~$393~~
		~~Method 6A~~	~~$393~~
		~~Method 6B~~	~~$393~~
		~~Method 6C~~	~~$393~~
		~~Method 8~~	~~$393~~
		~~Method19~~	~~$393~~
		~~Method 20~~	~~$393~~
~~Sulfuric Acid Mist~~	~~Q~~	~~Method 8~~	~~$393~~
~~Vapor Tightness, Gasoline Delivery Tank~~	~~Q~~	~~Method 27~~	~~$393~~
~~Volatile Matter Density, Solids and Water~~	~~Q~~	~~Method 24~~	~~$393~~
		~~Method 24A~~	~~$393~~
~~VOCs~~	~~Q~~	~~Method 21~~	~~$393~~
	~~S1~~	~~TO-15~~	~~$152~~
~~Wood Heaters, Certification and Burn Rates~~	~~Q~~	~~Method 28~~	~~$393~~
		~~Method 28A~~	~~$393~~
~~**3. ADEQ Emission Test**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Particulate Emissions, Dry Matter~~	~~R~~	~~Method A2~~	~~$393~~
~~Particulate Emissions, Sulfuric Acid Mist/Sulfur Oxides~~	~~R~~	~~Method A1~~	~~$393~~
~~**4. National Emission Standards for Hazardous Air Pollutants**~~			
~~**Description**~~	~~**Reference**~~	~~**Method/s**~~	~~**Fee Per Method**~~
~~Arsenic~~	~~S~~	~~Method 108~~	~~$393~~
		~~Method 108A~~	~~$393~~
		~~Method 108B~~	~~$393~~
		~~Method 108C~~	~~$393~~
~~Beryllium~~	~~S~~	~~Method 103~~	~~$393~~
		~~Method 104~~	~~$393~~
~~Mercury~~	~~S~~	~~Method 101~~	~~$393~~
		~~Method 101A~~	~~$393~~
		~~Method 102~~	~~$393~~
		~~Method 105~~	~~$393~~
~~Polonium 210~~	~~S~~	~~Method 111~~	~~$393~~

Vinyl Chloride	S	Method 106	$393
		Method 107	$393
		Method 107A	$393
SECTION E. METHODS DIRECTOR APPROVED UNDER R9-14-610(C)			
Description	**Reference**	**Method/s**	**Fee Per Method**
Chromatographic Method	-	Any	$116
Mass Spectrometric Method	-	Any	$152
Toxicity Method	-	Any	$194
Other Method	-	Any	$75

Table 2. Instrumentation Fees

Description	**Subtype, if any**	**Fee Per Instrument**
Atomic Absorption	Cold Vapor	$76
	Flame Burner	$76
	Graphite Furnace	$76
	Hydride Generator	$76
	Other	$76
Counters for Radioactivity	-	$76
Gas Chromatograph	Electron Capture	$76
	Flame Ionization	$76
	Flame Photometric	$76
	Halide Specific	$76
	Nitrogen/Phosphorus	$76
	Photoionization	$76
	Other	$76
Gas Chromatograph/Mass Spectrometer	High Resolution	$194
	Other than High Resolution	$152
High Pressure Liquid Chromatograph	Ultraviolet	$76
	Fluorescence	$76
	Other	$76
High Pressure Liquid Chromatograph/Mass Spectrometer	-	$152
Inductively Coupled Plasma	-	$76
Inductively Coupled Plasma/Mass Spectrometer	-	$152
Ion Chromatograph	-	$76
Automated Autoanalyzer	-	$76
Mercury Analyzer	-	$76
Organic Halide, Total	-	$76

~~Transmission Electron Microscope~~	~~-~~	~~$396~~
~~X-Ray Diffraction Unit~~	~~-~~	~~$76~~

EXHIBIT II. ~~ALTERNATE DEFAULT LIMITS~~ Repealed

~~Table 1. Default Limits~~

~~QUALITY CONTROL PARAMETERS WITHOUT ACCEPTANCE CRITERIA SPECIFIED IN THE METHOD~~	~~DEFAULT LIMITS~~
~~Matrix Spike/LFM (processed or non-processed)~~	~~LCS/LFB~~
~~LCS/LFB (processed or non-processed)/Second source reference standard~~	~~CCV/continuing IPC~~
~~LOQ/MRL (non-processed)~~	~~CCV/continuing IPC or ± 50%~~
~~LOQ/MRL (processed)~~	~~LCS/LFB or ± 50%~~
~~QCS (non-processed)~~	~~ICV/continuing IPC/manufacturer's limits~~
~~QCS (processed)~~	~~LCS/LFB/manufacturer's limits~~
~~IDOC limits~~	~~LFB/LCS~~
~~LFB/LCS/LFM/duplicate RPD~~	~~IDOC limits/≤20%~~
~~Non-CCC compounds~~	~~CCC limits~~
~~ICV/CCV~~	~~± 10%~~

~~**A.** For 8000 methods that do not specify the QC limits for Matrix Spike/LCS, a licensee may use the default limit of ±30%.~~
~~**B.** For 500, 600, 1600, and 8000 series methods that do not specify surrogates or acceptance limits for surrogates, a licensee may use the default limits of 70-130%.~~
~~**C.** For 500, 600, 1600, and 8000 series methods that do not specify internal standards or acceptance limits for internal standards, a licensee may use the default limits of 70-130%.~~
~~**D.** For methods that do not list a precision measurement, a licensee may use 20% RPD.~~
~~**E.** For methods that do not specify the LOQ/MRL, a licensee may use the default limit of ± 50%.~~

Table 6.2.A. Approved Methods and Method Fees for Drinking Water Parameters

1. Microbiology of Drinking Water			
Description	**Reference**	**Method/s**	**Fee Per Method**
Aeromonas	A4.35	1605	$228
Coliforms, Fecal	C	9221E (2006)	$228
		9222D (2006)	$228
Coliforms, Total and *E. coli*, by Colilert (ONPG-MUG)	C and Z	9223B (2004) and IDEXX	$152
Coliforms, Total, and *E. coli*, by Colisure	C2 and Z7	9223B (2004) and IDEXX	$152
Coliforms, Total, by Membrane Filtration	C	9222B (2006)	$228
		9222C (2006)	$228
Coliforms, Total and *E. coli*, by Membrane Filtration	A4.36	1604	$228
Coliforms, Total, and *E. coli* by Colitag	C and Z5	9223B (2004) and CPI	$152
Coliforms, Total, and *E. coli* by Modified Colitag	C and D8	9223B (2004) and Modified Colitag	$152
Coliforms, Total, and *E. coli* by E.colite	C and Z8	9223B (2004) and Charm Sciences, Inc.	$152
Coliforms, Total, and *E. coli* by m-ColiBlue24 Test	C and Z6	9222H (2006) and Hach 10029	$228
Coliforms, Total, and *E. coli* by Readycult Coliforms 100 Presence/Absence	C and Z14	9223B (2004) and EM Science	$152
Coliforms, Total, and *E. coli* by MF using Chromocult Coliform Agar	C and Z15	9223B (2004) and EM Science	$152

Coliforms, Total, by Multiple Tube Fermentation	C	9221B and C (2006)	$228
Coliforms, Total, by Presence/Absence	C	9221D (2006)	$228
Escherichia coli	C	9222G (2006)	$228
	X	Tube Procedure	$228
		Membrane Filter Procedure	$228
Cryptosporidium	A4.32	1622	$381
Giardia and *Cryptosporidium*	A4.39	1623	$381
	A4.33	1623.1	$381
Heterotrophic Plate Count	C	9215B (2004)	$152
	Z3	SimPlate	$152
Heterotrophic Plate Count (For Bottled Water Only)	C	9215D (2004)	$152
Microscopic Particulate Analysis	P1	910/9-92-029	$228
Viruses	P2	600/R-95/178	$381
Coliphage	A4.37	1601	$228
	A4.38	1602	$228

2. Inorganic Chemistry and Physical Properties of Drinking Water

Description	Reference	Method/s	Fee Per Method
Alkalinity	C	2320B (2011)	$19
Asbestos	A4.30	100.1 (9/83)	$503
	A4.31	100.2 (6/94)	$503
Bromate	A4.1	317.0 (2.0)	$76
	A4.3	326.0 (1.0)	$76
	A5	300.1 (1.0)	$26
		321.8 (1.0)	$152
Bromide	A4.41	302.0 (1.0)	$26
	A2	300.0 (2.1)	$26
	A4.1	317.0 (2.0)	$76
	A4.3	326.0 (1.0)	$76
	A5	300.1 (1.0)	$26
Calcium	A1	200.7 (4.4)	$10
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3500-Ca B (2011)	$76
Carbon, Dissolved Organic	A4.12	415.3 (1.1)	$76
	A4.13	415.3 (1.2)	$76
	C	5310B (2011)	$39
		5310C (2011)	$39
		5310D (2011)	$39
Carbon, Total Organic	A4.12	415.3 (1.1)	$76
	A4.13	415.3 (1.2)	$76
	C	5310B (2011)	$39
		5310C (2011)	$39
		5310D (2011)	$39
Chloride	A2	300.0 (2.1)	$26
	A5	300.1 (1.0)	$26
	C	4500-Cl B (2011)	$39
		4500-Cl D (2011)	$39
		4110B (2011)	$26
Chloramine	C	4500-Cl F (2011)	$39
		4500-Cl G (2011)	$76

Chlorate	A5	300.1 (1.0)	$26
Chlorine, Total Residual and Free	A4.44	334.0 (9/2000)	$39
	C	4500-Cl D (2011)	$39
		4500-Cl E (2011)	$39
		4500-Cl F (2011)	$39
		4500-Cl G (2011)	$39
		4500-Cl H (2011)	$39
		4500-Cl I (2011)	$39
Chlorine Dioxide	A4.4	327.0 (1.1)	$76
	C	4500-ClO_2 E (2011)	$39
	C7	ChlordioX Plus	$79
Chlorite	A2	300.0 (2.1)	$26
	A4.1	317.0 (2.0)	$76
	A4.3	326.0 (1.0)	$76
	A4.4	327.0 (1.1)	$76
	A5	300.1 (1.0)	$26
	C	4500-ClO_2 E (2011)	$39
	C7	ChlordioX Plus	$79
Color	C	2120B (2011)	$32
Corrosivity	C	2330B (2010)	$39
Cyanide	A2	335.4 (1.0)	$76
	A6	QuikChem 10-204-00-1-X (2.1)	$76
	C	4500-CN B (2011)	$7
		4500-CN C (2011)	$13
		4500-CN E (2011)	$76
		4500-CN F (2011)	$76
	E7	Kelada-01	$76
	A4.26	OIA-1677 DW	$76
Cyanide, Available/Amenable	C	4500-CN G (2011)	$76
	I	D6888-04	$76
Fluoride	A2	300.0 (2.1)	$26
	A3	380-75WE (2/76)	$39
	A5	300.1 (1.0)	$26
	C	4500-F B (2011)	$39
		4500-F C (2011)	$26
		4500-F D (2011)	$39
		4500-F E (2011)	$39
		4110B (2011)	$26
Hardness	A1	200.7 (4.4), Sum of Ca and Mg as their carbonates	$10
	C	2340 B (2011), Sum of Ca and Mg as their carbonates	$10
		2340 C (2011)	$39
Magnesium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3500-Mg B (1997)	$76
Methylene Blue Active Substances	C	5540 C (2011)	$39

Nitrate	A2	300.0 (2.1)	$26
		353.2 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-NO_3 D (2011)	$39
		4500-NO_3 E (2011)	$76
		4500-NO_3 F (2011)	$76
		4110B (2011)	$26
Nitrite	A2	300.0 (2.1)	$26
		353.2 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-NO_2 B (2011)	$76
		4500-NO_3 E (2011)	$76
		4500-NO_3 F (2011)	$76
		4110B (2011)	$26
Odor	C	2150B (2011)	$32
Orthophosphate	A2	300.0 (2.1)	$26
		365.1 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-P E (2011)	$76
		4500-P F (2011)	$76
		4110B (2011)	$26
Ozone	C	4500-O_3 B (2011)	$39
Perchlorate	A4.2	314.1 (1.0)	$76
	A4.5	331.0 (1.0)	$76
	A4.11	332.0 (1.0)	$76
	A5	314.0 (1.0)	$76
pH (Hydrogen Ion)	A	150.1	$39
		150.2	$39
	C	4500-H B (2011)	$39
Residue, Filterable (TDS)	C	2540C (2011)	$39
Sediment Concentration	I	D 3977-97	$13
Silica	A1	200.7 (4.4)	$10
	A4.10	200.5 (4.2)	$10
	C	4500-SiO_2 C (2011)	$76
		4500-SiO_2 D (2011)	$76
		4500-SiO_2 E (2011)	$76
Sodium	A1	200.7 (4.4)	$10
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
Specific Conductance	C	2510B (2011)	$39
Sulfate	A2	300.0 (2.1)	$26
		375.2 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-SO_4 C (2011)	$76
		4500-SO_4 D (2011)	$76
		4500-SO_4 E (2011)	$76
		4500-SO_4 F (2011)	$76
		4110B (2011)	$26
Temperature, Degrees Celsius	C	2550 (2010)	$13
Turbidity, Nephelometric (NTU)	A2	180.1 (2.0)	$39
	C	2130B (2011)	$39

UV-Absorption at 254 nm	A4.12	415.3 (1.1)	$76
	A4.13	415.3 (1.2)	$76
	C	5910B (2011)	$76

3. Metals in Drinking Water

a. Sample Preparation for Metals in Drinking Water

Description	Reference	Method/s	Fee Per Method
Acid Extractable Metals	C	3030C (2004)	$7
Microwave Assisted Digestion	C	3030K (2004)	$7
Nitric Acid	C	3030E (2004)	$7
Nitric Acid/Hydrochloric Acid	C	3030F (2004)	$7
Nitric Acid/Perchloric Acid	C	3030H (2004)	$7
Nitric Acid/Perchloric Acid/Hydrofluoric Acid	C	3030I (2004)	$7
Nitric Acid/Sulfuric Acid	C	3030G (2004)	$7
Preliminary Filtration	C	3030B (2004)	$7

b. Methods to Analyze Metals in Drinking Water

Description	Reference	Method/s	Fee Per Method
Aluminum	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111D (2011)	$26
		3113B (2010)	$26
Antimony	A1	200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
Arsenic	A1	200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
		3114B (2011)	$76
Barium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111D (2011)	$26
		3113B (2010)	$26
Beryllium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
Cadmium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
Chromium, Hexavalent by IC	A4.43	218.7 (1.0)	$116

Chromium, Total	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
Cobalt	A1	200.8 (5.4)	$26
Copper	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3113B (2010)	$26
Iron	A1	200.7 (4.4)	$10
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3113B (2010)	$26
Lead	A1	200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
Manganese	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	C	3111B (2011)	$26
		3113B (2010)	$26
Mercury	A	245.2	$52
	A1	245.1 (3.0)	$52
		200.8 (5.4)	$26
	C	3112B (2011)	$52
Molybdenum	A1	200.8 (5.4)	$26
Nickel	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3113B (2010)	$26
Selenium	A1	200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
		3114B (2011)	$76
Silver	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3113B (2010)	$26

Strontium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	C	3500-Sr B (2011)	$26
		3500-Sr C (2011)	$20
		3500-Sr D (2011)	$26
Thallium	A1	200.8 (5.4)	$26
		200.9 (2.2)	$26
Uranium	A1	200.8 (5.4)	$26
	C	7500 U-C (2011)	$206
	I	D3972-97, 02	$206
		D5174-97, 02	$206
Vanadium	A1	200.8 (5.4)	$26
Zinc	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
4. Organic Chemistry of Drinking Water			
a. Methods to Comply with National Primary Drinking Water Regulations			
Description	**Reference**	**Method/s**	**Fee Per Method**
Disinfectant Byproducts, Solvents and Pesticides: Alachlor Atrazine Dibromochloropropane Endrin Ethylene dibromide Heptachlor Heptachlorepoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Simazine 1,1,2-Trichloroethane Trichloroethylene 1,1,1-Trichloroethane Tetrachloroethylene Carbontetrachloride Chloroform Bromodichloromethane Dibromochloromethane Bromoform Total Trihalomethanes	D3	551.1 (1.0)	$116

VOCs by GC: Benzene Carbon Tetrachloride (mono) Chlorobenzene o-Dichlorobenzene para-Dichlorobenzene 1,2-Dichloroethane cis-1,2-Dichloroethylene Trans-1,2-Dichloroethylene Dichloromethane 1,2-Dichloropropane Ethylbenzene Styrene Tetrachloroethylene 1,1,1-Trichlorothane Trichloroethylene Toluene 1,2,4-Trichlorobenzene 1,1-Dichloroethylene 1,1,2-Trichloroethane Vinyl chloride Xylenes, Total Chloroform Bromodichloromethane Dibromochloromethane Bromoform Total Trihalomethanes	D3	502.2 (2.1)	$152
VOCs by GC-MS: Benzene Carbon Tetrachloride (mono) Chlorobenzene o-Dichlorobenzene para-Dichlorobenzene 1,2-Dichloroethane cis-1,2-Dichloroethylene Trans-1,2-Dichloroethylene Dichloromethane 1,2-Dichloropropane Ethylbenzene Styrene Tetrachloroethylene 1,1,1-Trichlorothane Trichloroethylene Toluene 1,2,4-Trichlorobenzene 1,1 Dichloroethylene 1,1,2-Trichloroethane Vinyl Chloride Xylenes, Total Chloroform Bromodichloromethane Dibromochloromethane Bromoform Total Trihalomethanes	A4.19	524.4	$152
	D3	524.2 (4.1)	$152

VOCs by GC: Benzene Carbon Tetrachloride (mono) Chlorobenzene o-Dichlorobenzene para-Dichlorobenzene 1,2-Dichloroethane cis-1,2-Dichloroethylene Trans-1,2-Dichloroethylene Dichloromethane 1,2-Dichloropropane Ethylbenzene Styrene Tetrachloroethylene 1,1,1-Trichlorothane Trichloroethylene Toluene 1,2,4-Trichlorobenzene 1,1-Dichloroethylene 1,1,2-Trichloroethane Vinyl chloride Xylenes, Total Chloroform Bromodichloromethane Dibromochloromethane Bromoform Total Trihalomethanes Dibromochloropropane Ethylenedibromide	A4.20	524.3 (1.0)	$152
EDB/DBCP	D3	504.1 (1.1)	$116
Pesticides and PCBs by GC (Microextraction): Alachlor Atrazine Chlorodane Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Simazine Toxaphene	D3	505 (2.1)	$152
Phthalate and Adipate Esters by GC-PID: Di (2-ethylhexyl)adipate Di (2-ethylhexyl)phthalate	D3	506 (1.1)	$116
Pesticides by GC-NPD Atrazine Alachlor Simazine	D3	507 (2.1)	$116

Chlorinated Pesticides by GC-ECD: Chlordane Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Toxaphene	D3	508 (3.1)	$152
Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD: Alachlor Atrazine Chlorodane Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Simazine Toxaphene	D3	508.1(2.0)	$152
Organics by GC-MS: Alachlor Atrazine Benzo(a)pyrene Chlorodane Di (2-ethylhexyl)adipate Di (2-ethylhexyl)phthalate Endrin Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Pentachlorophenol Simazine Toxaphene	D3	525.2 (2.0)	$152
1, 4-Dioxane by GC/MS	A4.21	522	$152

Carbamates by HPLC/Post Column: Carbofuran Oxamyl	A4.8	531.2 (1.0)	$116
	D3	531.1 (3.1)	$116
Chlorinated Acids and Dalapon by GC-ECD: 2,4-D Dalapon Dinoseb Pentachlorophenol Picloram Silvex (2,4,5-TP)	A4.6	515.4 (1.0)	$116
	A5	515.3 (1.0)	$116
	D	515.1 (4.0)	$116
Chlorinated Acids By GC-ECD 2,4-D Dinoseb Pentachlorophenol Picloram Silvex (2,4,5-TP)	D3	515.2 (1.1)	$116
Haloacetic Acids, Bromate and Dalapon By IC-ESI-MS/MS	A4.18	557 (1.0)	$152
Perfluorinated Compounds by LC/MS/MS	A4.40	537 (1.1)	$152
Hormones by LC/MS/MS	A4.42	539	$152
PAHs By HPLC/UV/FL: Benzo(a)pyrene	D1	550 (7/90)	$116
		550.1 (7/90)	$116
Haloacetic Acids and Dalapon by GC-ECD: Dalapon Monochloracetic Acid Dichloracetic Acid Trichloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid HAA5	D2	552.1 (1.0)	$116
	D3	552.2 (1.0)	$116
Haloacetic Acids: Monochloroacetic Acid Dichloroacetic Acid Trichloroacetic Acid Monobromoacetic Acid Dibromoacetic Acid Dalapon HAA5	A4.9	552.3 (1.0)	$116
Disinfection Byproducts by Micro Liquid-Liquid Extraction/ GC-ECD	C8	6251B (1994)	$116
Chlorinated Acids By HPLC/PDA/UV: 2,4-D Dinoseb Pentachlorophenol Picloram Silvex (2,4,5-TP)	D2	555 (1.0)	$116
1,4 Dioxane by GC/MS	A4.21	522 (1.0)	$152
Dioxin	A4.22	1613 Rev B (10/94)	$258
Diquat	A5	549.2 (1.0)	$116
Endothall	D2	548.1 (1.0)	$116
Glyphosate	D1	547 (7/90)	$116
PCBs (as decachlorobiphenyl)	D	508A (1.0)	$152
b. Additional Methods and Compounds Required by Other Programs			
Description	**Reference**	**Method/s**	**Fee Per Method**
Disinfectant Byproducts, Solvents and Pesticides	D3	551.1 (1.0)	$26
VOCs by GC	D3	502.2 (2.1)	$26
VOCs by GC-MS	A4.20	524.3 (1.0)	$26
	D3	524.2 (4.1)	$26
EDB/DBCP	D3	504.1 (1.1)	$26

Pesticides and PCBs by GC (Microextraction)	D3	505 (2.1)	$26
Phthalate and Adipate Esters by GC-PID	D3	506 (1.1)	$26
Pesticides by GC-NPD	D3	507 (2.1)	$26
Chlorinated Pesticides by GC-ECD	D3	508 (3.1)	$26
Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD	D3	508.1(2.0)	$26
Organics by GC-MS	D3	525.2 (2.0)	$26
Carbamates by HPLC/Post Column	A4.8	531.2 (1.0)	$26
	D3	531.1 (3.1)	$26
Chlorinated Acids and Dalapon by GC-ECD	A4.6	515.4 (1.0)	$26
	A5	515.3 (1.0)	$26
	D	515.1 (4.0)	$26
Chlorinated Acids By GC-ECD	D3	515.2 (1.1)	$26
PAHs By HPLC/UV/FL	D1	550 (7/90)	$26
		550.1 (7/90)	$26
Haloacetic Acids and Dalapon by GC-ECD	D2	552.1 (1.0)	$26
	D3	552.2 (1.0)	$26
Chlorinated Acids By HPLC/PDA/UV	D2	555 (1.0)	$26
Dioxins and Furans	A4.22	1613 Rev B (10/94)	$65
Paraquat	A5	549.2 (1.0)	$26
Benzidines and Nitrogen Compounds	D2	553 (1.1)	$116
Carbonyl Compounds	D2	554 (1.0)	$116
Phenols	A5	528 (1.0)	$152
Phenylurea Compounds	A5	532 (1.0)	$116
Selected Semivolatiles	A5	526 (1.0)	$152
Pesticides and Flame Retardants by GCMS	A4.7	527 (1.0)	$152
Explosives and Related Compounds	A4.15	529 (1.0)	$152
Acetanilide Degradation Products	A4.16	535 (1.1)	$194
Acetanilide Parent Compound	D3	525.2 (2.0)	$26
Nitrosamines by MS/MS	A4.14	521 (1.0)	$194

5. Radiochemistry of Drinking Water

Description	**Reference**	**Method/s**	**Fee Per Method**
Cesium	B	p. 4	$206
	C	7500-Cs B (2011)	$206
		7120 (2011)	$206
	J	R-1110-76	$206
		R-1111-76	$206
	L	901	$206
		901.1	$206
	U	Ga-01-R	$206
	W	p. 92	$206
Gamma Emitters	C	7500-Cs B (2011)	$206
		7500-I B (2011)	$206
		7120 (2011)	$206
	L	901.1	$206
		901.0	$206
		902.0	$206
	U	Ga-01-R	$206
	W	p. 92	$206

Gross Alpha	B	EPA 00-02	$206
	C	7110C (2011)	$206
	L	900.0	$206
	V	00-01	$206
		00-02	$206
Gross Alpha and Beta	B	p. 1	$206
	C	7110B (2011)	$206
	J	R-1120-76	$206
	L	900.0	$206
	V	00-01	$206
	W	p. 1	$206
Iodine	B	p. 6, p. 9	$206
	C	7120 (2011)	$206
		7500-I B (2011)	$206
		7500-I C (2011)	$206
		7500-I D (2011)	$206
	L	901.1	$206
		902.0	$206
	U	Ga-01-R	$206
	W	p. 92	$206
Radium 226	B	p. 13, p. 16	$206
	C	7500-Ra B (2011)	$206
		7500-Ra C (2011)	$206
	L	903.0	$206
		903.1	$206
	U	Ra-04	$206
		Ra-05	$206
	V	EPA Ra-03	$206
		EPA Ra-04	$206
	W	p. 19	$206
Radium 228	B	p. 24	$206
	C	7500-Ra D (2011)	$206
	L	904.0	$206
	V	Ra-05	$206
	W	p. 19	$206
Strontium	B	p. 29	$206
	C	7500-Sr B (2011)	$206
	J	R-1160-76	$206
	L	905.0	$206
	U	Sr-01	$206
		Sr-02	$206
	V	Sr-04	$206
	W	p. 65	$206
Tritium	B	p. 34	$206
	C	7500-^{3}H B (2011)	$206
	J	R-1171-76	$206
	L	906.0	$206
	V	H-02	$206
	W	p.87	$206

Uranium	A1	200.8 (5.4)	$26
	A7	D5174-97, 02	$206
	C	7500-U B (2011)	$206
		7500-U C (2011)	$206
	J	R-1180-76	$206
		R-1181-76	$206
		R-1182-76	$206
	L	908.0	$206
		908.1	$206
	U	U-02	$206
		U-04	$206
	V	00-07	$206
	W	p. 33	$206

Table 6.2.B. Approved Methods and Method Fees for Wastewater Parameters

1. Microbiology of Wastewater and Sewage Sludge			
Description	**Reference**	**Method/s**	**Fee Per Method**
Ascaris lumbricoides	C8	10550	$228
	P3	UofA2000	$228
Coliforms, Fecal, number per 100 ml or number per gram dry weight, by Membrane Filter	C	9222D (2006)	$228
Coliforms, Fecal, by Multiple Tube Fermentation (may be used for sewage sludge), number per 100 ml by MPN	C	9221C, E (2006)	$228
Coliforms, Total, by Membrane Filter	C	9222B (2006)	$228
Coliforms, Total, by Multiple Tube Fermentation	C	9221B (2006)	$228
Control of pathogens and vectors in sewage	E3	625/R-92/013	$76
Cryptosporidium	A4.32	1622	$381
Cryptosporidium and *Giardia*	A4.39	1623	$381
	C	9711B (2011)	$381
	P2	600/R-95/178	$381
E. coli, number per 100 ml, MPN multiple tube	C	9222B (2006)	$228
E. coli, number per 100 ml, MPN multiple tube/multiple well	C	9223B (2004)	$228
E. coli by m-ColiBlue	C1 and Z6	Hach 10029	$228
Enterococci, number per 100 ml MF	C	9230C (2007)	$228
Escherichia coli by Colilert MPN, in conjunction with SM 9221B and 9221C	C	9223B (2004)	$152
Escherichia coli in conjunction with SM 9221B and 9221C	C	9221F (2006)	$152
Entamoeba histolytica	C	9711C (2011)	$228
Enteric viruses	I	D4994-89	$381
Enteric viruses in sewage sludge	E3	EPA 625/R-92/103	$381
Fecal Coliforms by Colilert-18 (APP and Reuse only)	C	9020B (2005)/9223B (2004)	$152
Fecal Coliforms by Colilert-18 (NPDES-ATP Permits only)	C	9020B (2005)/9223B (2004)	$152
Fecal Coliforms in sewage sludge by MTF	Z1	EPA 1681	$228
Helminth Ova in sludge	Z4	600/1-87-014	$381
Salmonella in sludge MPN	E5	9260D (1988)	$228
Salmonella in Sewage Sludge (Biosolids) by Modified MSRV	A4.34	1682	$228
Streptococcus, Fecal, by Membrane Filter	C	9230C (2007)	$194
Streptococcus, Fecal, by Multiple Tube Fermentation	C	9230B (2007)	$194
Viruses	C	9510 (2011)	$381
	P	Methods for Virology	$381
	P2	600/R-95/178	$381

2. Wastewater Inorganic Chemistry, Nutrients and Demand

Description	Reference	Method/s	Fee Per Method
Acid Mine Drainage	A4.27	1627	$303
Acidity	C	2310B (2011)	$39
Alkalinity, Total	A	310.2 (1974)	$19
	C	2320B (2011)	$19
Ammonia	A2	350.1 (2.0)	$39
	C	4500-NH_3 B (2011)	$39
		4500-NH_3 C (2011)	$39
		4500-NH_3 D (2011)	$39
		4500-NH_3 E (2011)	$39
		4500-NH_3 G (2011)	$39
	C1	Hach 10205	$39
Ammonia in sludge only	E5	4500-NH3B&C (1990)	$39
Biochemical Oxygen Demand/Carbonaceous Biochemical Oxygen Demand	C	5210B (2011)	$152
	C3	Hach 10360	$152
Boron	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	4500-B B (2011)	$76
Bromide	A2	300.0 (2.1)	$26
	A5	300.1 (1.0)	$26
Calcium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3500-Ca B (2011)	$39
Carbon, Total Organic (TOC)	C	5310 B (2011)	$39
		5310 C (2011)	$39
		5310D (2011)	$39
Chemical Oxygen Demand	A	410.3 (1978)	$39
	A2	410.4 (2.0)	$76
	C	5220 B (2011)	$39
		5220 C (2011)	$39
		5220 D (2011)	$76
	C1	Hach 8000	$39
Chloride	A2	300.0 (2.1)	$26
	A5	300.1 (1.0)	$26
	C	4500-Cl B (2011)	$39
		4500-Cl C (2011)	$39
		4500-Cl D (2011)	$39
		4500-Cl E (2011)	$39
Chlorine, Total Residual	C	4500-Cl B (2011)	$39
		4500-Cl C (2011)	$39
		4500-Cl D (2011)	$39
		4500-Cl E (2011)	$39
		4500-Cl F (2011)	$39
		4500-Cl G (2011)	$39
	C1	Hach 10014	$39
Color	C	2120 B (2011)	$32

	C	4500-CN G (2011)	$76
Cyanide, Available	E7	Kelada-01	$76
	Y	OIA-1677-09 (8/99)	$76
Cyanide, Free	Y	OIA-1677-09 (8/99)	$76
Cyanide, Total	A2	335.4 (1.0)	$76
	A6	QuickChem 10-204-00-1-X (2.1)	$76
	C	Combination of 4500-CN B (2011) and 4500-CN C (2011), followed by 4500-CN D (2011), 4500-CN E (2011), or 4500-CN F (2011)	$89
	E7	Kelada-01	$76
Fluoride	A2	300.0 (2.1)	$26
	A5	300.1 (1.0)	$26
	C	4500-F B (2011)	$39
		4500-F C (2011)	$39
		4500-F D (2011)	$39
		4500-F E (2011)	$39
Hardness	A	130.1 (1976)	$10
	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	2340B (2011)	$39
		2340C (2011)	$39
Kjeldahl, Total Nitrogen	A	351.1 (1978)	$76
	A2	351.2 (2.0)	$76
	C	Combination of 4500-NH_3 B (2011) and either 4500-N_{org} B (2011) or 4500-N_{org} C (2011)	$115
		4500-NH_3 C (2011)	$39
		4500-NH_3 D (2011)	$39
		4500-NH_3 E (2011)	$39
		4500-NH_3 F (2011)	$39
		4500-NH_3 G (2011)	$39
		4500-NH_3 H (2011)	$39
	Z9	PAI-DK01 (12/94)	$76
	Z10	PAI-DK02 (12/94)	$76
	Z11	PAI-DK03 (12/94)	$76
Methylene Blue Active Substances	C	5540C (2011)	$39
Nitrate (as N)	A	352.1 (1971)	$76
	A2	300.0 (2.1)	$26
	A5	300.1 (1.0)	$26
	C	3500-NO_3 D (2011)	$39
Nitrate-Nitrite (as N)	A2	300.0 (2.1)	$26
		353.2 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-NO_3 E (2011)	$76
		4500-NO_3 F (2011)	$76
		4500-NO_3 H (2011)	$76

Nitrite (as N)	A2	300.0 (2.1)	$26
		353.2 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-NO_2 B (2011)	$76
		4500-NO_3 E (2011)	$76
		4500-NO_3 F (2011)	$76
Oil and Grease and Total Petroleum Hydrocarbons	A4.24	1664 Rev B	$76
	C	5520B (2011)	$76
Orthophosphate	A	365.3 (2.0)	$76
	A2	300.0 (2.1)	$26
		365.1 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-P E (2011)	$76
		4500-P F (2011)	$76
Oxygen-consumption Rate (SOUR)	C	2710B (2011)	$39
Oxygen, Dissolved	C	4500-O B (2011)	$26
		4500-O C (2011)	$26
		4500-O D (2011)	$26
		4500-O E (2011)	$26
		4500-O F (2011)	$26
		4500-O G (2011)	$26
	C1	1002-8-2009	$26
	C3	Hach 10360	$26
pH (Hydrogen Ion)	A	150.2	$39
	C	4500-H B (2011)	$39
Phenols	A	420.1 (1978)	$116
	A2	420.4 (1.0)	$116
	C	5530 B (2010)	$116
		5530 D (2010)	$116
Phosphorus, Total	A	365.3 (1978)	$76
		365.4 (1974)	$76
	A1	200.7 (4.4)	$10
	A2	365.1 (2.0)	$76
	C	4500-P B (2011)	$76
		4500-P E (2011)	$76
		4500-P F (2011)	$76
		4500-P G (2011)	$76
		4500-P H (2011)	$76
Potassium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	C	3111B (2011)	$26
		3500-K B (2011)	$26
Residue, Filterable (TDS)	C	2540C (2011)	$39
	E8	I-1750-85	$39
Residue, Nonfilterable (TSS)	C	2540D (2011)	$39
Residue, Settleable Solids	C	2540F (2011)	$39
Residue, Total	C	2540B (2011)	$39
Residue, Volatile	A	160.4 (1971)	$39
	C	2540E (2011)	$39

	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
Silica, Dissolved	C	4500-SiO_2 B (2011)	$76
		4500-SiO_2 C (2011)	$76
		4500-SiO_2 E (2011)	$76
		4500-SiO_2 F (2011)	$76
Sodium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3500-Na B (2011)	$26
		3500-Na D (2011)	$26
		3111B (2011)	$26
Sodium Azide	C	4110C (2011)	$76
Specific Conductance	A	120.1 (1982)	$39
	C	2510B (2011)	$39
Sulfate	A2	300.0 (2.1)	$26
		375.2 (2.0)	$76
	A5	300.1 (1.0)	$26
	C	4500-SO_4 C (2011)	$76
		4500-SO_4 D (2011)	$76
		4500-SO_4 E (2011)	$76
		4500-SO_4 F (2011)	$76
		4500-SO_4 G (2011)	$76
Sulfide (includes total and soluble)	C	4500-S^{2-} B (2011)	$39
		4500-S^{2-} D (2011)	$76
		4500-S^{2-} F (2011)	$39
		4500-S^{2-} G (2011)	$39
	C1	Hach 8131	$39
Sulfite	C	4500-SO_3 B (2011)	$76
Temperature, Degrees Celsius	C	2550B (2010)	$13
Total, Fixed and Volatile Solids in Solid and Semisolid Samples in Sludge	C	2540G (2011)	$39
Turbidity, NTU	A2	180.1 (2.0)	$39
	C	2130B (2011)	$39

3. Metals in Wastewater

a. Sample Preparation for Metals in Wastewater

Description	Reference	Method/s	Fee Per Method
Acid Extractable Metals	C	3030C (2004)	$7
Digestion for Metals	C	3030D (2004)	$7
Microwave Digestion	E6	CEM Microwave Digestion	$7
Nitric Acid	C	3030E (2004)	$7
Nitric Acid/Hydrochloric Acid	C	3030F (2004)	$7
Nitric Acid/Perchloric Acid	C	3030H (2004)	$7
Nitric Acid/Perchloric Acid/Hydrofluoric Acid	C	3030I (2004)	$7
Nitric Acid/Sulfuric Acid	C	3030G (2004)	$7
Preliminary Filtration	C	3030B (2004)	$7

b. Methods to Analyze Metals in Wastewater

Description	Reference	Method/s	Fee Per Method

Aluminum	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
		3111D (2011)	$26
Antimony	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	A4.25	1638	$26
	C	3111B (2011)	$26
		3113B (2010)	$26
Arsenic	A	206.5 (1978)	$39
	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
		3500-As B (2011)	$76
Barium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111D (2011)	$26
		3113B (2010)	$26
Beryllium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111D (2011)	$26
		3111E (2011)	$26
		3113B (2010)	$26
Cadmium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	A4.25	1638	$26
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
		3500-Cd D (2011)	$76
Chromium (VI) Hexavalent	A1	218.6 (3.3)	$26
	C	3500-Cr B (2011)	$39
		3111C (2011)	$26

Chromium, Total	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
		3500-Cr B (2011)	$76
Cobalt	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
Copper	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	A4.25	1638	$26
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
		3500-Cu B (2011)	$76
		3500-Cu C (2011)	$76
Gold	A	231.2 (1978)	$26
	A1	200.8 (5.4)	$26
	C	3111B (2011)	$26
Iridium	A	235.2 (1978)	$26
	C	3111B (2011)	$26
Iron	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
		3500-Fe B (2011)	$76
Lead	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	A4.25	1638	$26
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
		3500-Pb B (2011)	$76
Lithium	A1	200.7 (4.4)	$10

Magnesium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
Manganese	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3113B (2010)	$26
		3500-Mn B (2011)	$76
Mercury	A	245.2 (1974)	$52
	A1	200.7 (4.4)	$10
		245.1 (3.0)	$52
	A4.17	1631E	$152
	A4.23	245.7 (2.0)	$15
	C	3112B (2011)	$52
Molybdenum	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111D (2011)	$26
		3113B (2010)	$26
Nickel	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	A4.25	1638	$26
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
Osmium	A	252.2 (1978)	$26
	C	3111D (2011)	$26
Palladium	A	253.2 (1978)	$26
	C	3111B (2011)	$26
Platinum	A	255.2 (1978)	$26
	C	3111B (2011)	$26
Rhodium	A	265.2 (1978)	$26
	C	3111B (2011)	$26
Ruthenium	A	267.2 (1978)	$26
	C	3111B (2011)	$26
Selenium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3113B (2010)	$26
		3114B (2011)	$76

Silver	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3111C (2011)	$26
		3113B (2010)	$26
Strontium	A1	200.7 (4.4)	$10
	C	3111B (2011)	$26
		3500-Sr B (2011)	$26
		3500-Sr C (2011)	$20
		3500-Sr D (2011)	$26
Thallium	A	279.2 (1978)	$26
	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	A4.25	1638	$26
	C	3111B (2011)	$26
Tin	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
		200.9 (2.2)	$26
	A4.10	200.5 (4.2)	$10
	C	3111B (2011)	$26
		3113B (2010)	$26
Titanium	A	283.2 (1978)	$26
	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	C	3111D (2011)	$26
Vanadium	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	C	3111D (2011)	$26
		3500-V B (2011)	$76
Zinc	A	289.2 (1978)	$26
	A1	200.7 (4.4)	$10
		200.8 (5.4)	$26
	A4.10	200.5 (4.2)	$10
	A4.25	1638	$26
	C	3111B (2011)	$26
		3111C (2011)	$26
		3500 Zn B (2011)	$76
4. Aquatic Toxicity Bioassay of Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Toxicity, Acute	M1	EPA/600/4-90/027F	$194
	Z12	821-R-02-012	$194
Toxicity, Chronic	N1	EPA/600/4-91/002	$194
	Z2	821-R-02-013	$194
	Z13	Lozarchak, J. 2001	$194
5. Organic Chemicals of Wastewater			

Description	Reference	Method/s	Fee Per Method
Volatile Organics for Pharmaceuticals	D3	524.2 (4.1)	$152
Purgeable Hydrocarbons	E	601	$76
Purgeable Aromatics	E	602	$76
Acrolein and Acrylonitrile	E	603	$76
		624	$152
Phenols	E	604	$116
Benzidines	E	605	$116
Phthalate ester	E	606	$116
Nitrosamines	E	607	$116
Organochlorine Pesticides and PCBs	E	608	$152
	E2	608.1	$152
		608.2	$152
	E4	608 (3M)	$152
Nitroaromatics and Isophorone	E	609	$116
PAHs	E	610	$116
Haloethers	E	611	$116
Chlorinated Hydrocarbons	E	612	$116
2, 3, 7, 8-Tetrachlorodibenzo-p-Dioxin	E	613	$457
Chlorinated Herbicides	E2	615	$116
Organohalide Pesticides and PCB	E2	617	$116
Triazine Pesticides	E2	619	$116
Thiophosphate Pesticides	E2	622.1	$116
Purgeables	E	624	$152
Base/Neutrals and Acids (all analytes excluding pesticides)	E	625	$152
Base/Neutrals and Acids (pesticides only)	E	625	$152
Carbamate and Urea Compounds	E2	632	$116
Tetra- through Octa-Chlorinated Dioxins and Furans	A4.22	1613 Rev B (10/94)	$258
VOCs by Isotope Dilution GC/MS	E	1624B	$152
Semivolatile Organic Compounds by Isotope Dilution GC/MS	E	1625B	$152
Organophosphorus Pesticides	E1	1657	$116
	E2	614	$116
		614.1	$116
		622	$116
VOCs Specific to the Pharmaceutical Manufacturing Industry by Isotope Dilution GC/MS	K1	1666 (A)	$152
Herbicides	C	6640B (2006)	$116
Ethylene Glycol	K	BLS-188	$152
6. Radiochemistry of Wastewater			
Description	**Reference**	**Method/s**	**Fee Per Method**
Alpha-Total pCi per liter	C	7110B (2011)	$206
	L	900.0	$206
Alpha Counting Error, pCi per liter	C	7110B (2011)	$206
Beta-Total pCi per liter	C	7110B (2011)	$206
	L	900.0	$206
Beta Counting Error, pCi	C	7110B (2011)	$206
Radium, Total pCi per liter	C	7500-Ra B (2011)	$206
	L	903.0	$206
Radium	C	7500-Ra C (2011)	$206
	L	903.1	$206

Table 6.2.C. Approved Methods and Method Fees for Waste Parameters

1. Microbiology of Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Coliforms, Total, by Membrane Filter	F	9132	$228
Coliforms, Total, by Multiple Tube Fermentation	F	9131	$228
2. Sample Preparation for Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Acid Digestion of Water	F	3005A	$7
Alkaline Digestion for Hex Chome	F	3060A	$7
Bomb Preparation Method for Solid Waste	F	5050	$7
EP for Oily Wastes	F	1330A	$76
EP Toxicity	F	1310B	$76
Microwave Assisted Digestions	F	3015A	$7
		3051A	$7
		3052	$7
		3546	$7
Multiple EP	F	1320	$152
Oils, Greases, and Waxes	F	3040A	$7
Oils	F	3031	$7
Sediments, Sludges, and Soils	F	3050B	$7
SPLP	F	1312	$303
TCLP	F	1311	$303
Total Metals	F	3010A	$7
		3020A	$7
Total Recoverable in Water	F	3005A	$7
3. Inorganic Chemistry and Metals of Solid Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Aluminum	F	6010C	$10
		6020A	$26
		7000B	$26
	F and F13	6010D	$10
		6020B	$26
Ammonia	A	350.3	$39
Antimony	F	6010C	$10
		6020A	$26
		7062	$76
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Arsenic	F	6010C	$10
		6020A	$26
		7010	$26
		7061A	$76
		7062	$76
		7063	$76
	F and F13	6010D	$10
		6020B	$26

Barium	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Beryllium	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Boron	F	6010C	$10
	F and F13	6010D	$10
Bromide	F	9056A	$26
		9211	$39
Cadmium	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Calcium	F	6010C	$10
		6020A	$26
		7000B	$26
	F and F13	6010D	$10
		6020B	$26
Cation-Exchange Capacity of Soils	F	9080	$34
		9081	$34
Chloride	F	9056A	$26
		9057	$76
		9212	$39
		9250	$76
		9251	$76
		9253	$39
Chlorine, Total, in New and Used Petroleum Products	F	9075	$76
		9076	$39
		9077	$39
Chromium, Hexavalent	F	7195	$26
		7196A	$76
		7197	$26
		7198	$40
		7199	$76
Chromium, Total	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26

Cobalt	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Compatibility Test for Wastes and Membrane Liners	F	9090A	$152
Copper	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Corrosive to Steel	F	1110A	$63
Corrosivity pH Determination	F	9040C	$63
Cyanide	F	9010C	$13
		9012B	$76
		9213	$76
		9014	$76
	F9	9015	$76
Cyanide Extraction for Solids and Oils	F10	9013A	$39
Dermal Corrosion	F	1120	$63
Ignitability of Solids	F	1030	$32
Flash Point by Pensky Martems Cup	F	1010A	$32
Flash Point by Set-a Flash	F	1020B	$32
Fluoride	F	9056A	$26
		9214	$39
Iron	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Kjeldahl Total, Nitrogen	A	351.4	$76
Lead	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Liquid Release Test Procedure	F	9096	$39
Lithium	F	6010C	$10
		7000B	$26
	F and F13	6010D	$10
Magnesium	F	6010C	$10
		6020A	$26
		7000B	$26
	F and F13	6010D	$10
		6020B	$26

Manganese	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Mercury	F	6010C	$10
		6020A	$26
		7470A	$52
		7471B	$52
		7472	$152
		7473	$152
		7474	$152
	F and F13	6010D	$10
		6020B	$26
Molybdenum	F	6010C	$10
		7000B	$26
		7010	$26
	F and F13	6010D	$10
Nickel	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Nitrate	F	9210A	$39
		9056A	$26
Nitrite	F	9056A	$26
		9216	$39
Oil and Grease and Petroleum Hydrocarbons	A4.24	1664B	$76
O-Phosphate-P	F	9056A	$26
Osmium	F	7000B	$26
Paint Filter Liquids Test	F	9095B	$19
Perchlorate	A5	314.0	$76
	F	6850	$152
pH (Hydrogen Ion)	F	9041A	$39
		9045D	$39
Phosphorus	F	6010C	$10
	F and F13	6010D	$10
Phosphorus, Total	A	365.3	$76
Potassium	F	6010C	$10
		6020A	$26
		7000B	$26
	F and F13	6010D	$10
		6020B	$26
Saturated Hydraulic and Leachate Conductivity and Intrinsic Permeability	F	9100	$152

Selenium	F	6010C	$10
		6020A	$26
		7010	$26
		7741A	$26
		7742	$76
Silica	F and F13	6010D	$10
		6020B	$26
	F	6010C	$10
	F and F13	6010D	$10
Silver	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Sodium	F	6010C	$10
		6020A	$26
		7000B	$26
	F and F13	6010D	$10
		6020B	$26
Sodium Azide	C	4110C (2011)	$76
Specific Conductance	F	9050A	$39
Strontium	F	6010C	$10
		7000B	$26
	F and F13	6010D	$10
Sulfate	F	9035	$76
		9036	$76
		9038	$76
		9056A	$26
Sulfides	F	9030B	$76
		9031	$76
		9034	$76
		9215	$76
Thallium	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Tin	F	6010C	$10
		7000B	$26
	F and F13	6010D	$10
Titanium	F	6010C	$10
Vanadium	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26
Water	F	9000	$32
		9001	$32

White Phosphorus by GC	F	7580	$116
Zinc	F	6010C	$10
		6020A	$26
		7000B	$26
		7010	$26
	F and F13	6010D	$10
		6020B	$26

4. Organics Procedures in Waste

Description	Reference	Method/s	Fee Per Method
Separatory Funnel Liquid-Liquid Extraction	F	3510C	$13
Organic Compounds in Water by Microextraction	F5	3511	$13
Continuous Liquid-Liquid Extraction	F	3520C	$13
SPE	F	3535A	$13
Soxhlet Extraction	F	3540C	$13
Automated Soxhlet Extraction	F	3541	$13
Pressurized Fluid Extraction	F	3545A	$13
Ultrasonic Extraction	F	3550C	$13
Supercritical Fluid Extraction of Total Recoverable Petroleum Hydrocarbons	F	3560	$13
Supercritical Fluid Extraction of PAHs	F	3561	$13
SFE of PCBs and Organochlorine Pesticides	F	3562	$13
MSE	F4	3570	$13
Waste Dilution	F	3580A	$13
Waste Dilution for Volatile Organics	F	3585	$13
Alumina Cleanup	F	3610B	$13
Alumina Column Cleanup and Separation of Petroleum Wastes	F	3611B	$13
Florisil Cleanup	F	3620C	$13
Silica Gel Cleanup	F	3630C	$13
Gel-Permeation Cleanup	F	3640A	$13
Acid-Base Partition Cleanup	F	3650B	$13
Sulfur Cleanup	F	3660B	$13
Sulfuric Acid/Permanganate Cleanup	F	3665A	$13
Screening Solids for VOCs	F	3815	$76
Hexadecane Extraction and Screening for Purgeable Organics	F	3820	$76
Screening for Pentachlorophenol by Immunoassay	F	4010A	$76
Screening for 2,4-Dichlorophenoxyacetic Acid by Immunoassay	F	4015	$76
Screening for PCBs by Immunoassay	F	4020	$76
Screening for PCDDs and PCDFs by Immunoassay	F3	4025	$76
Soil Screening for Petroleum Hydrocarbons by Immunoassay	F	4030	$76
Soil Screening for PAHs by Immunoassay	F	4035	$76
Soil Screening for Toxaphene by Immunoassay	F	4040	$76
Soil Screening for Chlordane by Immunoassay	F	4041	$76
Soil Screening for DDT by Immunoassay	F	4042	$76
TNT Explosives in Soil by Immunoassay	F	4050	$76
RDX in Soil by Immunoassay	F	4051	$76
Screening Environmental Samples for Planar Organic Compounds	F	4425	$76
Triazine Herbicides by Quantitative Immunoassay	F	4670	$76

VOCs in Various Sample Matrices Using Equilibrium Headspace Analysis	F8	5021A	$13
Purge-and-Trap for Aqueous Samples	F6	5030C	$13
Volatile, Nonpurgeable, Water-Soluble Compounds by Azeotropic Distillation	F	5031	$13
VOCs by Vacuum Distillation	F	5032	$13
Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples	F2	5035A	$13
Analysis for Desorption of Sorbent Cartridges from VOST	F	5041A	$13
EDB and DBCP by Microextraction and GC	F	8011	$116
$C_{10} - C_{32}$ Hydrocarbons	K	8015AZ 1	$116
Nonhalogenated Organics Using GC/FID	F7	8015D	$116
Aromatic and Halogenated Volatiles by GC Using Photoionization and/or Electrolytic Conductivity Detectors	F	8021B	$152
Acrylonitrile by GC	F	8031	$76
Acrylamide by GC	F	8032A	$76
Acetonitrile by GC with Nitrogen-Phosphorus Detection	F	8033	$76
Phenols by GC	F	8041A	$116
Phthalate Esters by GC/ECD	F	8061A	$116
Nitrosamines by GC	F	8070A	$116
Organochlorine Pesticides by GC	F	8081B	$152
Elemental Quantitation by GC/AED	F	8085	$116
PCBs by GC	F	8082A	$152
Nitroaromatics and Cyclic Ketones by GC	F	8091	$116
Explosives by GC	F	8095	$116
PAHs	F	8100	$116
Haloethers by GC	F	8111	$116
Chlorinated Hydrocarbons by GC: Capillary Column Technique	F	8121	$116
Aniline and Selected Derivatives by GC	F	8131	$116
Organophosphorus Compounds by GC	F	8141B	$152
Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization	F	8151A	$152
VOCs by GC/MS, including n-Hexane	F	8260B	$152
	F12 and F13	8260C/8000D	$152
VOCs by VD/GC/MS	F	8261	$152
Semivolatile Organic Compounds by GC/MS	F	8270C	$152
	F and F13	8270D/8000D	$152
Semivolatile Organic Compounds (PAHs and PCBs) in Soils/Sludges and Solid Wastes Using TE/GC/MS	F	8275A	$152
8280A: Polychlorinated Dibenzo-p-Dioxins and PCDFs by HRGC/LRMS	F	8280B	$258
PCDDs and PCDFs by HRGC/HRMS	F	8290A	$258
PAHs	F	8310	$116
Determination of Carbonyl Compounds by HPLC	F	8315A	$116
Acrylamide, Acrylonitrile, and Acrolein by HPLC	F	8316	$116
N-Methylcarbamates by HPLC	F	8318A	$116
Solvent-Extractable Nonvolatile Compounds by HPLC/TS/MS or UV Detection	F	8321B	$152
Solvent Extractable Nonvolatile Compounds by HPLC/PB/MS	F	8325	$152
Nitroaromatics and Nitramines by HPLC	F	8330A	$116
Nitroaromatics, Nitramines, and Nitrate Esters	F11	8330B	$116
Tetrazene by Reverse Phase HPLC	F	8331	$116
Nitroglycerin by HPLC	F	8332	$116

GC/FT-IR Spectrometry for Semivolatile Organics: Capillary Column	F	8410	$116
Analysis of Bis (2-chloroethyl) Ether and Hydrolysis Products by Direct Aqueous Injection GC/FT-IR	F	8430	$116
Total Recoverable Petroleum Hydrocarbons by Infrared Spectrophotometry	F	8440	$116
Screening for RDX/MDX in Soil	F	8510	$76
Colorimetric Screening Method for TNT in Soil	F	8515	$76
Screening for Total VOH in Water	F	8535	$76
PCP by UV Colorimetry	F	8540	$108
TOX	F	9020B	$76
POX	F	9021	$76
TOX by Neutron Activation Analysis	F	9022	$114
EOX in Solids	F	9023	$114
TOCs	F	9060A	$76
Phenolics	F	9065	$152
		9066	$152
		9067	$152
HEM for Aqueous Samples	F	9070A	$76
HEM for Sludge, Sediment, and Solid Samples	F	9071B	$76
Screening for TRPH in Soil	F	9074	$76
Screening for PCBs in Soil	F	9078	$76
Screening for PCBs in Oil	F	9079	$76
PCBs in Waste Oil	A4.28	600/4-81-045	$152
5. Bulk Asbestos Analysis of Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Bulk Asbestos Analysis	A4.29	Bulk Asbestos	$228
	G	9002	$228
	G1 and A4.29	Bulk Asbestos	$228
Fiber Counting	G	7400	$228
		7402	$228
6. Radiochemistry of Waste			
Description	**Reference**	**Method/s**	**Fee Per Method**
Alpha-Emitting Radium Isotopes	F	9315	$206
Gross Alpha and Beta	F	9310	$206
Radium-228	F	9320	$206

Table 6.2.D. Approved Methods and Method Fees for Air and Stack Parameters

1. Ambient Air Primary and Secondary Pollutants			
Description	**Reference**	**Method/s**	**Fee Per Method**
Carbon Monoxide	O	Appendix C	$393
Formaldehyde	F	8520	$393
Lead	O	Appendix G	$393
Nitrogen Dioxide	O	Appendix F	$393
Ozone	O	Appendix D	$393

Particulate Matter	O	Appendix B	$393
		Appendix J	$393
		Appendix L	$393
		Appendix O	$393
Sulfur Oxides	O	Appendix A	$393
2. Stationary and Stack Sources			
Description	**Reference**	**Method/s**	**Fee Per Method**
Carbon Dioxide, Oxygen, and Excess Air	Q	Method 3C	$393
Carbon Monoxide	Q	Method 10	$393
		Method 10A	$393
		Method 10B	$393
Carbonyl Sulfide, Hydrogen Sulfide, and Carbon Disulfide	Q	Method 15	$393
Fluoride	Q	Method 13A	$393
		Method 13B	$393
		Method 14	$393
Fugitive Emissions	Q	Method 22	$393
Gaseous Organic Compounds	Q	Method 18	$393
		Method 25	$393
		Method 25A	$393
		Method 25B	$393
Hydrogen Sulfide	Q	Method 11	$393
Inorganic Lead	Q	Method 12	$393
Mercury, Total Vapor Phase	Q1	PS-12B	$393
Moisture Content	Q	Method 4	$393
Nitrogen Oxide	Q	Method 7	$393
		Method 7A	$393
		Method 7B	$393
		Method 7C	$393
		Method 7D	$393
		Method 7E	$393
		Method 20	$393
Non-methane Organic Compounds	Q	Method 25C	$393
Particulate Emissions by Asphalt Processing and Roofing	Q	Method 5A	$152
Particulate Emissions by Fiberglass Insulation Plants	Q	Method 5E	$152
Particulate Emissions of Nonsulfates	Q	Method 5F	$152
Particulate Emissions by Nonsulfuric Acid	Q	Method 5B	$152
Particulate Emissions by Pressure Filters	Q	Method 5D	$152
Particulate Emissions by Stationary Sources	Q	Method 5	$152
		Method 17	$152
Particulate Emissions by Wood Heaters	Q	Method 5G	$152
		Method 5H	$152
Petroleum Products, Heat of Combustion	I	D240-92	$76
		D240-87	$76
Petroleum Products, Hydrometer Method	I	D287-92	$76
Petroleum Products, Sulfur	I	D4294-90	$152
Sulfur and Total Reduced Sulfur	Q	Method 15A	$393
		Method 16	$393
		Method 16A	$393
		Method 16B	$393

Sulfur Dioxide	Q	Method 6	$393
		Method 6A	$393
		Method 6B	$393
		Method 6C	$393
		Method 8	$393
		Method 19	$393
		Method 20	$393
Sulfur Dioxide Removal and SO2/NO Emission Rates	Q	Method 19	$152
Sulfuric Acid Mist	Q	Method 8	$393
Vapor Tightness, Gasoline Delivery Tank	Q	Method 27	$393
Volatile Matter Density, Solids and Water from Surface Coatings	Q	Method 24	$393
		Method 24A	$393
Volatile Matter and Density of Printing Inks	Q	Method 24A	$393
VOCs	Q	Method 21	$393
	S1	TO-3	$152
		TO-14A	$152
		TO-15	$152
VOCs in Vapor	F1	8260B AZ (Vapor) (0.0)	$152
Wood Heaters, Certification and Burn Rates	Q	Method 28	$393
		Method 28A	$393

3. ADEQ Emission Test

Description	Reference	Method/s	Fee Per Method
Particulate Emissions in the Presence of Sulfuric Acid Mist/ Sulfur Oxides	R	Method A1	$393

4. National Emission Standards for Hazardous Air Pollutants

Description	Reference	Method/s	Fee Per Method
Arsenic	S	Method 108	$393
		Method 108A	$393
		Method 108B	$393
		Method 108C	$393
Beryllium	S	Method 103	$393
		Method 104	$393
Mercury	S	Method 101	$393
		Method 101A	$393
		Method 102	$393
		Method 105	$393
Polonium 210	S	Method 111	$393
Vinyl Chloride	S	Method 106	$393
		Method 107	$393
		Method 107A	$393

5. Determination of Metals in Ambient Particulate Matter

Description	Reference	Method/s	Fee Per Method
Digestion of Ambient Matter	O3	IO-3.1	$7
Aluminum	O1	IO-3.4	$10
	O2	IO-3.5	$26
Antimony	O1	IO-3.4	$10
	O2	IO-3.5	$26

Arsenic	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Barium	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Beryllium	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Bismuth	O1	IO-3.4	$10
Cadmium	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Calcium	O1	IO-3.4	$10
Cesium	O1	IO-3.4	$10
Chromium	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Cobalt	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Copper	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Germanium	O1	IO-3.4	$10
Gold	O1	IO-3.4	$10
Indium	O1	IO-3.4	$10
Iron	O1	IO-3.4	$10
Lanthanum	O1	IO-3.4	$10
Lead	O1	IO-3.4	$10
	O2	IO-3.5	$26
	O4	EQL-0510-191	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Lithium	O1	IO-3.4	$10
Magnesium	O1	IO-3.4	$10
Manganese	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Mercury	O1	IO-3.4	$10
	Q	Method 29 – CVAA	$52
Molybdenum	O1	IO-3.4	$10
	O2	IO-3.5	$26

Nickel	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Niobium	O1	IO-3.4	$10
Palladium	O1	IO-3.4	$10
Phosphorus	O1	IO-3.4	$10
	Q	Method 29 – ICP	$10
Platinum	O1	IO-3.4	$10
Potassium	O1	IO-3.4	$10
Rhenium	O1	IO-3.4	$10
Rhodium	O1	IO-3.4	$10
Ruthenium	O1	IO-3.4	$10
Samarium	O1	IO-3.4	$10
Selenium	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Silicon	O1	IO-3.4	$10
Silver	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Sodium	O1	IO-3.4	$10
Strontium	O1	IO-3.4	$10
Tantalum	O1	IO-3.4	$10
Tellurium	O1	IO-3.4	$10
Thallium	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Thorium	O2	IO-3.5	$26
Tin	O1	IO-3.4	$10
Titanium	O1	IO-3.4	$10
Tungsten	O1	IO-3.4	$10
Uranium	O2	IO-3.5	$26
Vanadium	O1	IO-3.4	$10
	O2	IO-3.5	$26
Ytrrium	O1	IO-3.4	$10
Zinc	O1	IO-3.4	$10
	O2	IO-3.5	$26
	Q	Method 29 – ICP	$10
		Method 29 – ICPMS	$26
Zirconium	O1	IO-3.4	$10

Table 6.2.E. Methods Director-Approved under R9-14-610(E) and Method Fees

Description	Reference	Method/s	Fee Per Method
Chromatographic Method	-	Any	$116
Mass Spectrometric Method	-	Any	$152
Toxicity Method	-	Any	$194
Other Method	-	Any	$75

Table 6.3. Instrumentation Fees

Description	Subtype, if any	Fee Per Instrument
Atomic Absorption	Cold Vapor	$76
	Flame Burner	$76
	Graphite Furnace	$76
	Hydride Generator	$76
	Other	$76
Counters for Radioactivity	-	$76
Gas Chromatograph	Electron Capture	$76
	Flame Ionization	$76
	Flame Photometric	$76
	Halide Specific	$76
	Nitrogen/Phosphorus	$76
	Photoionization	$76
	Other	$76
Gas Chromatograph/Mass Spectrometer	High Resolution	$194
	Other than High Resolution	$152
High Pressure Liquid Chromatograph	Ultraviolet	$76
	Fluorescence	$76
	Other	$76
High Pressure Liquid Chromatograph/Mass Spectrometer	-	$152
Inductively Coupled Plasma	-	$76
Inductively Coupled Plasma/Mass Spectrometer	-	$152
Ion Chromatograph	-	$76
Automated Autoanalyzer	-	$76
Mercury Analyzer	-	$76
Organic Halide, Total	-	$76
Transmission Electron Microscope	-	$396
X-Ray Diffraction Unit	-	$76

Table 6.4. Alternate Default Limits

QUALITY CONTROL PARAMETERS WITHOUT ACCEPTANCE CRITERIA SPECIFIED IN THE METHOD	DEFAULT LIMITS
Matrix Spike/LFM (processed or non-processed)	LCS/LFB
Matrix Spike/LCS for 8000 methods	±30%.
LCS/LFB (processed or non-processed)/Second source reference standard	CCV/continuing IPC
LOQ/MRL (non-processed)	CCV/continuing IPC or ± 50%
LOQ/MRL (processed)	LCS/LFB or ± 50%
Methods that do not specify the LOQ/MRL	± 50%
QCS (non-processed)	ICV/continuing IPC/manufacturer's limits
QCS (processed)	LCS/LFB/manufacturer's limits
IDOC limits	LFB/LCS
LFB/LCS/LFM/duplicate RPD	IDOC limits/?20%
Non-CCC compounds	CCC limits
ICV/CCV	± 10%

500, 600, 1600, and 8000 series methods that do not specify surrogates or acceptance limits for surrogates	70-130%.
500, 600, 1600, and 8000 series methods that do not specify internal standards or acceptance limits for internal standards	70-130%.
Methods that do not list a precision measurement	20% RPD

NOTICE OF FINAL RULEMAKING

TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE

CHAPTER 5. INDUSTRIAL COMMISSION OF ARIZONA

[R16-188]

PREAMBLE

1. Article, Part, or Section Affected (as applicable) **Rulemaking Action**
R20-5-715 Amend

2. Citations to agency's statutory rulemaking authority to include both the authorizing statute (general) and the implementing statute (specific):
Authorizing statutes: A.R.S. §§ 23-107(A)(1); 23-961.01(B)
Implementing statute: A.R.S. § 23-961.01(F)

3. The effective date of the rule:

a. If the agency selected a date earlier than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the earlier date and state the reason or reasons the agency selected the earlier effective date as provided in A.R.S. § 41-1032(A)(1) through (5):
September 7, 2016. The Industrial Commission of Arizona (Commission) requests an immediate effective date under A.R.S. § 41-1032(A)(5) ("To adopt a rule that is less stringent than the rule that is currently in effect and that does not have an impact on public health, safety, welfare or environment, or that does not affect the public involvement and public participation process.").

The current excess insurance requirements of R20-5-715(D) are an impediment to the formation of workers' compensation self-insurance pools, defeating the purpose of A.R.S. § 23-961.01. The proposed amendments reduce the stringency of these requirements by increasing permissible retention amounts and by decreasing the required amount of aggregate insurance coverage. The proposed amendments do not impact public health, safety, welfare or environment. Although the amendments to R20-5-715(D) loosen the excess insurance requirements, the changes should not impact the availability or effectiveness of workers' compensation for injured workers. Self-insurance pools established under A.R.S. § 23-961.01 remain subject to the Commission's approval process contemplated in A.R.S. §§ 23-961(A)(2) and 23-961.01(B). As such, self-insurance pools will continue to be required to meet rigid financial and loss control standards to demonstrate a "financial ability to pay [workers'] compensation . . . in the amount and manner and when due as provided in [A.R.S. Title 23, Chapter 6, Workers' Compensation]." The amendments should also have no effect on public involvement or the public participation process.

b. If the agency selected a date later than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the later date and state the reason or reasons the agency selected the later effective date as provided in A.R.S. § 41-1032(B):
Not applicable

4. Citations to all related notices published in the *Register* as specified in R1-1-409(A) that pertain to the record of the final rulemaking package:
Notice of Rulemaking Docket Opening: 22 A.A.R. 239, February 12, 2016
Notice of Proposed Rulemaking: 22 A.A.R. 416, March 4, 2016

5. The agency's contact person who can answer questions about the rulemaking:

Name: Scott J. Cooley, Attorney
Address: Industrial Commission of Arizona
800 W. Washington St., Suite 303
Phoenix, AZ 85007
Telephone: (602) 542-5781
Fax: (602) 542-6783
E-mail: scott.cooley@azica.gov

6. An agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:

Until 1997, Arizona law mandated that employers "secure workers' compensation to their employees" by either: (1) acquiring insurance from a carrier licensed to write workers' compensation insurance in the state or (2) obtaining authorization from the Industrial Commission of Arizona (Commission) to self-insure. *See* A.R.S. § 23-961(A). In 1997, the Arizona Legislature added "self-insurance pools" as a third mechanism for securing workers' compensation. S*ee* A.R.S. §§ 23-961(A), 23-961.01. Specifically, A.R.S. § 23-961.01(A) permits two or more employers who are engaged in similar industries to form a workers' compensation pool to provide for the direct payment and administration of workers' compensation claims.

A.R.S. § 23-961.01(F) directs the Commission to "adopt rules necessary for safeguarding the solvency of [self-insurance] pools and guaranteeing that injured workers receive benefits required under [A.R.S. Title 23, Chapter 6, Workers' Compensation]." The rules "shall include, at a minimum, matters pertaining to [among other things] . . . specific and aggregate excess insurance . . . necessary for participation in and administration of the workers' compensation system." A.R.S. § 23-961.01(F).

"Specific excess insurance," in this context, refers to insurance coverage purchased from an insurer who will be liable for the payment of any amount of a particular workers' compensation claim in excess of a retained predetermined amount (the specific retention) paid directly by the self-insurance pool. Once a pool has paid the specific retention for a particular claim, the specific excess insurer would be obligated to pay all remaining amounts due on that claim (with no upper limit). Specific excess insurance mitigates a pool's risk resulting from any particular claim.

"Aggregate excess insurance," in this context, refers to coverage purchased from an insurer who will be liable for the payment of any amount of the aggregate of all a pool's workers' compensation claims in excess of a retained predetermined amount (the aggregate retention) paid directly by the pool. Once the pool has paid the aggregate retention amount, the aggregate excess insurer would be obligated to pay all remaining claim liabilities on all claims (subject to policy limits). Aggregate excess insurance mitigates a pool's overall risk from all claims.

In 1998, following the enactment of A.R.S. § 23-961.01, the Commission adopted rules (Title 20, Chapter 5, Article 7) to implement the new legislation, including a rule (R20-5-715(D)) which established excess coverage and retention requirements for self-insurance pools. Specifically, the maximum permissible retention amounts were set at $250,000 (specific retention) and "110% of collected premiums" (for aggregate retention). The minimum aggregate insurance coverage limit was set at $5,000,000.

In 1998, when R20-5-715 was implemented, the excess insurance required by the rule was widely available in the insurance market at competitive prices. Today, however, Arizona employers have been effectively precluded from forming self-insurance pools because the required excess insurance products are either unavailable in the insurance market or are cost prohibitive. This is evidenced by the fact that no self-insurance pools under A.R.S. § 23-961.01 are currently in operation in Arizona. In short, the excess insurance requirements of R20-5-715(D) have become an impediment to the formation of self-insurance pools, frustrating the intent of A.R.S. § 23-961.01. The Commission seeks to remove these impediments by amending the rule to reflect present economic realities within the excess insurance industry.

The proposed amendments will allow self-insurance pools to acquire necessary excess coverage more easily and in a cost-effective manner. In lieu of a maximum specific retention amount of $250,000, the proposed amendments authorize a range of specific retention amounts from $100,000 up to $1,250,000. In lieu of a maximum aggregate retention amount of "110% of collected premiums," the proposed amendments authorize a maximum aggregate retention amount of "150% of collected premiums." And in lieu of a minimum aggregate excess coverage limit of $5,000,000, the proposed amendment authorizes a minimum coverage amount of $1,000,000. Finally, the proposed amendments give the Commission flexibility to approve deviations from the authorized specific retention range where a self-insurance pool can demonstrate sufficient financial security and loss control procedures to justify a higher specific retention, consistent with the approval process contemplated in A.R.S. §§ 23-961(A)(2) and 23-961.01(B). Each of these proposed amendments seeks to ease the regulatory burden on employers who may be interested in forming self-insurance pools by authorizing excess insurance products that are more accessible in the current insurance market and that are not cost prohibitive.

The proposed amendments are designed to make self-insurance pools a viable and cost-effective option for employers to provide workers' compensation to their employees. The proposed amendments will promote the statutory objectives of A.R.S. § 23-961.01(F), while continuing to ensure that self-insurance pools are financially able to provide for the payment and administration of workers' compensation claims.

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

The Commission has not reviewed or relied on a study for this rulemaking.

8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. A summary of the economic, small business and consumer impact:

EMPLOYERS and EMPLOYEES: The proposed amendments ease the regulatory burden on employers who participate in self-insurance pools by authorizing excess insurance products that are cost-effective and more accessible in the current insurance market. Arizona employers, both large and small, who participate in a self-insurance pool will benefit economically from the proposed amendments. In addition, incentivizing the use of self-insurance pools will likely lead to increased workplace safety and a reduction in industrial injuries.

INSURERS: As a result of the proposed rulemaking, Arizona employers may elect to participate in a self-insurance pool in lieu of purchasing workers' compensation insurance under A.R.S. § 23-961(A)(1). This shift would result in a decrease in sales of workers' compensation insurance policies and an increase in sales of specific and aggregate excess insurance policies. Although some impact on the insurance industry is expected, the Commission does not believe the impact of the proposed amendments will be significant for any particular insurance carrier.

SPECIAL FUND: The proposed rulemaking may indirectly impact on the Commission's Special Fund Division/No Insurance Section (Special Fund), which provides workers' compensation benefits to injured employees of uninsured employers. If currently-uninsured employers elect to participate in a self-insurance pool as a result of the proposed rulemaking, the Special Fund would benefit because workers' compensation liabilities of the formerly-uninsured employers would be shifted from the Special Fund to self-insurance pools. The Commission, however, believes the overall impact on the Special Fund will be minimal, as it is likely that the majority of uninsured employers will not participate in a self-insurance pool.

10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:

Two non-substantive changes were made to subsection (D)(1)(a) of the proposed amended rule. The word "Maximum" was deleted because the proposed amendments replace the maximum permissible specific retention with an authorized range of specific retention amounts, thereby rendering the word "Maximum" superfluous. Second, due to the deletion of the word "Maximum," which began the sentence, the word "retention" was capitalized.

11. An agency's summary of the public or stakeholder comments made about the rulemaking:

No oral or written comments were submitted on this rulemaking.

12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

None

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

The amended rule does not require a permit.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

The subject of the rulemaking, *i.e.*, retention and policy amounts for specific and aggregate excess insurance for a self-insurance pool under A.R.S. § 23-916.01, is a matter of state law. The Commission is not aware of any applicable federal law.

c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:

No

13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rule:

None

14. Whether the rule was previously made, amended or repealed as an emergency rule. If so, cite the notice published in the Register as specified in R1-1-409(A). Also, the agency shall state where the text was changed between the emergency and the final rulemaking packages:

Not applicable

15. The full text of the rule follows:

TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE

CHAPTER 5. INDUSTRIAL COMMISSION OF ARIZONA

ARTICLE 7. SELF-INSURANCE REQUIRMENTS FOR WORKERS' COMPENSATION POOLS ORGANIZED UNDER A.R.S. § 23-961.01

ARTICLE 7. SELF-INSURANCE REQUIRMENTS FOR WORKERS' COMPENSATION POOLS ORGANIZED UNDER A.R.S. § 23-961.01

R20-5-715. Aggregate and Specific Excess Insurance Policies

A. A pool shall maintain aggregate and specific excess insurance policies during all periods of self-insurance.

B. The Commission shall not consider policies of aggregate and specific excess insurance when determining a pool's ability to fulfill its financial obligations under the Arizona Workers' Compensation Act, unless the policies are issued by a casualty insurance company authorized by the Arizona Department of Insurance to transact business in Arizona.

C. A pool or insurance company seeking to cancel or refuse renewal of aggregate and specific excess insurance policies shall provide 90 days written notice of the proposed cancellation or non-renewal to the other party to the policies and to the Commission. The written notice shall be by registered or certified mail. Failure to provide notice as required by this Section precludes cancellation or non-renewal of the policies.

D. Policy and Retention Amounts.

1. Policy and retention amounts for specific and aggregate excess insurance for a pool shall be as follows:
   a. ~~Maximum retention~~ Retention for specific excess insurance shall not be less than $100,000 nor exceed ~~$250,000~~$1,250,000 without advance written approval by the Commission. Specific excess insurance shall be provided to the statutory limit; and
   b. Maximum retention of aggregate excess insurance shall not exceed ~~110~~150% of collected premiums. Total aggregate insurance coverage shall not be less than ~~$5,000,000~~$1,000,000.
2. Aggregate and specific excess insurance policies shall state that payments of workers' compensation benefits on a claim made by a member employer, pool, or surety under a bond or through the use of other approved securities shall be applied toward reaching the retention level in the policy.

NOTICES OF RECODIFICATION

The Office of the Secretary of State will publish a Notice of Recodification in the *Register* when the Office finds it necessary to recodify a Chapter in order to maintain the integrity of the codification system or whenever an agency requests, in writing, that an entire Chapter or portion of a Chapter be recodified.

NOTICE OF RECODIFICATION

TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE

CHAPTER 2. DEPARTMENT OF WEIGHTS AND MEASURES

[R16-165]

1. A list of the Subchapters (if applicable), Articles, Parts (if applicable), and Sections being recodified along with their respective headings:

20 A.A.C. 2, Article 1. Administration and Procedures
R20-2-101. Definitions
R20-2-102. Metrology Laboratory Testing and Calibration Fees
R20-2-103. Licensing and Fees
R20-2-104. Administrative Enforcement Action
R20-2-105. Repealed
R20-2-106. Repealed
R20-2-107. Repealed
R20-2-108. Time-frames for Licenses, Renewals, and Authorities to Construct
R20-2-109. Administrative Hearing Procedures
R20-2-110. Motion for Rehearing or Review
R20-2-111. Repealed
R20-2-112. Repealed
R20-2-113. Renumbered
R20-2-114. Repealed
R20-2-115. Renumbered
R20-2-116. Renumbered
R20-2-117. Renumbered
Table 1. Time-frames (in days)
20 A.A.C. 2, Article 2. Commercial Devices
R20-2201. Licensing Process
R20-2-202. Repealed
R20-2-203. Approval, Installation, and Sale of Devices
R20-2-204. Livestock and Vehicle Scale Installation
20 A.A.C. 2, Article 3. Packaging, Labeling and Method of Sale
R20-2-301. Repealed
R20-2302. Handbook 130 and Handbook 133
R20-2-303. Repealed
R20-2-304. Repealed
R20-2-305. Repealed
R20-2-306. Repealed
R20-2-307. Repealed
R20-2-308. Repealed
R20-2-309. Repealed
R20-2-310. Repealed
R20-2-311. Repealed
R20-2-312. Repealed
R20-2-313. Repealed
20 A.A.C. 2, Article 4. Price Verification and Price Posting
R20-2-401. Repealed
R20-2-402. Price-posting Inspection Procedure and Violation Exceptions
R20-2-403. Repealed
R20-2-404. Repealed
R20-2-405. Repealed
R20-2-406. Repealed
R20-2-407. Repealed
R20-2-408. Repealed
R20-2-409. Repealed
R20-2-410. Repealed
R20-2-411. Repealed
R20-2-412. Repealed
20 A.A.C. 2, Article 5. Public Weighmasters

R20-2-501. Qualifications; License and Renewal Application Process
R20-2-502. Duties
R20-2-503. Grounds for Denying License or Renewal; and Disciplinary Action
R20-2-504. Scales and Vehicle Weighing
R20-2-505. Weight Certificates
R20-2-506. Seal of Authority
R20-2-507. Prohibited Acts
20 A.A.C. 2, Article 6. Registered Service Agencies and Representatives
R20-2601. Qualifications; License and Renewal Application Process
R20-2602. Duties
R20-2603. Grounds for Denying License or Renewal; Disciplinary Action; and Certification of Standards and Testing Equipment
R20-2604. Prohibited Acts
R20-2-605. Material Incorporated by Reference
20 A.A.C. 2, Article 7. Motor Fuels and Petroleum Products
R20-2-701. Definitions
R20-2-702. Material Incorporated by Reference
R20-2-703. Volumetric Inspection of Motor Fuels and Motor Fuel Dispensers
R20-2-704. Price and Grade Posting on External Signs
R20-2-705. Price, Octane, and Lead Substitute Notification on Dispensers
R20-2-706. Unattended Retail Dispensers
R20-2-707. Product Transfer Documentation and Record Retention for Motor Fuel other than Arizona CBG and AZRBOB
R20-2-708. Gasoline Ethanol Blends
R20-2-709. Retail Oxygenated Fuel Labeling
R20-2-710. Blending Requirements
R20-2-711. Alcohol-oxygenated Gasoline Storage Tank Requirements
R20-2-712. Water in Service Station Motor Fuel Storage Tanks
R20-2-713. Motor Fuel Storage Tank Labeling
R20-2-714. Requirements for Motor Fuels Other than Arizona CBG
R20-2-715. Motor Fuel Quality Testing Methods and Requirements
R20-2-716. Sampling and Access to Records
R20-2-717. Hold-open Latch Exception
R20-2-718. Requirements for the Production, Transport, Distribution, and Sale of Biofuels
R20-2-719. Repealed
R20-2-720. Renumbered
R20-2-721. Renumbered
R20-2-722. Reserved
through
R20-2-748. Reserved
R20-2-749. Definitions Applicable to Arizona CBG and AZRBOB
R20-2-750. Registration Relating to Arizona CBG or AZRBOB
R20-2-751. Arizona CBG Requirements
R20-2-751.01. Repealed
R20-2-752. General Requirements for Registered Suppliers
R20-2-753. General Requirements for Pipelines and Third-party Terminals
R20-2-754. Downstream Blending Exceptions for Transmix
R20-2-755. Additional Requirements for AZRBOB and Downstream Oxygenate Blending
R20-2-756. Downstream Blending of Arizona CBG with Nonoxygenate Blendstocks
R20-2-757. Product Transfer Documentation; Records Retention
R20-2-758. Repealed
R20-2-759. Testing Methodologies
Table A. Arizona Department of Weights and Measures Test Methods for Arizona CBG and AZRBOB
R20-2-760. Compliance Surveys
R20-2-761. Liability for Noncompliant Arizona CBG or AZRBOB
R20-2-762. Penalties
Table 1. Type 1 Arizona CBG Standards
Table 2. Type 2 Arizona CBG Standards
Table 3. Repealed
20 A.A.C. 2, Article 8. Repealed
20 A.A.C. 2, Article 9. Gasoline Vapor Control for Sites with both Stage I and Stage II Vapor Recovery Systems
R20-2-901. Material Incorporated by Reference
R20-2-902. Exemptions
R20-2-903. Equipment and Installation
R20-2-904. Application Requirements and Process for Authority to Construct Plan Approval
R20-2-905. Initial Inspection and Testing
R20-2-906. Fee
R20-2-907. Operation
R20-2-908. Training and Public Education
R20-2-909. Recordkeeping and Reporting
R20-2-910. Annual Inspection and Testing
R20-2-911. Compliance Inspections
R20-2-912. Enforcement
R20-2-913. Stage II Decommissioning
20 A.A.C. 2, Article 10. Stage I Vapor Recovery Systems

R20-2-1001. Material Incorporated by Reference
R20-2-1002. Exemptions
R20-2-1003. Equipment and Installation
R20-2-1004. Application Requirements and Process for Authority to Construct Plan Approval
R20-2-1005. Initial Inspection and Testing
R20-2-1006. Fee
R20-2-1007. Operation
R20-2-1008. Training and Public Education
R20-2-1009. Recordkeeping and Reporting
R20-2-1010. Annual Testing and Inspection
R20-2-1011. Compliance Inspection and Additional Test methods
R20-2-1012. Enforcement
R20-2-1013. Stage II Vapor Recovery
Table 1. Acceptability of Final System Pressure Results for Systems Tested Using TP-201.3

2. A list of the Subchapters (if applicable), Articles, Parts (if applicable), and Sections as recodified along with their respective headings:

3 A.A.C. 7, Article 1. Administration and Procedures
R3-7-101. Definitions
R3-7-102. Metrology Laboratory Testing and Calibration Fees
R3-7-103. Licensing and Fees
R3-7-104. Administrative Enforcement Action
R3-7-105. Repealed
R3-7-106. Repealed
R3-7-107. Repealed
R3-7-108. Time-frames for Licenses, Renewals, and Authorities to Construct
R3-7-109. Administrative Hearing Procedures
R3-7-110. Motion for Rehearing or Review
R3-7-111. Repealed
R3-7-112. Repealed
R3-7-113. Renumbered
R3-7-114. Repealed
R3-7-115. Renumbered
R3-7-116. Renumbered
R3-7-117. Renumbered
Table 1. Time-frames (in days)
3 A.A.C. 7, Article 2. Commercial Devices
R3-7201. Licensing Process
R3-7-202. Repealed
R3-7-203. Approval, Installation, and Sale of Devices
R3-7-204. Livestock and Vehicle Scale Installation
3 A.A.C. 7, Article 3. Packaging, Labeling, and Method of Sale
R3-7-301. Repealed
R3-7302. Handbook 130 and Handbook 133
R3-7-303. Repealed
R3-7-304. Repealed
R3-7-305. Repealed
R3-7-306. Repealed
R3-7-307. Repealed
R3-7-308. Repealed
R3-7-309. Repealed
R3-7-310. Repealed
R3-7-311. Repealed
R3-7-312. Repealed
R3-7-313. Repealed
3 A.A.C. 7, Article 4. Price Verification and Price Posting
R3-7-401. Repealed
R3-7-402. Price-posting Inspection Procedure and Violation Exceptions
R3-7-403. Repealed
R3-7-404. Repealed
R3-7-405. Repealed
R3-7-406. Repealed
R3-7-407. Repealed
R3-7-408. Repealed
R3-7-409. Repealed
R3-7-410. Repealed
R3-7-411. Repealed
R3-7-412. Repealed
3 A.A.C. 7, Article 5. Public Weighmasters
R3-7-501. Qualifications; License and Renewal Application Process
R3-7-502. Duties
R3-7-503. Grounds for Denying License or Renewal; and Disciplinary Action
R3-7-504. Scales and Vehicle Weighing
R3-7-505. Weight Certificates

R3-7-506. Seal of Authority
R3-7-507. Prohibited Acts
3 A.A.C. 7, Article 6. Registered Service Agencies and Representatives
R3-7601. Qualifications; License and Renewal Application Process
R3-7602. Duties
R3-7603. Grounds for Denying License or Renewal; Disciplinary Action; and Certification of Standards and Testing Equipment
R3-7604. Prohibited Acts
R3-7-605. Material Incorporated by Reference
3 A.A.C. 7, Article 7. Motor Fuels and Petroleum Products
R3-7-701. Definitions
R3-7-702. Material Incorporated by Reference
R3-7-703. Volumetric Inspection of Motor Fuels and Motor Fuel Dispensers
R3-7-704. Price and Grade Posting on External Signs
R3-7-705. Price, Octane, and Lead Substitute Notification on Dispensers
R3-7-706. Unattended Retail Dispensers
R3-7-707. Product Transfer Documentation and Record Retention for Motor Fuel other than Arizona CBG and AZRBOB
R3-7-708. Gasoline Ethanol Blends
R3-7-709. Retail Oxygenated Fuel Labeling
R3-7-710. Blending Requirements
R3-7-711. Alcohol-oxygenated Gasoline Storage Tank Requirements
R3-7-712. Water in Service Station Motor Fuel Storage Tanks
R3-7-713. Motor Fuel Storage Tank Labeling
R3-7-714. Requirements for Motor Fuels Other than Arizona CBG
R3-7-715. Motor Fuel Quality Testing Methods and Requirements
R3-7-716. Sampling and Access to Records
R3-7-717. Hold-open Latch Exception
R3-7-718. Requirements for the Production, Transport, Distribution, and Sale of Biofuels
R3-7-719. Repealed
R3-7-720. Renumbered
R3-7-721. Renumbered
R3-7-722. Reserved
through
R3-7-748. Reserved
R3-7-749. Definitions Applicable to Arizona CBG and AZRBOB
R3-7-750. Registration Relating to Arizona CBG or AZRBOB
R3-7-751. Arizona CBG Requirements
R3-7-751.01. Repealed
R3-7-752. General Requirements for Registered Suppliers
R3-7-753. General Requirements for Pipelines and Third-party Terminals
R3-7-754. Downstream Blending Exceptions for Transmix
R3-7-755. Additional Requirements for AZRBOB and Downstream Oxygenate Blending
R3-7-756. Downstream Blending of Arizona CBG with Nonoxygenate Blendstocks
R3-7-757. Product Transfer Documentation; Records Retention
R3-7-758. Repealed
R3-7-759. Testing Methodologies
Table A. Arizona Department of Weights and Measures Test Methods for Arizona CBG and AZRBOB
R3-7-760. Compliance Surveys
R3-7-761. Liability for Noncompliant Arizona CBG or AZRBOB
R3-7-762. Penalties
Table 1. Type 1 Arizona CBG Standards
Table 2. Type 2 Arizona CBG Standards
Table 3. Repealed
3 A.A.C. 7, Article 8. Repealed
3 A.A.C. 7, Article 9. Gasoline Vapor Control for Sites with both Stage I and Stage II Vapor Recovery Systems
R3-7-901. Material Incorporated by Reference
R3-7-902. Exemptions
R3-7-903. Equipment and Installation
R3-7-904. Application Requirements and Process for Authority to Construct Plan Approval
R3-7-905. Initial Inspection and Testing
R3-7-906. Fee
R3-7-907. Operation
R3-7-908. Training and Public Education
R3-7-909. Recordkeeping and Reporting
R3-7-910. Annual Inspection and Testing
R3-7-911. Compliance Inspections
R3-7-912. Enforcement
R3-7-913. Stage II Decommissioning
3 A.A.C. 7, Article 10. Stage I Vapor Recovery Systems
R3-7-1001. Material Incorporated by Reference
R3-7-1002. Exemptions
R3-7-1003. Equipment and Installation
R3-7-1004. Application Requirements and Process for Authority to Construct Plan Approval
R3-7-1005. Initial Inspection and Testing
R3-7-1006. Fee

R3-7-1007. Operation
R3-7-1008. Training and Public Education
R3-7-1009. Recordkeeping and Reporting
R3-7-1010. Annual Testing and Inspection
R3-7-1011. Compliance Inspection and Additional Test Methods
R3-7-1012. Enforcement
R3-7-1013. Stage II Vapor Recovery
Table 1. Acceptability of Final System Pressure Results for Systems Tested Using TP-201.3

3. A conversion table between the two numbering schemes:

Old Numbering Scheme	New Numbering Scheme
Title 20, Chapter 2. Department of Weights and Measures	Title 3, Chapter 7. Department of Agriculture – Weights and Measures Services Division
Title 20, Chapter 2, Article 1. Administration and Procedures	Title 3, Chapter 7, Article 1. Administration and Procedures
R20-2-101	R3-7-101
R20-2-102	R3-7-102
R20-2-103	R3-7-103
R20-2-104	R3-7-104
R20-2-105	R3-7-105
R20-2-106	R3-7-106
R20-2-107	R3-7-107
R20-2-108	R3-7-108
R20-2-109	R3-7-109
R20-2-110	R3-7-110
R20-2-111	R3-7-111
R20-2-112	R3-7-112
R20-2-113	R3-7-113
R20-2-114	R3-7-114
R20-2-115	R3-7-115
R20-2-116	R3-7-116
R20-2-117	R3-7-117
Table 1	Table 1
Title 20, Chapter 2, Article 2. Commercial Devices	Title 3, Chapter 7, Article 2. Commercial Devices
R20-2201	R3-7-201
R20-2-202	R3-7-202
R20-2-203	R3-7-203
R20-2-204	R3-7-204
Title 20, Chapter 2, Article 3. Packaging, Labeling and Method of Sale	Title 3, Chapter 7, Article 3. Packaging, Labeling, and Method of Sale
R20-2-301	R3-7-301
R20-2302	R3-7302
R20-2-303	R3-7-303
R20-2-304	R3-7-304
R20-2-305	R3-7-305
R20-2-306	R3-7-306
R20-2-307	R3-7-307
R20-2-308	R3-7-308
R20-2-309	R3-7-309
R20-2-310	R3-7-310
R20-2-311	R3-7-311
R20-2-312	R3-7-312
R20-2-313	R3-7-313
Title 20, Chapter 2, Article 4. Price Verification and Price Posting	Title 3, Chapter 7, Article 4. Price Verification and Price Posting
R20-2-401	R3-7-401
R20-2-402	R3-7-402
R20-2-403	R3-7-403

R20-2-404	R3-7-404
R20-2-405	R3-7-405
R20-2-406	R3-7-406
R20-2-407	R3-7-407
R20-2-408	R3-7-408
R20-2-409	R3-7-409
R20-2-410	R3-7-410
R20-2-411	R3-7-411
R20-2-412	R3-7-412
Title 20, Chapter 2, Article 5. Public Weighmasters	Title 3, Chapter 7, Article 5. Public Weighmasters
R20-2-501	R3-7-501
R20-2-502	R3-7-502
R20-2-503	R3-7-503
R20-2-504	R3-7-504
R20-2-505	R3-7-505
R20-2-506	R3-7-506
R20-2-507	R3-7-507
Title 20, Chapter 2, Article 6. Registered Service Agencies and Representatives	Title 3, Chapter 7, Article 6. Registered Service Agencies and Representatives
R20-2-601	R3-7-601
R20-2-602	R3-7-602
R20-2-603	R3-7-603
R20-2-604	R3-7-604
R20-2-605	R3-7-605
Title 20, Chapter 2, Article 7. Motor Fuels and Petroleum Products	Title 3, Chapter 7, Article 7. Motor Fuels and Petroleum Products
R20-2-701	R3-7-701
R20-2-702	R3-7-702
R20-2-703	R3-7-703
R20-2-704	R3-7-704
R20-2-705	R3-7-705
R20-2-706	R3-7-706
R20-2-707	R3-7-707
R20-2-708	R3-7-708
R20-2-709	R3-7-709
R20-2-710	R3-7-710
R20-2-711	R3-7-711
R20-2-712	R3-7-712
R20-2-713	R3-7-713
R20-2-714	R3-7-714
R20-2-715	R3-7-715
R20-2-716	R3-7-716
R20-2-717	R3-7-717
R20-2-718	R3-7-718
R20-2-719	R3-7-719
R20-2-720	R3-7-720
R20-2-721	R3-7-721
R20-2-722 Reserved	R3-7-722 Reserved
through	through
R20-2-748	R3-7-748
R20-2-749	R3-7-749
R20-2-750	R3-7-750
R20-2-751	R3-7-751
R20-2-751.01	R3-7-751.01
R20-2-752	R3-7-752

R20-2-753	R3-7-753
R20-2-754	R3-7-754
R20-2-755	R3-7-755
R20-2-756	R3-7-756
R20-2-757	R3-7-757
R20-2-758	R3-7-758
R20-2-759	R3-7-759
Table A	Table A
R20-2-760	R3-7-760
R20-2-761	R3-7-761
R20-2-762	R3-7-762
Table 1	Table 1
Table 2	Table 2
Table 3	Table 3
Title 20, Chapter 2, Article 8. Repealed	Title 3, Chapter 7, Article 8. Repealed
Title 20, Chapter 2, Article 9. Gasoline Vapor Control for Sites with both Stage I and Stage II Vapor Recovery Systems	Title 3, Chapter 7, Article 9. Gasoline Vapor Control for Sites with both Stage I and Stage II Vapor Recovery Systems
R20-2-901	R3-7-901
R20-2-902	R3-7-902
R20-2-903	R3-7-903
R20-2-904	R3-7-904
R20-2-905	R3-7-905
R20-2-906	R3-7-906
R20-2-907	R3-7-907
R20-2-908	R3-7-908
R20-2-909	R3-7-909
R20-2-910	R3-7-910
R20-2-911	R3-7-911
R20-2-912	R3-7-912
R20-2-913	R3-7-913
Title 20, Chapter 2, Article 10. Stage I Vapor Recovery Systems	Title 3, Chapter 7, Article 10. Stage I Vapor Recovery Systems
R20-2-1001	R3-7-1001
R20-2-1002	R3-7-1002
R20-2-1003	R3-7-1003
R20-2-1004	R3-7-1004
R20-2-1005	R3-7-1005
R20-2-1006	R3-7-1006
R20-2-1007	R3-7-1007
R20-2-1008	R3-7-1008
R20-2-1009	R3-7-1009
R20-2-1010	R3-7-1010
R20-2-1011	R3-7-1011
R20-2-1012	R3-7-1012
R20-2-1013	R3-7-1013
Table 1	Table 1

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

Name: Michelle Wilson
Address: Department of Agriculture
1688 W. Adams St.
Phoenix, AZ 85007
Telephone: (602) 771-4933
E-mail: mwilson@azda.gov

5. Changes to Section References under A.A.C. R-1-1001(C):

ARTICLE 1. ADMINISTRATION AND PROCEDURES

~~R20-2-101~~ R3-7-101. Definitions

The definitions in A.R.S. §§ 41-2051, 41-2065, 41-2085, 41-2121, and 41-2131 and the following definitions apply to this Chapter:

1. "ADEQ" means the Arizona Department of Environmental Quality.
2. "Administrative order" means a corrective action notice that the Department issues for a violation of A.R.S. Title 41, Chapter 15, or this Chapter, that orders a person to:
   a. Remove from use or sale, or dispose of, a commercial device, commodity, or liquid fuel;
   b. Stop selling a commodity or liquid fuel until the person provides documentation to the Department that the weight, measure, fuel quality, or price posting complies with the requirements of A.R.S. Title 41, Chapter 15, and this Chapter;
   c. Stop using a commercial device, commodity, liquid fuel, vapor recovery system, or vapor recovery system component, until the person provides documentation to the Department that the weight, measure, fuel, vapor recovery system, or component complies with the requirements of A.R.S. Title 41, Chapter 15, and this Chapter;
   d. Stop performing weighmaster, deputy weighmaster, registered service agency, or registered service representative licensed duties until the person provides documentation to the Department that the person is complying with the requirements of A.R.S. Title 41, Chapter 15, and this Chapter;
   e. Maintain labeling, policies, and cash register indicator displays according to A.R.S. Title 41, Chapter 15, and this Chapter;
   f. Stop constructing or modifying a vapor recovery system until the person complies with A.R.S. Title 41, Chapter 15, and this Chapter;
   g. Excavate a vapor recovery site according to ~~R20-2-104(L)~~ R3-7-104(L);
   h. Comply with scheduling a test according to ~~R20-2-104(L)~~ R3-7-104(L); or
   i. Retake a competency examination under A.R.S. § 41-2094.
3. "Application" means, for purposes of ~~R20-2-108~~ R3-7-108, forms designated as applications and all documents and additional information the Department requires an applicant to submit with an application.
4. "ASTM" means American Society for Testing and Materials.
5. "Area A" has the same meaning as in A.R.S. § 49-541.
6. "Area B" has the same meaning as in A.R.S. § 49-541.
7. "CARB" means the California Air Resources Board.
8. "CARB certified" means, with respect to a vapor recovery system, that the system has been certified in an executive order of the CARB.
9. "Certified prover" means a calibrated device, traceable to the National Institute of Standards and Technology, used for measuring liquid volume.
10. "Completion of construction" means the point when a gasoline dispensing site is placed into or returned into service following installation or modification of an approved vapor recovery system.
11. "Construction commenced" means the point in time when construction of a gasoline dispensing site begins:
    a. At a location where there was not one previously;
    b. To replace all gasoline storage tanks; or
    c. To replace, repair, or modify at least 75% of the facility's gasoline dispensing equipment.
12. "EPA" means the United States Environmental Protection Agency.
13. "Gasoline vapors" means volatile organic compounds in a gaseous state.
14. "Handbook 44" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 44, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000 or bookstore.gpo.gov (2010 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions or amendments.
15. "Handbook 112" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 112, *Examination Procedure Outlines for Commercial Weighing and Measuring Devices*, Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000 or bookstore.gpo.gov (2002 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions or amendments.
16. "Handbook 130" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 130, *Uniform Laws and Regulations*, Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000 or bookstore.gpo.gov (2009 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions or amendments.
17. "Handbook 133" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 133, *Checking The Net Contents of Packaged Goods*, Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000 or bookstore.gpo.gov (January 2005 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions and amendments.
18. "NCWM" means the National Conference on Weights and Measures.
19. "Malfunction" means any failure of gasoline vapor recovery equipment to operate in the normal and usual manner.
20. "Modification" means adding to, replacing, or upgrading a site's stage II vapor recovery system, but does not include the repair or replacement of like parts.
21. "Monthly throughput" means the total amount of gasoline transferred into or dispensed from a gasoline dispensing site during one calendar month.
22. "Motor vehicle" means any vehicle equipped with a spark-ignited internal combustion engine, except vehicles that run on or are guided by rails, and vehicles that are designed primarily for travel through air or water.
23. "NIST" means the National Institute of Standards and Technology.
24. "Operator" means a person in control of, or having responsibility for, the daily operation of a gasoline dispensing site.
25. "Out-of-service tag" means a red rejection tag that signifies that a commercial device does not meet the requirements of A.R.S. Title 41, Chapter 15, Handbook 44, or this Chapter.
26. "Person" as defined in A.R.S. § 41-2051, means an owner or operator of a commercial device or vapor recovery system, retail seller, wholesaler, registered supplier, pipeline distributor, packer, manufacturer, licensee, transporter, or consignee.
27. "Placed in service" means the certification by a registered service agency or representative that a commercial device may be used, unless the Department orders otherwise.
28. "Placed-in-service report" means the form that a registered service representative completes and submits to the Department after placing a commercial device in service.
29. "Product transfer document" means the bill of lading, loading ticket, manifest, delivery receipt, invoice, or other customarily used documentation to denote delivery information for motor fuel.

30. "Retail" means the sale of a commodity to a consumer for profit by someone in the business of selling the commodity.
31. "Seal of authority" means a stamp or press of the Department's official mark, issued to a public weighmaster, certifying the weighmaster's authority to issue weight certificates.
32. "Seizure" means taking into physical possession, or otherwise securing for evidence, a commodity, liquid fuel, weight, measure, commercial device, or component of a device by the Department.
33. "Stop-sale, stop-use tag" means a blue tag or blue tape that signifies that a commercial device, including a vapor recovery system or vapor recovery component, or a commodity or liquid fuel, does not meet the requirements of A.R.S. Title 41, Chapter 15, Handbook 44, Handbook 130, Handbook 133, CARB Executive Orders, or this Chapter.
34. "Third-party registered service agency" means a registered service agency that performs work under contract for any business or company.
35. "Underground storage tank" means a tank as described in A.R.S. § 491001(18).
36. "Unit" means a quantity adopted as a standard of measurement.
37. "Vapor recovery registered service representative No. 1" means an individual to whom the Department has issued a license authorizing the individual to conduct all vapor-recovery tests required under A.R.S. Title 41, Chapter 15 or this Chapter including annual vapor-recovery tests.
38. "Vapor recovery registered service representative No. 2" means an individual to whom the Department has issued a license authorizing the individual to conduct the specific vapor-recovery tests necessary to determine whether equipment on which the individual performed maintenance or repairs is operating properly.
39. "Warning tag" means a yellow tag that signifies a commercial device, vapor recovery system, or vapor recovery component does not comply with A.R.S. Title 41, Chapter 15, Handbook 44, CARB Executive Orders, or this Chapter.
40. "Weight certificate" means a document, issued by a public weighmaster in a form approved by the Department, that certifies the accuracy of the weight of the commodity measured.

~~R20-2-104~~ R3-7-104. Administrative Enforcement Action

A. The Department shall take progressive enforcement action for a violation of A.R.S. Title 41, Chapter 15, CARB Executive Orders, Handbook 44, Handbook 130, Handbook 133, or this Chapter.

B. The Department shall provide a copy of its inspection report to the person who owns or operates a location that the Department inspects. The report shall include the inspection results, violations, and enforcement action.

C. The person who owns or operates a location inspected by the Department may request a hearing under ~~R20-2-109~~ R3-7-109 to dispute the inspection results, violation, or enforcement action.

D. The Department shall suspend, revoke, or refuse to renew any license if the licensee does not comply with an enforcement action imposed under this Section.

E. A maximum civil penalty may be doubled as stated in A.R.S. § 41-2115(B).

F. Commercial device.

1. The Department shall place out of service an unlicensed commercial device that it determines has been in use for more than 30 days.
2. The Department shall confiscate a commercial device when a person violates an administrative order related to that commercial device, or removes a warning tag, out-of-service tag, or stop-sale, stop-use tag issued to that commercial device without Department authority.
3. The Department shall issue an out-of-service tag or a stop-sale, stop-use tag if a commercial device is not in compliance with the requirements in Handbook 44 and the lack of compliance creates a situation favorable to the person who owns or operates the commercial device.
   a. A person shall not use a commercial device that has an out-of-service tag until the person repairs the commercial device.
   b. A person shall not sell or use a commercial device that has a stop-sale, stop-use tag until the commercial device meets the requirements of A.R.S. Title 41, Chapter 15, Handbook 44, and this Chapter.
4. The Department shall issue a warning tag when a commercial device is not in compliance with the requirements in Handbook 44 and the lack of compliance creates a situation favorable to the public. The Department shall issue an out-of-service tag if the commercial device is not repaired by the deadline on the warning tag. A person shall not use a commercial device after the period specified on the warning tag for repair unless the commercial device complies with A.R.S. Title 41, Chapter 15, Handbook 44, and this Chapter.
5. The Department shall issue an out-of-service tag if a commercial device does not have a non-tampering seal affixed.
6. The Department shall issue an out-of-service tag if a Department inspector cannot conduct an inspection of a commercial device because of a potential safety risk that the person who owns or operates the commercial device does not correct within 30 minutes of the attempted inspection.
7. The Department shall issue an out-of-service tag if a commercial device cannot begin weighing, measuring, metering, or counting at zero.
8. The Department shall issue a warning tag if the manufacturer's plate on a commercial device does not contain the information required by Handbook 44, is missing, or is unreadable. The Department shall issue an out-of-service tag if the person who owns or operates a commercial device does not obtain a compliant manufacturer's plate by the 30-day deadline imposed on the warning tag.
9. The Department shall issue a warning tag to a person who did not construct a large-scale approach according to Handbook 44. The Department shall issue a stop-sale, stop-use tag if the large-scale approach is not made compliant by the deadline imposed on the warning tag.
10. In addition to any enforcement action under subsections (F)(1) through (9):
    a. If the Department finds during an inspection that a commercial device does not comply with the requirements of A.R.S. Title 41, Chapter 15, or this Chapter and the lack of compliance favors the owner or operator of the commercial device:
       i. The Department shall impose a $300 civil penalty on the person who owns or operates the commercial device; and
       ii. The Department shall impose a $500 civil penalty on the person who owns or operates the commercial device for each reinspection until the commercial device is in compliance.
    b. If the Department finds during an inspection that a person who weighs a product on a commercial device violates Handbook 44 or does not post rates according to Handbook 44 or this Chapter:
       i. The Department shall issue an administrative order to the person at the conclusion of the inspection and impose a $300 civil penalty; and

ii. The Department shall issue an administrative order to the person and impose a $500 civil penalty at each reinspection until the person complies with Handbook 44 and this Chapter.

G. Public and deputy weighmaster.
1. The Department shall issue an administrative order if a public weighmaster's:
   a. Weigh tickets are not in numbered sequence or are missing,
   b. Seal or press is not readable, or
   c. Records are not maintained according to ~~R20-2-505~~ R3-7-505.
2. The Department shall issue an administrative order and impose a $500 civil penalty on a public weighmaster if:
   a. The public weighmaster's weigh tickets contain inaccurate information,
   b. The public weighmaster violates an administrative order, or
   c. The public weighmaster misuses a seal or press or has an unauthorized seal or press.
3. The Department shall confiscate a seal or press if a public weighmaster violates an administrative order issued to the public weighmaster.
4. The Department shall suspend, revoke, or refuse to renew a license if a public weighmaster does not comply with an enforcement action under this Section.
5. The Department shall issue an administrative order to a person who performs public weighmaster duties without a license.
6. If a public weighmaster permits an unlicensed person to perform deputy weighmaster duties, the Department shall:
   a. Impose a $300 civil penalty on the public weighmaster for the first time the public weighmaster permits an unlicensed person to perform deputy weighmaster duties;
   b. Impose a $500 civil penalty on a public weighmaster for the second time the public weighmaster permits an unlicensed person to perform deputy weighmaster duties; and
   c. Confiscate the public weighmaster's records, equipment, and devices if the public weighmaster permits an unlicensed person to perform deputy weighmaster duties more than twice.

H. Package.
1. The Department shall issue an administrative order to an owner or an employee of the owner where a package inspection is held if a package is not in compliance with a requirement in Handbook 130 or Handbook 133. The person to whom the administrative order is issued shall correct the package violation by:
   a. Returning the package to the packer or manufacturer,
   b. Labeling the package to reflect its correct quantity,
   c. Placing a notice on the package that states the violation and pricing the package to reflect its correct quantity, or
   d. Repackaging the commodity so the package contains the quantity represented.
2. In addition to an administrative order, the Department shall impose a $500 civil penalty per lot on a person who violates a requirement in Handbook 130 or Handbook 133.

I. Price verification.
1. The initial inspection of a retail location for price verification is for educational purposes and an enforcement action will not be imposed for a violation identified during the initial inspection.
2. The Department shall issue a stop-sale, stop-use tag to a person who fails a price verification reinspection if the violation cannot be corrected within 30 minutes of the Department completing the reinspection.
   a. The Department shall impose a $100 civil penalty per violation on a person who fails a reinspection if the Department finds more than one item at more than its posted price.
   b. The Department shall impose a $200 civil penalty per violation on a person who fails a second reinspection. The Department shall increase the per violation civil penalty imposed by $100 for each subsequent reinspection until the violation is corrected.
3. If the Department receives and substantiates a complaint about a person against whom the Department took an administrative enforcement action under subsection (I)(2) within the 60 days before the date of the complaint, the Department shall issue a stop-sale, stop-use tag and impose a civil penalty that is $100 more than the civil penalty that the Department previously imposed against this person.
4. The Department shall issue a warning to a person who does not have a written price-error policy. The Department shall impose a $500 civil penalty if the person does not have a written price-error policy upon reinspection.
5. The Department shall issue a warning to a person who does not have a price display visible to the public at a check-out location. The Department shall issue an out-of-service tag if the person does not have a price display visible to the public at a check-out location upon reinspection.

J. Price posting.
1. The initial inspection of a retail location for price posting is for educational purposes and an enforcement action will not be imposed for a violation identified during the initial inspection.
2. The Department shall issue a stop-sale, stop-use tag to a person who fails a price posting reinspection if the violation cannot be corrected within 30 minutes of the Department completing the reinspection.
3. The Department shall impose a $50 civil penalty for each inspected lot not priced if a person fails a reinspection with a score of less than 96 percent.
4. The Department shall impose a $100 civil penalty for each inspected lot not priced if a person fails a second reinspection.
5. If the Department receives and substantiates a complaint about a person against whom the Department took an administrative enforcement action under subsection (J)(2) within the 60 days before the date of the complaint, the Department shall issue a stop-sale, stop-use tag and impose a civil penalty that is $100 more than the civil penalty that the Department previously imposed against this person.

K. Fuel quality and labeling.
1. The Department shall issue a warning tag to a person whose fuel dispenser labeling violates A.R.S. Title 41, Chapter 15, or this Chapter. The Department shall issue an out-of-service tag to the person if the person does not correct the fuel dispenser labeling violation within the time specified on the warning tag.
2. The Department shall issue an administrative order to a person whose fuel storage tank labeling or external street signage violates A.R.S. Title 41, Chapter 15, or this Chapter. The Department shall impose a $300 civil penalty if the person does not correct the labeling or signage violation within the time specified in the administrative order.
3. The Department shall issue an administrative order and impose a $500 per octane level civil penalty to a person who violates a fuel-quality requirement under A.R.S. Title 41, Chapter 15, or this Chapter. The person shall correct the violation by:
   a. Removing non-compliant motor fuel from the storage tank and replacing it with compliant motor fuel,

b. Selling the motor fuel at the correct octane level,
c. Adding sufficient compliant motor fuel to the storage tank to bring the motor fuel in the storage tank into compliance,
d. Removing all water from the storage tank, or
e. Removing the non-compliant motor fuel to another area within the state if the motor fuel complies with specifications of that area.

4. The Department shall issue an administrative order to a person who does not provide requested product transfer documentation within 24 hours of the Department's request. The Department shall impose a $300 civil penalty on a person who provides the requested documentation between 24 and 72 hours. The Department shall impose a $500 civil penalty on a person who does not provide the requested documentation within 72 hours.

L. Vapor recovery.

1. The Department shall issue an administrative order to stop construction at a vapor recovery site and impose a $500 civil penalty on a person who:
   a. Begins construction or makes a major modification without an authority to construct plan approval,
   b. Does not comply with the authority to construct plan approval, or
   c. Does not obtain an approved change order for construction or major modification of the vapor recovery site unless:
      i. The vapor recovery system and its components comply with A.R.S. Title 41, Chapter 15, and this Chapter; and
      ii. The vapor recovery system passes the required vapor recovery tests according to A.R.S. Title 41, Chapter 15, and this Chapter.
2. The Department shall issue an administrative order requiring a person to excavate a vapor recovery site if the person covers a vapor recovery component before a Department pre-burial inspection and shall impose a $500 civil penalty if the excavated system does not pass required vapor recovery tests according to A.R.S. Title 41, Chapter 15, and this Chapter.
3. The Department shall issue an administrative order if a person fails to ensure that a vapor recovery site passes an initial test within 90 days of being opened or passes an annual test within the designated test month. The Department shall issue a stop-sale, stop-use tag if the person does not comply with the administrative order.
4. The Department shall impose a $100 civil penalty on a person who does not have an authority to construct plan approval available for inspection at the construction site during normal business hours.
5. The Department shall issue a warning tag to a person whose vapor recovery system labeling does not comply with the authority to construct plan approval. The Department shall issue a stop-sale, stop-use tag and impose a $500 civil penalty on a person who does not correct a labeling violation within the time specified on a warning tag.
6. The Department shall issue a stop-sale, stop-use tag to a person whose vapor recovery system fails a test under ~~R20-2-905~~ R3-7-905 or ~~R20-2-910~~ R3-7-910. If the test failure is isolated to a system component, the Department's stop-sale, stop-use tag shall pertain to that component so the rest of the system may operate.
7. The Department shall impose a $500 civil penalty and issue another stop-sale, stop-use tag to a person who violates a stop-sale, stop-use tag. The Department shall impose a $500 civil penalty and revoke, suspend, or refuse to renew a commercial device license if a person removes a stop-sale, stop-use tag without approval.

M. Registered service agency and registered service representative.

1. If a registered service agency submits to the Department an inaccurate or incomplete placed-in-service or test report, the Department shall:
   a. Return the inaccurate or incomplete placed-in-service or test report to the agency for correction, and
   b. Impose a $50 civil penalty on the agency each time the agency resubmits a placed-in-service or test report without making all needed corrections.
2. The Department shall impose a $300 civil penalty on a registered service representative who incorrectly:
   a. Installs a commercial device,
   b. Repairs a commercial device,
   c. Tests a vapor recovery system, or
   d. Repairs a vapor recovery system.
3. If an unlicensed person represents itself as a registered service agency, the Department shall:
   a. Issue an administrative order,
   b. Impose a $500 civil penalty and confiscate the unlicensed person's calibration standards if the unlicensed person violates the administrative order, and
   c. Deny a registered service agency license to the unlicensed person if the unlicensed person fails to comply with the enforcement action under this subsection.
4. The Department shall issue an administrative order to an unlicensed person who performs the duties of a registered service representative. The Department shall impose a $300 civil penalty on the registered service agency for which the unlicensed individual works.
5. The Department shall issue an administrative order if a registered service representative places a commercial device into service without Department authorization. The Department shall impose a $500 civil penalty on the registered service agency whose representative places a commercial device into service without Department authorization.
6. The Department shall impose a $500 civil penalty on a registered service agency whose registered service representative uses a metrology standard or vapor recovery air-to-liquid (A/L) ratio testing equipment that is not certified according to this Chapter. The Department shall confiscate a metrology standard or A/L ratio testing equipment if a registered service representative uses the uncertified standard or equipment after the registered service agency is penalized. The Department shall return the standard or equipment when it is properly certified.
7. The Department shall issue an administrative order to a vapor recovery registered service agency or person who owns a vapor recovery system that does not, according to A.R.S. Title 41, Chapter 15, and this Chapter:
   a. Notify the Department of a test date and time,
   b. Begin a test at the approved time,
   c. Appear for a witnessed test,
   d. Close a vapor recovery system for repairs if the system fails, or
   e. Perform a test.
8. The Department shall impose a $300 civil penalty on a vapor recovery registered service agency that violates subsection (M)(7) twice in 12 months.
9. If a registered service agency's registered service representative does not attach a non-tampering seal on a commercial device that is equipped for a seal, the Department shall:

a. Impose a $300 civil penalty on the registered service agency for the first violation, and
b. Impose a $500 civil penalty on the registered service agency for each subsequent violation by the registered service representative.

10. If a registered service representative determines that a vapor recovery system or component is not in compliance with A.R.S. Title 41, Chapter 15, or this Chapter, the registered service representative shall:
    a. Secure the non-compliant vapor recovery system or component from use before the registered service representative leaves the vapor recovery site or until the system or component passes the tests required by ~~R20-2-910~~ R3-7-910;
    b. Notify the Department of the secured, non-compliant vapor recovery system or component before leaving the vapor recovery site; and
    c. Notify the Department of the time of the test required by ~~R20-2-910~~ R3-7-910 by 6:00 a.m. of the day after the non-compliant vapor recovery system or component is secured or one hour before the test, whichever is sooner.
11. If a registered service representative fails to comply with subsection (M)(10)(b) or (c), the Department shall:
    a. Impose a $300 civil penalty on the registered service representative;
    b. Issue an administrative order, if the registered service representative is penalized under this subsection three times in 12 months, requiring the registered service representative to take and pass the licensing competency examination; and
    c. Suspend or revoke the license of the registered service agency employing the registered service representative if the registered service representative does not comply with an order issued under subsection (M)(11)(b).

Table 1. Time-frames (in days)

Type of License	Administrative Review Time-frame	Time to Respond to Deficiency Notice	Substantive Review Time-frame	Time to Respond to Request for Additional Information	Overall Time-frame
Commercial Device ~~R20-2-201~~ R3-7-201	10	20	30	20	40
Public Weighmaster ~~R20-2-501~~ R3-7-501	10	20	30	20	40
Registered Service Agency/Representative ~~R20-2-601~~ R3-7-601	10	20	30	20	40
Authority to Construct ~~R20-2-904~~ R3-7-904	10	20	30	20	40

ARTICLE 6. REGISTERED SERVICE AGENCIES AND REPRESENTATIVES

~~R20-2-601~~ R3-7-601. Qualifications; License and Renewal Application Process

A. Registered service agency.
1. To obtain a license as a registered service agency, an applicant shall provide evidence that:
    a. The applicant's registered service representative has a thorough knowledge of all appropriate laws within A.R.S. Title 41, Chapter 15, Handbook 44, Handbook 112, CARB Executive Orders, and this Chapter;
    b. The applicant provided its representative with a copy of the portions of A.R.S. Title 41, Chapter 15, Handbook 44, Handbook 112, CARB Executive Orders, and this Chapter relating to registered service representative duties;
    c. The applicant:
        i. Possesses the necessary certified standards and testing equipment to service commercial devices; and
        ii. Possesses the necessary test equipment calibrated annually by the equipment manufacturer to perform an air to liquid (A/L) test of a vapor recovery system or vapor recovery component properly; or
        iii. Has access to the necessary standards and testing equipment belonging to another registered service agency and has written approval from that agency to use its standards and testing equipment; and
    d. The applicant shall ensure that its registered service representative operates the equipment according to A.R.S. Title 41, Chapter 15, Handbook 44, Handbook 112, CARB Executive Orders, and this Chapter.
2. The Department shall not issue a registered service agency license until at least one of the applicant's employees passes a registered service representative competency exam.
3. An applicant for a registered service agency license shall submit an application form, obtained from the Department that provides:
    a. Name, address, telephone number, electronic mail address, and facsimile number;
    b. License information from other states;
    c. Types of devices serviced, repaired, or installed, or vapor recovery systems or components repaired or tested;
    d. A list of all of the applicant's devices and testing equipment with corresponding serial or identification numbers;
    e. Branch office information;
    f. Names of registered service representatives and their experience with other registered service agencies or states;
    g. License and disciplinary history; and
    h. Applicant's signature.

B. Third-party registered service agency. In addition to complying with the requirements in subsection (A), a third-party registered service agency shall provide the Department with evidence that the third-party registered service agency:
1. Holds a valid license issued by the Arizona Registrar of Contractors,
2. Complies with workers' compensation insurance laws, and
3. Maintains liability insurance sufficient to cover the value of work to be performed.

C. Registered service representative.
1. To obtain a license as a registered service representative, an applicant shall provide evidence that:
    a. The applicant has a thorough knowledge of all appropriate laws within A.R.S. Title 41, Chapter 15, Handbook 44, Handbook 112, CARB Executive Orders, and this Chapter;

b. The applicant possesses the necessary training or experience regarding appropriate standards and testing equipment to service the specific commercial device, vapor recovery system, or vapor recovery system component indicated on the application;
c. The applicant will operate according to appropriate laws within A.R.S. Title 41, Chapter 15, Handbook 44, Handbook 112, CARB Executive Orders; and this Chapter; and
d. The applicant has passed the competency examination specified in subsection (D).

2. An applicant for a registered service representative license shall submit an application on a form obtained from the Department that provides:
a. Name, address, telephone number, and facsimile number;
b. License information from other states;
c. An indication of whether the applicant is applying to be a registered service representative, vapor recovery service representative No. 1, or vapor recovery service representative No. 2;
d. Types of devices serviced, repaired, or installed, or vapor recovery systems or components repaired or tested;
e. Work experience with other registered service agencies in Arizona or other states;
f. License and disciplinary history; and
g. Applicant's signature.

3. An applicant for a vapor recovery registered service representative No. 1 license shall maintain and make available to the Department upon request evidence of being:
a. Certified by the manufacturer to test or repair all vapor recovery systems and components, or
b. Determined qualified by the Department to test or repair all vapor recovery systems and components.

D. Competency examination. Before being issued a registered service representative license, an applicant shall pass a Department-administered competency examination.
1. An applicant for a vapor recovery registered service representative license shall complete the Department's training class before taking the competency examination.
2. An applicant shall bring a copy of Handbook 44 and Handbook 112 to the examination site.
3. An applicant shall complete the competency examination within the time specified by the Department.
4. The Department shall not allow an applicant to take the competency examination more than two times in six months.

E. As required under A.R.S. § 41-2094(G), the Department shall specify on a registered service representative license the devices that the registered service representative may service, repair, or install or the vapor recovery systems or components that the vapor recovery registered service representative may test or repair. A registered service representative shall perform only the services approved by the Department for the registered service representative.

F. Renewal of a registered service representative license. Under A.R.S. § 41-2094(D), a registered service representative license is valid for 12 months and expires unless renewed. To renew a registered service representative license, the registered service agency employing the registered service representative shall comply with ~~R20-2-603(E)~~ R3-7-603(E). Before complying with ~~R20-2-603(E)~~ R3-7-603(E), the registered service agency shall ensure that:
1. A vapor recovery registered service representative No. 1 or 2 completes the Department's training class, and
2. A vapor recovery registered service representative takes and passes the Department's written vapor recovery competency examination as follows:
a. A vapor recovery service representative No. 1 shall pass the vapor recovery competency examination annually, and
b. A vapor recovery service representative No. 2 shall pass the vapor recovery competency examination biennially.

G. The Department does not charge a fee to process a change in business name or address.

~~R20-2-602~~ R3-7-602. Duties

A. Registered service agency.
1. A registered service agency shall:
a. Maintain all equipment used for commercial device certification according to standards traceable to NIST, and
b. Maintain and use equipment for testing vapor recovery systems and vapor recovery system components according to this Chapter and manufacturer specifications.
2. When a registered service agency restores or newly places in service a commercial device, the registered service agency shall complete a placed-in-service report form prescribed by the Department.
a. The registered service agency shall complete the placed-in-service report in triplicate;
b. Within seven calendar days after the commercial device is restored to service or newly placed in service, the registered service agency shall mail the original of the properly completed and signed placed-in-service report to the Department;
c. The registered service agency shall give a copy of the placed-in-service report to the person who owns or operates the commercial device;
d. The registered service agency shall retain a copy of the placed-in-service report or any required vapor recovery report for one year;
e. The registered service agency shall ensure that the placed-in-service report contains the assigned license number of the registered service representative who completes the report;
f. The registered service agency shall ensure that the placed-in-service report is completed and signed by the registered service representative noting each rejected commercial device restored to service and each newly installed commercial device placed in service;
g. The registered service agency shall ensure that the placed-in-service report includes the serial or identification number of each standard used by the registered service representative to calibrate the commercial device for each rejected device restored to service and for each newly installed device placed in service; and
h. The registered service agency shall ensure that the placed-in-service report includes the license number of the registered service representative who installs or repairs the commercial device.
3. A registered service agency shall have all equipment used for commercial device certification and A/L testing certified annually by the manufacturer.
4. A registered service agency shall not use new equipment for commercial device certification until it is certified by a NIST-traceable laboratory.
5. A registered service agency shall ensure that employees do not perform registered service representative duties until licensed. A registered service agency may train an employee in registered service representative duties only if the employee is within the direct line of sight and hearing of a supervising licensed registered service representative.

6. A registered service agency shall use a form approved by the Department to record vapor recovery test results and violations. The registered service agency shall submit to the Department the summary test report within 24 hours following the test. All other forms relating to the test shall be mailed within seven days after completion of the test.
7. A registered service agency shall ensure that its registered service representative provides a copy of the Regulatory Bill of Rights, defined in A.R.S. § 41-1001.01, to the owner or operator of a vapor recovery system before beginning a vapor recovery test that is not witnessed by the Department.
8. A registered service agency shall ensure that its registered service representative provides a vapor recovery system owner or operator with written test preparation instructions, approved by the Department, at least 10 business days before an initial or annual test.

B. Registered service representative.

1. A registered service representative shall:
   a. Install only commercial devices that meet the requirements of this Chapter;
   b. Perform all vapor recovery tests according to this Chapter;
   c. Perform all appropriate tests when repairing a commercial device or repairing or replacing a vapor recovery system or component to ensure that the requirements of A.R.S. Title 41, Chapter 15, this Chapter, Handbook 44, Handbook 112, and CARB Executive Orders are met;
   d. Report to the user equipment or commercial devices that do not conform to NIST standards; and
   e. Complete placed-in-service reports accurately.
2. If a vapor recovery registered service representative cannot correct a violation and has to leave the vapor recovery site, the registered service representative shall secure the non-compliant vapor recovery system or component from commercial use. The non-compliant system or component shall not be used for commercial purposes until it is repaired and passes the test required by ~~R20-2-910~~ R3-7-910. The registered service representative shall notify the Department of the stop-sale, stop-use by 6:00 a.m. of the day after the non-compliant vapor recovery system or component is secured or one hour before the test, whichever is sooner, so that the Department can witness the test.

ARTICLE 7. MOTOR FUELS AND PETROLEUM PRODUCTS

~~R20-2-701~~ R3-7-701. Definitions

In addition to the definitions in ~~R20-2-101~~ R3-7-101, the following definitions apply to this Article unless the context otherwise requires:

"Address" means a street number, street name, city, state, and zip code.
"Area A" has the same meaning as in A.R.S. § 49-541.
"Area B" has the same meaning as in A.R.S. § 49-541.
"Arizona Cleaner Burning Gasoline" or "Arizona CBG" means a gasoline blend that meets the requirements of this Article for gasoline produced and shipped to or within Arizona and sold or offered for sale for use in motor vehicles within the CBG-covered area, except as provided under A.R.S. § 41-2124(J).
"AST" means aboveground storage tank.
"AZRBOB" or "Arizona Reformulated Blendstock for Oxygenate Blending" means a combination of gasoline blendstocks that is intended to be or represented to constitute Arizona CBG upon the addition of a specified amount (or range of amounts) of fuel ethanol after the blendstock is supplied from the facility at which it was produced or imported.
"Batch" means a quantity of motor fuel or AZRBOB that is homogeneous for motor fuel properties specific for the motor fuel standards applicable to that motor fuel or AZRBOB.
"Beginning of transport" means the point at which:
A registered supplier relinquishes custody of Arizona CBG or AZRBOB to a transporter or third-party terminal; or
A registered supplier that retains custody of Arizona CBG or AZRBOB begins transfer of the Arizona CBG or AZRBOB into a vessel, tanker, or other container for transport to the CBG-covered area.
"Biodiesel" means a diesel fuel substitute that is produced from nonpetroleum renewable resources as defined by the United States environmental protection agency and meets the registration requirements for fuels and fuel additives established by the United States environmental protection agency pursuant to § 211 of the clean air act as defined in section 49-401.01. A.R.S. § 41-2051
"Biodiesel blend" means a motor fuel that is comprised of biodiesel and diesel fuel and that is designated by the letter "B," followed by the numeric value of the volume percentage of biodiesel in the blend. A.R.S. § 41-2051
"Biodiesel (mono-alkyl ester)" means a biodiesel or fuel additive that:
Is registered as a motor vehicle fuel or fuel additive under 40 CFR 79,
Is a mono-alkyl ester,
Meets the standards in ASTM D6751,
Is intended for use in some engines designed to run on conventional diesel fuel, and
Is derived from nonpetroleum renewable resources.
"Biodiesel (mono-alkyl ester) blend" means a motor fuel composed of biodiesel (mono-alkyl ester) and diesel fuel and identified by the letter "B" and a numeric value indicating the volume percentage of biodiesel (mono-alkyl ester) in the blend.
"Biofuel" means a solid, liquid, or gaseous fuel that is derived from biomass or nonpetroleum renewable resources and can be used directly for heating or power or as a motor fuel.
"Biofuel blend" means a motor fuel composed of biofuel and petroleum-based motor fuel and identified by the letter "C" and a numeric value indicating the volume percentage of biofuel in the blend.
"Biomass" means biological material, such as animal or plant matter, that can be transformed into biofuel, excluding biological material that has been transformed by geological processes into a substance such as coal petroleum or a derivative of a substance resulting from geological processes.
"Blendstock" means any liquid compound that is blended with another liquid compound to produce a motor fuel, including Arizona CBG. A deposit-control or similar additive registered under 40 CFR 79 is not a blendstock.
"BQ9000" means the cooperative and voluntary program, implemented by the National Biodiesel Accreditation Commission, to accredit producers and marketers of biodiesel fuel using a combination of the ASTM standard for biodiesel (ASTM D6751) and a quality systems program of fuel management practices regarding storing, sampling, testing, blending, shipping, and distributing biodiesel fuel.
"CARB" means the California Air Resources Board.
"CARBOB Model" means the procedures incorporated by reference in ~~R20-2-702(11)~~ R3-7-702(11).
"CARB Phase 2 gasoline" means gasoline that meets the specifications incorporated by reference in ~~R20-2-702(8)~~ R3-7-702(8).

"CBG-covered area" means a county with a population of 1,200,000 or more persons according to the most recent United States decennial census and any portion of a county within area A.
"Conventional gasoline" means gasoline that conforms to the requirements of this Chapter for sale or use in Arizona, but does not meet the requirements of Arizona CBG or AZRBOB.
"Diesel" or "diesel fuel" *means a refined middle distillate that is used as a fuel in a compression-ignition internal combustion engine and that meets the specifications of ASTM D975.* A.R.S. § 41-2051
"Duplicate" means a portion of a sample that is treated the same as the original sample to determine the accuracy and precision of an analytical method.
"E85" means a fuel ethanol gasoline blend that meets the specifications in ASTM D5798, which is incorporated by reference in ~~R20-2-702~~ R3-7-702.
"EPA" means the United States Environmental Protection Agency.
"EPA waiver" means a waiver granted by the Environmental Protection Agency as described in "Waiver Requests under Section 211(f) of the Clean Air Act," which is incorporated by reference in ~~R20-2-702~~ R3-7-702.
"Final destination" means the name and address of the location to which a transferee will deliver motor fuel for further distribution or final consumption.
"Final distribution facility" means a stationary motor-fuel transfer point at which motor fuel or AZRBOB is transferred into a cargo tank truck, pipeline, or other delivery vessel from which the motor fuel or AZRBOB will be delivered to a motor-fuel dispensing site. A cargo tank truck is a final distribution facility if the cargo tank truck transports motor fuel or AZRBOB and carries documentation that the type and amount or range of amounts of oxygenates designated by the registered supplier will be or have been blended directly into the cargo tank truck before delivery of the resulting motor fuel to a motor-fuel dispensing site.
"Fleet" means at least 25 motor vehicles owned or leased by the same person.
"Fleet vehicle fueling facility" means a facility or location where a motor fuel is dispensed for final use by a fleet.
"Fuel ethanol" means denatured ethanol that meets the specifications in ASTM D4806, which is incorporated by reference in ~~R20-2-702~~ R3-7-702.
"Gasoline" means a volatile, highly flammable liquid mixture of hydrocarbons that does not contain more than .05 grams of lead for each United States gallon, is produced, refined, manufactured, blended, distilled, or compounded from petroleum, natural gas, oil, shale oils or coal, and other flammable liquids free from undissolved water, sediment, or suspended matter, with or without additives, and is commonly used as a fuel for spark-ignition internal-combustion engines. Gasoline does not include diesel fuel or E85.
"Jobber" means a person that distributes a motor fuel from a bulk storage plant to the owner or operator of a UST or AST or purchases a motor fuel from a terminal for distribution to the owner or operator of a UST or AST.
"Manufacturer's proving ground" means a facility used only to develop complete motor vehicles, which are not currently available on the retail market, for an automotive manufacturer.
"Marketer" means a person engaged in selling or offering for sale motor fuels.
"Motor fuel" means a petroleum or a petroleum based substance that is motor gasoline, aviation gasoline, number one or number two diesel fuel or any grade of oxygenated gasoline typically used in the operation of a motor engine, including biodiesel blends, biofuel blends and the ethanol blend E85 as defined in ASTM D5798. A.R.S. § 41-2051
"Motor fuel dispensing site" means a facility or location where a motor fuel is dispensed into commerce for final use.
"Motor fuel property" means any characteristic listed in ~~R20-2-751(A)(1)~~ R3-7-751(A)(1) through (7), ~~R20-2-751(B)(1)~~ R3-7-751(B)(1) through (7), Table 1, Table 2, or any other motor fuel standard referenced in this Article.
"Motor vehicle" means a vehicle equipped with a spark-ignited or compression-ignition internal combustion engine except:
A vehicle that runs on or is guided by rails, or
A vehicle designed primarily for travel through air or water.
"Motor vehicle racing event" means a competition, including related practice and qualifying and demonstration laps that uses unlicensed motor vehicles designed and manufactured specifically for racing and is conducted on a public or private racecourse for the entertainment of the general public.
"MTBE" means methyl tertiary butyl ether.
"Neat" means pure or 100 percent; not blended with motor fuel.
"NOx" means oxides of nitrogen.
"Octane," "octane number," or "octane rating" mean the anti-knock characteristic of gasoline as determined by the resultant arithmetic test average of ASTM D2699 and ASTM D2700.
"Oxygenate" means any oxygen-containing ashless, organic compound, including aliphatic alcohols and aliphatic ethers, that may be used as a fuel or as a gasoline blending component and is approved as a blending agent under the provisions of a waiver issued by the United State environmental protection agency pursuant to 42 United States Code §7545(f). A.R.S. § 41-2121
"Oxygenate blender" means a person that owns, leases, operates, controls, or supervises an oxygenate-blending facility, or that owns or controls the blendstock or gasoline used, or the gasoline produced, at an oxygenate-blending facility.
"Oxygen content" means the percentage by weight of oxygen contained in a gasoline oxygenate blend as determined under ASTM D4815.
"Petroleum-based renewable diesel" means diesel fuel or fuel additive that meets all of the following:
Is registered as a motor vehicle fuel or fuel additive under 40 CFR 79,
Is not a mono-alkyl ester,
Is intended for use in engines designed to run on diesel fuel,
Is derived from petroleum and nonpetroleum renewable resources,
Meets the requirements of ASTM D975, and
Is identified by the letter "R" and a numeric value indicating the volume percentage of the nonpetroleum renewable resources component in the blend.
"Pipeline" means a transporter that owns or operates an interstate common-carrier pipe or is subject to Federal Energy Regulatory Commission tariffs to transport motor fuels into Arizona.
"Pressurant" means a blendstock component of an E85 blend for sale within the CBG-covered area added specifically to ensure that the vapor pressure meets ASTM D5798 requirements.
"Producer" means a refiner, blender, or other person that produces a motor fuel, including Arizona CBG or AZRBOB.
"Production facility" means a facility at which a motor fuel, including Arizona CBG or AZRBOB, is produced. Upon request of a producer, the Director may designate, as part of the producer's production facility, a physically separate bulk storage facility that:

Is owned or leased by the producer;
Is operated by or at the direction of the producer; and
Is used to store or distribute motor fuels, including Arizona CBG or AZRBOB, that are supplied only from the production facility.

"Product transfer document" means a bill of lading, loading ticket, manifest, delivery receipt, invoice, or other paper that is provided by the transferor at the time motor fuel is delivered and evidences that custody or title of the motor fuel is transferred to the transferee. A product transfer document is not required when motor fuel is sold or dispensed at a motor fuel dispensing site or fleet vehicle fueling facility.
"Refiner" means a person that owns, leases, operates, controls, or supervises a refinery in the United States, including its trust territories.
"Refinery" means a facility that produces a liquid fuel, including Arizona CBG or AZRBOB, by distilling petroleum, or a transmix facility that produces a motor fuel offered for sale or sold into commerce as a finished motor fuel.
"Reproducibility" means the testing method margin of error as provided in the ASTM specification or other testing method required under this Article.
"Supplier" means a marketer or jobber of a biofuel or biofuel blend.
"Supply" means to provide or transfer motor fuel to a physically separate facility, vehicle, or transportation system.
"Terminal" means an owner or operator of a motor fuel storage tank facility that accepts custody, but not ownership, of a motor fuel from a registered supplier, oxygenate blender, pipeline, or other terminal and relinquishes custody of the motor fuel to a transporter.
"Test result" means any document that contains a result of testing including all original test measures, all subsequent test measures that are not identical to the original test measure, and all worksheets on which calculations are performed.
"Transferee" means a person that receives title to or custody of a motor fuel.
"Transferor" means a person that relinquishes title to or custody of a motor fuel to a transporter, marketer, jobber, or motor fuel dispensing site.
"Transmix" means a mixture of petroleum distillate fuel and gasoline that does not meet the Arizona standards for either petroleum distillate fuels or gasoline.
"Transmix facility" means a facility at which transmix is processed into its components and then the components either are combined with a finished product or further processed to produce a finished motor fuel.
"Transporter" means a person that causes motor fuels, including Arizona CBG or AZRBOB, to be transported into or within Arizona.
"UST" means underground storage tank.
"Vapor pressure" means dry vapor pressure equivalent of gasoline or blendstock as measured according to ASTM D5191.
"Vehicle emissions control area" has the same meaning as in A.R.S. § 49-541 except that a vehicle emissions control area does not include a manufacturer's proving ground that is located in the vehicle emissions control area.
"VOC" means volatile organic compound.

~~R20-2-705~~ R3-7-705. Price, Octane, and Lead-substitute Notification on Dispensers

A. A service station owner or operator shall ensure that information regarding pricing, motor fuel grade, octane rating, and lead-substitute addition displayed on a service station motor fuel dispenser:
1. Is clean, legible, and visible at all times;
2. Is displayed electronically or with a sign or label on the upper 60 percent of each face of the dispenser;
3. Lists the full price of the motor fuel including fractions of a cent and all federal and state taxes;
4. Displays the highest price of motor fuel sold from the dispenser if the dispenser is capable of dispensing and computing the price of multiple grades of motor fuel;
5. Displays a discount, if offered, in letters at least 1/4" in height on each face of the dispenser and next to the undiscounted price;
6. Displays both a cash and credit price on a dispenser that is capable of electronically displaying both cash and credit prices;
7. Posts both a cash and credit price on each face of a dispenser that is preset by the cashier if the dispenser is unable to display electronically and simultaneously both cash and credit prices;
8. Posts a price-per-gallon sign next to or on a non-price computing dispenser for a retail-only sale of liquefied petroleum gas used as an alternative motor fuel; and
9. Complies with the requirements of ~~R20-2-704(A)(1)~~ R3-7-704(A)(1) (A)(1), (A)(2), (A)(3), (A)(5), (A)(6), and (A)(7).

B. A person who owns or operates a service station shall ensure that:
1. The octane rating of each grade of gasoline is displayed on the upper 60 percent of each face of each dispenser, as prescribed by 16 CFR 306; and
2. The signs required by Handbook 130, for gasoline dispensers that dispense gasoline with lead substitute, are displayed on the upper 60 percent of each face of each dispenser in letters at least 1/4" in height.

~~R20-2-707~~ R3-7-707. Product Transfer Documentation and Record Retention for Motor Fuel other than Arizona CBG and AZRBOB

A. When a transferor transfers custody or title to a motor fuel that is not Arizona CBG or AZRBOB, and the motor fuel is not sold or dispensed at a motor fuel dispensing site or fleet vehicle fueling facility, the transferor shall provide to the transferee documents that include the following information:
1. The grade of the motor fuel;
2. The volume of each grade of motor fuel being transferred;
3. The date of the transfer;
4. Product transfer document number;
5. For conventional gasoline, the minimum octane rating of each grade;
6. For conventional gasoline, the type and maximum volume of oxygenate contained in each grade;
7. For conventional gasoline transported in or through the CBG-covered area, the statement, "This gasoline is not intended for use inside the CBG-covered area";
8. Whether a lead substitute is present in the gasoline and the type of lead substitute present;
9. For a biofuel or biofuel blend, the percentage of biofuel in the finished product; and
10. The final destination:

a. When a terminal is the transferor, the owner or operator of the terminal shall include on the product transfer document the terminal name and address, the transporter name and address, and the final destination, which may be a final distribution facility, jobber, marketer, or motor fuel dispensing site;
b. When a transporter is the transferor, the transporter shall include on the product transfer document the name and address of the transporter and the final destination, which is the location at which the motor fuel will be delivered and off loaded from the truck; and
c. When a jobber or marketer is the transferor, the jobber or marketer shall include on the product transfer document the name and address of the jobber or marketer and the final destination, which may be a final distribution facility or a motor fuel dispensing site.

B. To enable a transferor to comply fully with the requirement in subsection (A)(10), the transferee shall supply to the transferor information regarding the final destination.
C. A registered supplier, third-party terminal, or pipeline may use standardized product codes on pipeline tickets as the product transfer documentation.
D. A person identified in subsection (A) shall retain product transfer documentation for each shipment delivered for 12 months. This documentation shall be available within two working days from the time of the Department's request.
E. A person identified in subsection (A) shall maintain product transfer documentation for a transfer or delivery during the preceding 30 days at that person's address listed on the product transfer documentation.
F. An owner or operator of a motor fuel dispensing site or fleet owner shall maintain product transfer documentation for the three most recent deliveries of each grade of motor fuel on the premises of the motor fuel dispensing site owner or operator or fleet owner. This documentation shall be available for Department review.
G. The Department shall accept a legible photocopy of a product transfer document instead of the original.
H. A person transferring custody or title of Arizona CBG or AZRBOB shall comply with ~~R20-2-757~~ R3-7-757.

~~R20-2-708~~ R3-7-708. Gasoline Ethanol Blends

A. A person that has custody of gasoline blended with an oxygenate shall ensure that the amount of oxygenate does not exceed the amount allowed by EPA waivers, Section 211(f) of the Clean Air Act, and A.R.S. § 41-2122. The maximum oxygen content of gasoline oxygenate blends shall not exceed 4.0 percent by weight for fuel ethanol oxygenate and as specified in A.R.S. § 41-2122 for other oxygenates.
B. Special provisions for gasoline ethanol blends.
1. A gasoline ethanol blend that meets the requirements in subsections (B)(1)(a) and (b) shall not exceed the vapor pressure specified in ASTM D4814 by more than 1 psi:
   a. The gasoline ethanol blend shall contain fuel ethanol. The concentration of the fuel ethanol, excluding the required denaturing agent, shall be:
      i. From May 1 through September 15, at least nine percent and no more than 10 percent by volume of the gasoline ethanol blend; and
      ii. From September 16 through April 30, at least 1.5 percent by weight and no more than 10 percent by volume of the gasoline ethanol blend; and
   b. The fuel ethanol content of the gasoline ethanol blend shall:
      i. Be determined using the appropriate test method listed in ASTM D4814, and
      ii. Not exceed any applicable waiver condition under Section 211(f) of the Clean Air Act.
2. The provision in subsection (B)(1) is effective for gasoline ethanol blends sold:
   a. Outside the CBG-covered area year around, and
   b. Within the CBG-covered area during April.
3. Gasoline blended with no more than 10 percent by volume of fuel ethanol shall be blended using one of the following alternatives:
   a. The base gasoline complies with the standards in ASTM D4814, the fuel ethanol complies with the standards in ASTM D4806, and the finished blend complies with the standards in ASTM D4814 with the following permissible exceptions:
      i. The distillation minimum temperature at the 50 volume percent evaporated point is not less than 66°C (150°F), and
      ii. The minimum test temperature at which the vapor/liquid ratio is equal to 20 is waived;
   b. The finished blend complies with the standards in ASTM D4814; or
   c. The base gasoline complies with the standards in ASTM D4814 except distillation and the finished blend complies with the standards in ASTM D4814 with the following permissible exceptions:
      i. The distillation minimum temperature at the 50 volume percent evaporated point is not less than 66°C (150°F), and
      ii. The minimum test temperature at which the vapor/liquid ration is equal to 20 is waived.
4. A gasoline ethanol blend shall meet the standards specified in ASTM D4814.

C. In addition to complying with the requirements in ~~R20-2-707~~ R3-7-707, the transferor of a gasoline ethanol blend shall ensure that the product transfer document contains a legible and conspicuous statement that the gasoline being transferred contains fuel ethanol and the percentage concentration of fuel ethanol.

~~R20-2-710~~ R3-7-710. Blending Requirements

A. A person that has custody of or transports an oxygenated gasoline blend shall ensure that no neat oxygenate blending occurs at a motor fuel dispensing site or fleet vehicle fueling facility.
B. If a motor fuel dispensing site storage tank contains an oxygenated gasoline blend that does not contain the amount of oxygen required by A.R.S. §§ 41-2122, 41-2123, 41-2125, or ~~R20-2-751~~ R3-7-751, the owner or operator of the motor fuel dispensing site shall do one of the following:
1. Add gasoline that contains no more than 20 percent by volume of the same oxygenate to the non-compliant oxygenated gasoline blend;
2. Add a gasoline blend that dilutes the non-compliant oxygenated gasoline blend to the level of oxygen content required by A.R.S. §§ 41-2122, 41-2123, 41-2125, or ~~R20-2-751~~ R3-7-751; or
3. Empty the storage tank and replace the non-compliant oxygenated gasoline blend with a required oxygenate blend.

~~R20-2-714~~ R3-7-714. Requirements for Motor Fuels Other than Arizona CBG

A. A person that owns or operates a motor fuel dispensing site or transmix or production facility outside the CBG-covered area shall ensure that a motor fuel offered for sale at the motor fuel dispensing site or transmix or production facility meets all the appropriate specifications in ~~R20-2-702~~ R3-7-702 except that from May 1 through September 30, gasoline shall meet the specifications in ASTM

D4814 except maximum vapor pressure shall be 9.0 pounds per square inch.

B. The owner or operator of a motor fuel dispensing site shall ensure that the finished gasoline is visually free of water, sediment, and suspended matter and is clear and bright at ambient temperature or 70° F (21° C), whichever is greater.

C. The owner or operator of a motor fuel dispensing site or transmix or production facility shall ensure that the minimum octane rating determined by the test average of ASTM D 2699 and ASTM D 2700, also known as the (R+M)/2 method, is:
1. 87 for unleaded or regular;
2. 88 for mid-grade, extra, or any other gasoline with an octane rating of 88 or higher; and
3. 90 for super, high performance, premium, or any other gasoline with an octane rating of 90 or higher.

D. Prohibited activities regarding a motor fuel sold or offered for sale outside the CBG-covered area.
1. The owner or operator of a motor fuel dispensing site shall not sell or offer for sale from the motor fuel dispensing site storage tank a product that is not a motor fuel;
2. The owner or operator of a motor fuel dispensing site or transmix or production facility shall not sell or offer for sale a motor fuel that contains more than 0.3 volume percent MTBE or more than 0.1 weight percent oxygen from all other ethers or alcohols as listed in A.R.S. § 41-2122.
3. A transporter shall not deliver to a motor fuel dispensing site or place in a motor fuel dispensing site storage tank a product that is not motor fuel.

~~R20-2-715~~ R3-7-715. Motor Fuel Quality Testing Methods and Requirements

A. Unless otherwise required in A.R.S. Title 41, Chapter 15, or this Chapter, the producer of a motor fuel shall test the motor fuel for its motor fuel properties using the methodologies in ~~R20-2-702~~ R3-7-702 and ensure that the motor fuel meets the applicable specifications in the material incorporated by reference in ~~R20-2-702~~ R3-7-702.

B. Unless otherwise required in A.R.S. Title 41, Chapter 15, or this Chapter, a person testing #1 or #2 diesel fuel shall use the methodologies and meet the specifications of ASTM D975.

C. The owner or operator of a transmix or production facility shall ensure that all gasoline sold or offered for sale outside the CBG-covered area has its octane rating determined and certified in accordance with 16 CFR 306 using the average of ASTM D2699 and ASTM D2700, also known as the (R+M)/2 method. The owner or operator of a motor fuel dispensing site shall ensure that all gasoline sold or offered for sale outside the CBG-covered area has its octane rating posted in accordance with 16 CFR 306.

~~R20-2-718~~ R3-7-718. Requirements for Production, Transport, Distribution, and Sale of Biofuels

A. General requirements for producers and suppliers of biofuel or biofuel blends in Arizona.
1. Registration requirement.
   a. A producer, supplier, or person required to register with the EPA under 40 CFR 80, Subpart K or M, shall register with the Director, using a form prescribed by the Director, before producing or supplying biofuel or biofuel blend in Arizona.
   b. A person required to register under subsection (A)(1)(a) shall notify the Director within 10 days after the effective date of a change in any of the information provided under subsection (A)(1)(a).
   c. Consequences of failing to register under subsection (A)(1)(a).
      i. If a producer fails to register, the Department shall presume that all biofuel or biofuel blend produced is noncompliant with the requirements of this Chapter from the date that registration should have occurred; and
      ii. If a supplier or person required to register with the EPA fails to register, the Director shall take action as allowed under A.R.S. § 41-2115 and ~~R20-2-762~~ R3-7-762.
   d. The Department shall maintain and make available to the public a list of all persons registered under this Section.
2. Reporting requirement.
   a. A person required to register under subsection (A)(1)(a) shall report to the Department by the 15th of the month after producing or supplying biofuel or biofuel blend. The person shall:
      i. Report on a form prescribed by the Director;
      ii. Provide the information specified in subsections (B) and (C), as applicable;
      iii. Attest to the truthfulness and accuracy of the information submitted;
      iv. Consent to the Department or its authorized agent collecting samples and accessing records as provided in this Article; and
      v. Ensure that the report form is signed by a corporate officer responsible for operations at the facility at or from which the biofuel or biofuel blend was produced or supplied.
   b. The Department shall classify the information submitted under subsection (A)(2)(a) as confidential and protected under A.R.S. § 44-1374 if the person that submits the information expressly designates the information as confidential.
3. Quality Assurance and Quality Control (QA/QC) program requirement.
   a. A person required to register under subsection (A)(1)(a) shall develop a QA/QC program to ensure the quality of a biofuel or biofuel blend produced in or supplied in or into Arizona.
   b. A person required to develop a QA/QC program under subsection (A)(3)(a) shall summarize the QA/QC program in a manual and submit the manual to the Director for approval at least three months before the person plans to produce or supply a biofuel or biofuel blend. The person shall ensure that the manual:
      i. Documents the manner in which the QA/QC program ensures that a biofuel or biofuel blend produced or supplied conforms to applicable ASTM specifications, is appropriately blended, and meets all customer-specific requirements;
      ii. Contains a policy and objectives that expressly commit the producer or supplier to ensure the quality of the biofuel or biofuel blend produced or supplied;
      iii. Contains procedures that will be used to determine and document that operational quality requirements are met; and
      iv. Contains a provision for making, maintaining, and controlling documents and records regarding the QA/QC program.
   c. A person that submits a manual under subsection (A)(3)(b) shall not produce or supply a biofuel or biofuel blend until the manual is approved by the Director.
   d. The Director shall approve a manual submitted under subsection (A)(3)(b) only if the Director determines that the QA/QC program sufficiently ensures the quality of a biofuel or biofuel blend produced or supplied.

B. Specific requirements for producers or suppliers of E85.
1. The owner or operator of a motor fuel dispensing site at which E85 is dispensed shall ensure that:
   a. Both the motor fuel dispenser and nozzle from which E85 is dispensed have labels affixed that:
      i. Indicate E85 is not gasoline,
      ii. Indicate E85 is intended for use only in a flexible-fuel vehicle, and
      iii. State "Check your owner's manual to ensure that this fuel can be used in your vehicle," and

b. Any motor fuel dispenser from which E85 is dispensed is compatible with E85 and meets the requirements of this Chapter and A.R.S. § 41-2083.

2. Additional requirement for producing E85 for sale in the CBG-covered area. A producer of E85 for sale in the CBG-covered area shall:
   a. Use Arizona CBG or AZRBOB and pressurant as needed to meet the hydrocarbon requirement of ASTM D5798; and
   b. Ensure that the fuel ethanol used meets the standards in this Chapter.
3. Reporting requirement for a producer of E85. A producer of E85 intended as a final product for the fueling of motor vehicles shall submit the report required under subsection (A)(2) and ensure that the report includes the following information regarding the E85 produced:
   a. The amount of fuel ethanol used to produce E85 in the previous month,
   b. The amount of gasoline used to produce E85 in the previous month,
   c. The total amount of E85 produced during the previous month,
   d. The following fuel quality properties for the finished E85:
      i. Appearance,
      ii. American Petroleum Institute gravity,
      iii. Organic chloride,
      iv. Water content,
      v. Vapor pressure, and
      vi. Sulfur content.
4. Reporting requirement for a supplier of E85. A supplier of E85 intended as a final product for the fueling of motor vehicles shall submit the report required under subsection (A)(2) and ensure that the report includes the following:
   a. The amount of E85 sold during the previous month; and
   b. A certification by the supplier of E85 that the E85 sold, offered for sale, or dispensed was received from or traceable to a person registered with the Department under subsection (A)(1).
5. Quality Assurance and Quality Control (QA/QC) program for a producer of E85. A producer of E85 shall comply with the QA/QC requirements specified in subsection (A)(3). Additionally, the producer shall ensure that the manual submitted to the Director under subsection (A)(3)(b) contains a description of a QA/QC sampling and testing protocol to be implemented at each facility within the person's operation at which E85 is produced. The producer shall ensure that the sampling and testing protocol meets the following minimum standards:
   a. All samples of E85 are collected after any applicable blend component is added,
   b. All samples of E85 are collected using approved ASTM methods,
   c. Sampling is done at one of the following rates:
      i. If E85 is produced in a single storage tank by batch, a rate of at least one sample per tank. For the purpose of this subsection, a storage tank is a stationary tank and does not include a transport trailer;
      ii. If E85 is blended or transferred into a delivery truck through the use of computer-controlled in-line blending equipment, a rate of at least one sample for every 500 times E85 is blended or transferred or one sample per week, whichever is more frequent;
      iii. If E85 is blended or transferred into a delivery truck without the use of computer-controlled in-line blending equipment, a rate of at least one sample every 250 times E85 is blended or transferred or two samples per week, whichever is more frequent;
   d. All testing of E85 is conducted using the appropriate ASTM test method outlined in ASTM D5798,
   e. Test results are used to certify the quality of the E85 produced,
   f. Sample handling and storage procedures are specified, and
   g. Sample retention time-frames are specified.
6. Non-compliant E85. If test results for E85 shipped from a facility indicate that the E85 does not comply with the requirements of this Chapter, the producer of the E85 shall immediately:
   a. Notify the Director of the test results,
   b. Take all reasonable steps to stop the sale of the non-compliant E85, and
   c. Take steps reasonably calculated to determine the cause of the noncompliance and to prevent future occurrences of noncompliance.

C. Specific requirements for producers or suppliers of biodiesel and biodiesel blends.

1. A person shall not sell or offer or expose for sale:
   a. Neat biodiesel unless the neat biodiesel meets all specifications established by ASTM D6751,
   b. Diesel fuel containing up to five percent by volume biodiesel unless the diesel fuel meets all specifications established by ASTM D975, and
   c. A blend containing six percent through 20 percent biodiesel and diesel fuel unless the blend meets all specifications established by ASTM D7467.
2. The owner or operator of a motor fuel dispensing site shall ensure that:
   a. Any motor fuel dispenser from which a biodiesel or biodiesel blend is dispensed:
      i. Meets the labeling requirements established by A.R.S. § 41-2083(L),
      ii. Is compatible with biodiesel or biodiesel blend, and
      iii. Meets all requirements in this Chapter and A.R.S. § 41-2083; and
   b. Any biodiesel or biodiesel blend sold, offered for sale, or dispensed was received from or traceable to a person registered with the Department under subsection (A)(1).
3. Additional requirement for producing biodiesel or biodiesel blend for sale in the CBG-covered area. A producer of biodiesel or biodiesel blend for sale in the CBG-covered area shall ensure that the diesel fuel used contains no more than 15 ppm of sulfur.
4. Reporting requirement for a producer of a biodiesel or biodiesel blend. A producer of a biodiesel or biodiesel blend intended as a final product for the fueling of motor vehicles shall submit the report required under subsection (A)(2) and ensure that the report includes the following information regarding the biodiesel or biodiesel blend produced:
   a. The total amount of biodiesel or biodiesel blend produced in the previous month;
   b. The amount of biodiesel used to produce a biodiesel blend in the previous month;
   c. The following fuel quality properties, established by ASTM D6751, for the finished biodiesel:
      i. Flash point;
      ii. Water sediment;

iii. Sulfur content,
iv. Cold soak filterability;
v. Cloud point;
vi. Acid number;
vii. Free glycerin;
viii. Total glycerin; and
ix. Distillation, 90 percent; and

d. The following fuel quality properties, established by ASTM D7467, for the finished biodiesel blend that contains six percent through 20 percent biodiesel:
i. Sulfur content,
ii. Aromatic hydrocarbon content,
iii. Cetane index,
iv. Acid number,
v. Distillation, and
vi. American Petroleum Institute gravity.

5. Reporting requirement for a supplier of a biodiesel or biodiesel blend. A supplier of a biodiesel or biodiesel blend intended as a final product for the fueling of motor vehicles shall submit the report required under subsection (A)(2) and ensure that the report includes the following:
a. The amount of biodiesel or biodiesel blend sold during the previous month; and
b. A certification by the supplier of biodiesel or biodiesel blend that the biodiesel or biodiesel blend sold, offered for sale, or dispensed was received from or traceable to a person registered with the Department under subsection (A)(1).
6. Quality Assurance and Quality Control (QA/QC) program for a producer of biodiesel or a biodiesel blend. Except as specified in subsection (C)(7), a producer of biodiesel or a biodiesel blend shall comply with the QA/QC requirements specified in subsection (A)(3). Additionally, the producer shall ensure that the manual submitted to the Director under subsection (A)(3)(b) contains a description of a QA/QC sampling and testing protocol to be implemented at each facility within the person's operation at which biodiesel or a biodiesel blend is produced. The producer shall ensure that the sampling and testing protocol meets the following minimum standards:
a. All samples of biodiesel or biodiesel blend are collected after any applicable blend component is added;
b. All samples of biodiesel or biodiesel blend are collected using approved ASTM methods;
c. Sampling is done at one of the following rates:
i. If biodiesel or a biodiesel blend is produced in a single storage tank by batch, a rate of at least one sample per tank. For the purpose of this subsection, a storage tank is a stationary tank and does not include a transport trailer;
ii. If biodiesel or a biodiesel blend is blended or transferred into a delivery truck through the use of computer-controlled in-line blending equipment, a rate of at least one sample for every 20 times biodiesel or biodiesel blend is blended or transferred or one sample every two weeks, whichever is more frequent;
iii. If biodiesel or a biodiesel blend is blended or transferred into a delivery truck without the use of computer-controlled in-line blending equipment, a rate of at least one sample every 10 times biodiesel or biodiesel blend is blended or transferred or one sample per week, whichever is more frequent;
d. All testing of biodiesel or biodiesel blend is conducted using the appropriate ASTM test method outlined in ASTM D6751, D975, or D7467;
e. Test results are used to certify the quality of the biodiesel or biodiesel blend produced;
f. Sample handling and storage procedures are specified; and
g. Sample retention time-frames are specified.
7. A producer of biodiesel or a biodiesel blend that is accredited under the BQ9000 program shall, at least three months before planning to produce or supply a biodiesel or biodiesel blend, submit to the Director the quality manual developed and implemented under the BQ9000 program instead of the QA/QC manual required under subsection (C)(6). A producer of biodiesel or a biodiesel blend that is BQ9000 accredited shall not produce or supply a biodiesel or biodiesel blend until the quality manual developed under the BQ9000 program is approved by the Director. A producer of biodiesel or a biodiesel blend that is BQ9000 accredited shall, upon request, provide the Director with access to records relating to the accreditation and documentation relating to the precision and accuracy of any alternative test method used to meet the requirements of this Section. The Director has authority under A.R.S. §§ 41-2065(A)(4) and 41-2083(N) to audit the quality manual submitted under this subsection.
8. Non-compliant biodiesel or biodiesel blend. If test results for biodiesel or a biodiesel blend shipped from a facility indicate that the biodiesel or biodiesel blend does not comply with the requirements of this Chapter, the producer of the biodiesel or biodiesel blend shall immediately:
a. Notify the Director of the test results,
b. Take all reasonable steps to stop the sale of the non-compliant biodiesel or biodiesel blend, and
c. Take steps reasonably calculated to determine the cause of the noncompliance and to prevent future occurrences of noncompliance.

D. Specific requirements for producers or suppliers of petroleum-based renewable diesel. A producer or supplier of petroleum-based renewable diesel that is intended as a final product for the fueling of motor vehicles shall ensure that the petroleum-based renewable diesel:
1. Meets the standards in ASTM D975, and
2. Is identified as specified in ~~R20-2-701~~ R3-7-701.

~~R20-2-749~~ R3-7-749. Definitions Applicable to Arizona CBG and AZRBOB

The following definitions apply only to ~~R20-2-750~~ R3-7-750 through ~~R20-2-762~~ R3-7-762, including Tables A, 1, and 2:

"Designated alternative limit" means a motor fuel property specification, expressed in the nearest part per million by weight for sulfur content, nearest 10th percent by volume for aromatic hydrocarbon content, nearest 10th percent by volume for olefin content, and nearest degree Fahrenheit for T90 and T50, that is assigned by a registered supplier to a final blend of Type 2 Arizona CBG or AZRBOB for purposes of compliance with the Predictive Model Procedures.

"Downstream oxygenate blending" means combining AZRBOB and fuel ethanol to produce fungible Arizona CBG.

"Importer" means any person that assumes title or ownership of Arizona CBG or AZRBOB produced by an unregistered supplier.

"Oxygenate-blending facility" means any location (including a truck) where fuel ethanol is added to Arizona CBG or AZRBOB and the resulting quality or quantity of Arizona CBG is not altered in any other manner except for the addition of a deposit-control or similar additive registered under 40 CFR 79.
"Oxygenated Arizona CBG" means Arizona CBG with a maximum oxygen content of 4.0 wt. percent or another oxygen content approved by the Director under A.R.S. § 41-2124, that is produced and shipped to or within Arizona and sold or offered for sale for use in motor vehicles in the CBG-covered area from November 1 through March 31 of each year.
"Performance standard" means the VOC and NOx emission reduction percentages in ~~R20-2-751(A)(8)~~ R3-7-751(A)(8) and Table 1.
"PM" or "Predictive Model Procedures" means the California Predictive Model and CARB's "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," as adopted April 20, 1995, which is incorporated by reference in ~~R20-2-702~~ R3-7-702.
"PM alternative gasoline formulation" means a final blend of Arizona CBG or AZRBOB that is subject to a set of PM alternative specifications.
"PM alternative specifications" means the specifications for the following fuel properties, as determined using a testing methodology in ~~R20-2-759~~ R3-7-759:
Maximum vapor pressure, expressed in the nearest 100th of a pound per square inch;
Maximum sulfur content, expressed in the nearest part per million by weight;
Maximum olefin content, expressed in the nearest 10th of a percent by volume;
Minimum and maximum oxygen content, expressed in the nearest 10th of a percent by weight;
Maximum T50, expressed in the nearest degree Fahrenheit;
Maximum T90, expressed in the nearest degree Fahrenheit; and
Maximum aromatic hydrocarbon content, expressed in the nearest 10th of a percent by volume.
"PM averaging compliance option" means, with reference to a specific fuel property, the compliance option for PM alternative gasoline formulations by which final blends of Arizona CBG and AZRBOB are assigned designated alternative limits under ~~R20-2-751(G)~~ R3-7-751(G), (H), and (I).
"PM averaging limit" means a PM alternative specification that is subject to the PM averaging compliance option.
"PM flat limit" means a PM alternative specification that is subject to the PM flat limit compliance option.
"PM flat limit compliance option" means, with reference to a specific fuel property, the compliance option that each gallon of gasoline must meet for that specified fuel property as contained in the PM alternative specifications.
"Produce" means:
Except as otherwise provided, to convert a liquid compound that is not Arizona CBG or AZRBOB into Arizona CBG or AZRBOB.
If a person blends a blendstock that is not Arizona CBG or AZRBOB with Arizona CBG or AZRBOB acquired from another person, and the resulting blend is Arizona CBG or AZRBOB, the person conducting the blending produces only the portion of the blend not previously Arizona CBG or AZRBOB. If a person blends Arizona CBG or AZRBOB with other Arizona CBG or AZRBOB in accordance with this Article, without the addition of a blendstock that is not Arizona CBG or AZRBOB, that person is not a producer of Arizona CBG or AZRBOB.
If a person supplies Arizona CBG or AZRBOB to a refiner that agrees in writing to further process the Arizona CBG or AZRBOB at the refiner's refinery and be treated as the producer of Arizona CBG or AZRBOB, the refiner is the producer of the Arizona CBG or AZRBOB.
If an oxygenate blender blends oxygenates into AZRBOB supplied from a gasoline production or import facility, and does not alter the quality or quantity of the AZRBOB or the quality or quantity of the resulting Arizona CBG certified by a registered supplier in any other manner except for the addition of a deposit-control or similar additive, the producer or importer of the AZRBOB, rather than the oxygenate blender, is considered the producer or importer of the full volume of the resulting Arizona CBG.
"Registered supplier" means a producer or importer that supplies Arizona CBG or AZRBOB and is registered with the Director under ~~R20-2-750~~ R3-7-750.
"Third-party terminal" means an owner or operator of a gasoline storage tank facility that accepts custody, but not ownership, of Arizona CBG or AZRBOB from a registered supplier, oxygenate blender, pipeline, or other third-party terminal and relinquishes custody of the Arizona CBG or AZRBOB to a transporter.
"Type 1 Arizona CBG" means a gasoline that meets the standards contained in ~~R20-2-751(A)~~ R3-7-751(A) and Table 1.
"Type 2 Arizona CBG" means a gasoline that meets the standards contained in Table 2 or is certified using the PM according to the requirements of ~~R20-2-751(G)~~ R3-7-751(G), (H), and (I), and meets the requirements in:
~~R20-2-751(A)~~ R3-7-751(A) beginning April 1 through October 31 of each year, and
~~R20-2-751(B)~~ R3-7-751(B) beginning November 1 through March 31 of each year.
"Winter" means November 1 through March 31.

~~R20-2-750~~ R3-7-750. Registration Relating to Arizona CBG or AZRBOB

A. Each of the following shall register with the Director before producing, importing, or obtaining custody of Arizona CBG or AZRBOB:
1. A refiner that produces Arizona CBG or AZRBOB;
2. An importer that imports Arizona CBG or AZRBOB;
3. An oxygenate blender that blends oxygenate with AZRBOB to produce Arizona CBG; or
4. A pipeline or third-party terminal that has custody of Arizona CBG or AZRBOB.

B. A person listed in subsection (A) shall register on a form prescribed by the Director and include the following information:
1. Business name, business address, and contact name or position title and telephone number;
2. For each refinery or oxygenate blending facility, the facility name, physical location, contact name or position title and telephone number, and type of facility;
3. For each refinery, oxygenate blending facility, or importer:
   a. The location of the records required under this Article. If records are kept off-site, the primary off-site storage facility name, physical location, and contact name or position title and telephone number; and
   b. If an independent laboratory is used to meet the requirements of ~~R20-2-752(F)~~ R3-7-752(F), the name and address of the independent laboratory, and contact name or position title and telephone number;
4. If required under 40 CFR 80.76(d), the EPA registration number; and

5. A statement of consent permitting the Department or its authorized agent to collect samples and access records as provided in ~~R20-2-716~~ R3-7-716.

C. A person registered under subsection (B) shall notify the Director within 10 days after the effective date of a change in any of the information provided under subsection (B).

D. If a refiner, importer, or oxygenate blender fails to register under this Section, all Arizona CBG or AZRBOB produced by the refiner or oxygenate blender or imported by the importer and transported to the CBG-covered area is presumed to be noncompliant from the date that registration should have occurred.

E. The Department shall maintain a list of all registered suppliers.

~~R20-2-751~~ R3-7-751. Arizona CBG Requirements

A. General fuel property and performance requirements. In addition to the other requirements of this Article and except as provided in subsection (B), all Arizona CBG shall meet the following requirements and for any fuel property not specified, shall meet the requirements in ASTM D4814. The dates in this subsection are compliance dates for the owner or operator of a motor fuel dispensing site or a fleet vehicle fueling facility.
1. Sulfur: 500 ppm by weight (max).
2. Aromatics: 50 percent by volume (max).
3. Olefins: 25 percent by volume (max).
4. E200: 70-30 percent volume.
5. E300: 100-70 percent volume.
6. Maximum vapor pressure:
   a. October: 9.0 psi.
   b. November 1 - March 31: 9.0 psi.
   c. April: 10.0 psi.
   d. May: 9.0 psi.
   e. June 1 - September 30: 7.0 psi.
   f. A gasoline ethanol blend in the CBG-covered area is subject to the 1 psi vapor pressure waiver, as described in ~~R20-2-708(B)~~ R3-7-708(B), during April only.
7. Oxygen and oxygenates:
   a. Minimum content:
      i. November 1 - March 31: 10 percent fuel ethanol by volume. If A.R.S. § 41-2124(E) petition in effect: 2.7 percent oxygen by weight as approved by the Director.
      ii. April 1 - October 31: 0 percent by weight (any oxygenate).
   b. The maximum oxygen content shall not exceed 4.0 percent by weight for fuel ethanol and as specified in A.R.S. § 41-2122 for other oxygenates, and shall comply with the requirements of A.R.S. § 41-2123.
   c. Arizona CBG shall not contain more than 0.3 volume percent MTBE nor more than 0.1 weight percent oxygen from all other ethers or alcohols listed in A.R.S. § 41-2122.
8. Type 1 Arizona CBG shall meet the Federal Complex Model VOC emissions reduction percentage May 1 through September 15: ≥ 27.5 percent (Federal Complex Model settings: Summer, Area Class B, Phase 2). Type 2 Arizona CBG shall meet CARB Phase 2 requirements.

B. Wintertime requirements. In addition to the other requirements of this Article, the owner or operator of a motor fuel dispensing site or a fleet vehicle fueling facility shall ensure that beginning November 1 through March 31 of each year, all Arizona CBG meets the following fuel property requirements.
1. Sulfur: 80 ppm by weight (max),
2. Aromatics: 30% by volume (max),
3. Olefins: 10% by volume (max),
4. 90% Distillation Temp. (T90): 330° F (max),
5. 50% Distillation Temp. (T50): 220° F (max),
6. Vapor Pressure: 9.0 psi (max), and
7. Oxygenate - Ethanol;
   a. Minimum oxygenate content - 10 percent fuel ethanol by volume;
   b. Maximum oxygen content - 4.0 percent oxygen by weight, and shall comply with the requirements of A.R.S. § 41-2123; and
   c. Alternative minimum fuel ethanol content may be used if approved by the Director under A.R.S. § 41-2124(D).

C. Fuel ethanol specifications. A person that uses fuel ethanol as a blending component with AZRBOB or Arizona CBG shall ensure that the fuel ethanol meets the requirements in ASTM D4806 and the following:
1. A sulfur content not exceeding 10 ppm by weight,
2. An olefins content not exceeding 0.5 percent by volume, and
3. An aromatic hydrocarbon content not exceeding 1.7 percent by volume.

D. General elections. Except as provided in subsection (E), a registered supplier shall make an initial election, and a subsequent election each time a change occurs, before beginning to transport Arizona CBG or AZRBOB. A registered supplier shall make the election with the Director on a form or in a format prescribed by the Director. The election shall state:
1. Whether the registered supplier (at each point where the Arizona CBG or AZRBOB is certified) will supply Arizona CBG or AZRBOB that complies with Type 1 Arizona CBG, Type 2 Arizona CBG, or the PM alternative gasoline formulation requirements and, if the registered supplier will supply Arizona CBG or AZRBOB that complies with the PM alternative gasoline formulation requirements, whether the registered supplier will certify using the CARB Phase 2 model; and
2. For each applicable fuel property or performance standard in the election under subsection (D)(1), whether the Arizona CBG or AZRBOB will comply with the average standards or per-gallon standards. A registered supplier shall not elect to comply with average standards unless the registered supplier is in compliance with ~~R20-2-760~~ R3-7-760. A registered supplier shall not elect to comply with Type 1 Arizona CBG average standards in Table 1, columns B and C, from September 16 through October 31 and February 1 through April 30.

E. Winter elections. Beginning November 1 through March 31 of each year, a registered supplier shall ensure that all Arizona CBG or AZRBOB complies with Type 2 Arizona CBG requirements or the PM alternative gasoline formulation requirements under Table 2. A registered supplier shall make an initial election, and a subsequent election each time a change occurs, before beginning to transport Arizona CBG or AZRBOB. A registered supplier shall make the election with the Director on a form or in a format prescribed by

the Director. The election shall state:

1. Whether the registered supplier (at each point where the Arizona CBG or AZRBOB is certified) will supply Arizona CBG or AZRBOB that complies with the Type 2 Arizona CBG or the PM alternative gasoline formulation requirements; and
2. For each applicable fuel property, whether the Arizona CBG or AZRBOB will comply with the average standards or per-gallon standards.

F. A registered supplier may elect and produce Type 1 Arizona CBG from December 1 through March 31 but the registered supplier shall not distribute the Arizona CBG to a motor fuel dispensing site within the CBG-covered area before April 1.

G. Certification as Type 1 Arizona CBG or Type 2 Arizona CBG. A registered supplier shall certify Arizona CBG or AZRBOB under ~~R20-2-752~~ R3-7-752 as meeting all requirements of the election made in subsection (D) or (E). For each fuel property, Type 1 Arizona CBG shall comply with the requirements in either column A or columns B through D of Table 1, and shall be certified using the Federal Complex Model, which is incorporated by reference in ~~R20-2-702~~ R3-7-702. For each fuel property, Type 2 Arizona CBG shall comply with the requirements of columns A and B (averaging option), or column C in Table 2. The PM alternative gasoline formulation shall meet the requirements of subsections (H), (I), and (J), and column A of Table 2. A registered supplier may certify Arizona CBG or AZRBOB using an equivalent test method that the Department approves using the criteria stated in ~~R20-2-759~~ R3-7-759.

H. Certification and use of Predictive Model for alternative PM gasoline formulations.

1. Except as provided in subsections (H)(4) and (J), a registered supplier shall use the PM as provided in the Predictive Model Procedures.
2. A registered supplier shall certify a PM alternative gasoline formulation with the Director by either:
   a. Submitting to the Director a complete copy of the documentation provided to the executive officer of CARB according to 13 California Code of Regulations, Section 2264 and subsection (J); or
   b. Notifying the Director, on a form prescribed by or in a format acceptable to the Director, of:
      i. The PM alternative specifications that apply to the final blend, including for each specification whether it is a PM flat limit or a PM averaging limit; and
      ii. The numerical values for percent change in emissions for oxides of nitrogen and hydrocarbons determined in accordance with the Predictive Model Procedures.
3. A registered supplier shall deliver the certification required under subsection (H)(2) to the Director before transporting the PM alternative gasoline formulation.
4. Restrictions for elections to sell or supply final blends as PM alternative gasoline formulations.
   a. A registered supplier shall not make a new election to sell or supply from its production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation if the registered supplier has an outstanding requirement under subsection (K) to provide offsets for fuel properties at the same production or import facility.
   b. If a registered supplier elects to sell or supply from its production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation subject to a PM averaging compliance option for one or more fuel properties, the registered supplier shall not elect any other compliance option, including another PM alternative gasoline formulation, if an outstanding requirement to provide offsets for fuel properties exists under the provisions of subsection (K). This subsection does not preclude a registered supplier from electing another PM alternative gasoline formulation if:
      i. The PM flat limit for one or more fuel properties is changed to a PM averaging limit, or a single PM averaging limit for which there is no outstanding requirement to provide offsets is changed to a PM flat limit;
      ii. There are no changes to the PM alternative specifications for remaining fuel properties; and
      iii. The new PM alternative formulation meets the criteria in the Predictive Model Procedures.
   c. If a registered supplier elects to sell or supply from the registered supplier's production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation, the registered supplier shall not use a previously assigned designated alternative limit for a fuel property to provide offsets under subsection (K).
   d. If a registered supplier notifies the Director under subsection (D) or (E) that a final blend of Arizona CBG is sold or supplied from a production or import facility as a PM alternative gasoline formulation, all final blends of Arizona CBG or AZRBOB subsequently sold or supplied from that production or import facility are subject to the same PM alternative specifications until the registered supplier either:
      i. Designates a final blend at that facility as a PM alternative gasoline formulation subject to different PM alternative specifications; or
      ii. Elects, under subsection (D) or (E), a final blend at that facility subject to a flat limit compliance option or an averaging compliance option.

I. Prohibited activities regarding PM alternative gasoline formulations. A registered supplier shall not sell, offer for sale, supply, or offer to supply from the registered supplier's production or import facility Arizona CBG that is reported as a PM alternative gasoline formulation under ~~R20-2-752~~ R3-7-752 if any of the following occur:

1. The elected PM alternative specifications do not meet the criteria for approval in the Predictive Model Procedures,
2. The registered supplier is prohibited by subsection (H)(4)(a) from electing to sell or supply the gasoline as a PM alternative gasoline formulation,
3. The gasoline fails to conform with any PM flat limit in the PM alternative specifications election, or
4. With respect to any fuel property for which the registered supplier elects a PM averaging limit:
   a. The gasoline exceeds the applicable PM average limit in Table 2, column B, and no designated alternative limit for the fuel property is established for the gasoline in accordance with subsection (H)(2); or
   b. A designated alternative limit for the fuel property is established for the gasoline in accordance with subsection (H)(2), and either the gasoline exceeds the designated alternative limit for the fuel property or the designated alternative limit for the fuel property exceeds the PM averaging limit and the exceedance is not fully offset in accordance with subsection (K).

J. Oxygen content requirements for PM alternative gasoline formulations. A registered supplier shall ensure that from November 1 through March 31, all alternative PM gasoline formulations comply with oxygen content requirements for the CBG-covered area. Regardless of the oxygen content, a registered supplier shall certify the final alternative PM gasoline formulation using the PM with a minimum oxygen content of 2.0 percent by weight. A registered supplier may use the CARBOB Model as a substitute for the preparation of a fuel ethanol hand blend and use the fuel qualities calculated under the CARBOB Model for compliance and reporting purposes.

K. Offsetting fuel properties and performance standards. A registered supplier that elects to comply with the averaging standards for any of the fuel properties or performance standards contained in Tables 1 and 2, or the PM, shall, from a single production or import facility, complete physical transfer of certified Arizona CBG or AZRBOB in sufficient quantity to offset the amount by which the Arizona

CBG or AZRBOB exceeds the averaging standard according to the following schedule:

1. A registered supplier that elects to comply with the averaging standards contained in Table 2 or the PM shall offset each exceeded average standard within 90 days before or after beginning to transport any final blend of Arizona CBG or AZRBOB from the production or import facility;
2. A registered supplier that elects to comply with the averaging standard for the VOC Emission Reduction Percentage in Table 1, column B, shall offset an exceedance of the standard that occurs from May 1 to September 15 during that same period; and
3. A registered supplier that elects to comply with the averaging standard for the NOx Emission Reduction Percentage contained in Table 1, column B, shall offset an exceedance of the standard that occurs from May 1 to September 15 during that same period.

L. Consequence of failure to comply with averages.

1. In addition to a penalty under ~~R20-2-762~~ R3-7-762, if any, a registered supplier that fails to comply with a requirement of subsection (K) shall meet the applicable per-gallon standards contained in Table 1, Table 2, or an alternative PM gasoline formulation, for a probationary period as follows:
   a. For a registered supplier that elects to comply with the standards contained in Table 1, the probationary period begins on the first day of the next averaging season and ends on the last day of that averaging season if the conditions of subsection (L)(2) are met;
   b. For a registered supplier that elects to comply with the standards contained in Table 2 or the PM, the probationary period begins no later than 90 days after the registered supplier determines, or receives a notice from the Director, that the registered supplier did not comply with the requirements of subsection (K). Before the probationary period begins, the registered supplier shall notify the Director in writing of the beginning date of the probationary period. The probationary period ends 90 days after its beginning date.
2. A registered supplier shall not produce or import Arizona CBG or AZRBOB under an averaging compliance election until:
   a. The registered supplier submits a compliance plan to the Director that includes:
      i. An implementation schedule for actions to correct noncompliance, and
      ii. Reporting requirements that document implementation of the compliance plan,
   b. The Director approves the plan,
   c. The registered supplier implements the plan, and
   d. The registered supplier achieves compliance.
3. If a registered supplier fails to comply with the requirements of subsection (K) within one year of the end of a probationary period under subsection (L)(1), the registered supplier shall comply with applicable per-gallon standards for a subsequent probationary period of two years, or until the conditions in subsection (L)(2) are satisfied, whichever is later.
   a. If a registered supplier elects to comply with the Table 1 standards, the probationary period begins on the first day of the next averaging season.
   b. If a registered supplier elects to comply with the Table 2 standards or the PM, the probationary period begins no later than 90 days after the registered supplier determines, or receives notice from the Director, that the registered supplier did not comply with the requirements of subsection (K). Before the probationary period begins, the registered supplier shall notify the Director in writing of the beginning date of the probationary period.
4. If a registered supplier fails to comply with the requirements of subsection (K) within one year after the end of a probationary period provided under subsection (L)(3), the registered supplier shall permanently comply with applicable per-gallon standards.

M. Effect of VOC survey failure. Each time a VOC survey conducted under ~~R20-2-760~~ R3-7-760 shows excess VOC emissions in the CBG-covered area, the VOC emissions performance reduction in ~~R20-2-751(A)(8)~~ R3-7-751(A)(8) and the minimum per-gallon VOC emission reduction percentage in Table 1, column C shall be increased by an absolute 1.0 percent, not to exceed the VOC percent emissions reduction percentage per-gallon standard in Table 1, column A.

N. Effect of NOx survey failure. Each time a NOx survey conducted under ~~R20-2-760~~ R3-7-760 shows excess NOx emissions in the CBG-covered area, the NOx average emission reduction percentage applicable to the period of May 1 through September 15 in Table 1, column B shall be increased by an absolute 1.0 percent.

O. Subsequent survey compliance. If the minimum VOC or average NOx emissions reduction percentage has been made more stringent according to subsection (M) or (N) and all emissions reduction surveys for VOC or NOx for two consecutive years show emissions within the applicable adjusted reduction percentage in the CBG-covered area, the applicable VOC or NOx emissions adjusted reduction percentage shall be reduced by an absolute 1.0 percent beginning in the year following the year in which the second compliant survey is conducted. Each emissions reduction percentage adjusted under this subsection shall not be decreased below the following:

1. >27 percent for the VOC emissions reduction percentage, May 1 - September 15, Table 1, column C; and
2. >6.8 percent for the NOx emissions reduction percentage, May 1 - September 15, Table 1, column B.

P. Subsequent survey failures. If a VOC or NOx emissions reduction percentage is made less stringent under subsection (O) and a subsequent VOC or NOx survey shows excess VOC or NOx emissions in the CBG-covered area:

1. For a VOC survey failure, the Federal Complex Model VOC emissions reduction percentage in ~~R20-2-751(A)(8)~~ R3-7-751(A)(8) and the minimum per gallon VOC emission reduction percentage in Table 1, column C shall be increased by an absolute 1.0 percent, not to exceed the VOC percent emissions reduction percentage per gallon standard in Table 1, column A;
2. For a NOx survey failure, the NOx average emission reduction percentage applicable May 1 through September 15 in Table 1, column B shall be increased by an absolute 1.0 percent; and
3. If the VOC or NOx emission reduction percentage is increased under subsection (P)(1) or (2), the VOC or NOx emission reduction percentage shall not be made less stringent regardless of the result of subsequent surveys for VOC or NOx emissions.

Q. Effective date for adjusted standards. If a performance standard is adjusted by operation of subsection (M), (N), (O), or (P), the effective date for the change is the beginning of the next averaging season for which the standard is applicable.

~~R20-2-752~~ R3-7-752. General Requirements for Registered Suppliers

A. A registered supplier shall certify that each batch of Arizona CBG or AZRBOB transported for sale or use in the CBG-covered area meets the standards in this Article.

B. A registered supplier shall make the certification on a form or in a format prescribed by the Director. The registered supplier shall include in the certification information on shipment volumes, fuel properties as determined under ~~R20-2-759~~ R3-7-759, and performance standards for each batch of Arizona CBG or AZRBOB. The registered supplier shall submit the certification to the Director on or before the 15th day of each month for each batch of Arizona CBG or AZRBOB transported during the previous month.

C. Recordkeeping and records retention.

1. A registered supplier that samples and analyzes a final blend or shipment of Arizona CBG or AZRBOB under this Section shall maintain, for five years from the date of each sampling, records of the following:

a. Sample date;
b. Identity of blend or product sampled;
c. Container or other vessel sampled;
d. The final blend or shipment volume; and
e. The test results for sulfur, aromatic hydrocarbon, olefin, oxygen, vapor pressure, and as applicable, T50, T90, E200, and E300 as determined under ~~R20-2-759~~ R3-7-759.

2. If Arizona CBG or AZRBOB produced or imported by a registered supplier is not tested and documented as required by this Section, the Director shall deem the Arizona CBG or AZRBOB to have a vapor pressure, sulfur, aromatic hydrocarbon, olefin, oxygen, T50, and T90 that exceeds the standards specified in ~~R20-2-751~~ R3-7-751 or the comparable PM averaging limits, unless the registered supplier demonstrates to the Director that the Arizona CBG or AZRBOB meets all applicable fuel property limits and performance standards.
3. A registered supplier shall provide to the Director any records maintained by the registered supplier under this Section within 20 days of a written request from the Director. If a registered supplier fails to provide records for a blend or shipment of Arizona CBG or AZRBOB, the Director shall deem the final blend or shipment of Arizona CBG or AZRBOB in violation of ~~R20-2-751~~ R3-7-751, unless the registered supplier demonstrates to the Director that the Arizona CBG or AZRBOB meets all applicable fuel property limits and performance standards.

D. Notification requirement. A registered supplier shall notify the Director by fax before transporting Arizona CBG or AZRBOB into the CBG-covered area by a means other than a pipeline.

E. Quality Assurance and Quality Control (QA/QC) Program. A registered supplier shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the registered supplier's laboratory testing of Arizona CBG or AZRBOB. The registered supplier shall submit the QA/QC program to the Director for approval at least three months before the registered supplier transports Arizona CBG or AZRBOB. The Director shall approve a QA/QC program only if the Director determines that the QA/QC program ensures that the registered supplier's laboratory testing procedures comply with ~~R20-2-759~~ R3-7-759 and the data generated by the registered supplier's laboratory are complete, accurate, and reproducible. If the registered supplier makes significant changes to the QA/QC program, the registered supplier shall resubmit the QA/QC program to the Director for review and approval. Within 30 days of receiving the changed QA/QC program, the Director shall determine whether the changed QA/QC program meets the original quality objectives. The Director shall approve the changed QA/QC program if it meets the quality objectives. Instead of developing a QA/QC program, a registered supplier may comply with the independent testing requirements of subsection (F).

F. Independent testing.

1. A registered supplier of Arizona CBG or AZRBOB that does not develop a QA/QC program shall conduct a program of independent sample collection and analysis for the Arizona CBG or AZRBOB produced or imported, that complies with one of the following:
   a. Option 1. A registered supplier shall, for each batch of Arizona CBG or AZRBOB produced or imported, have an independent laboratory collect and analyze a representative sample from the batch using the methodology specified in ~~R20-2-759~~ R3-7-759 for compliance with each fuel property and performance standard for which the Arizona CBG or AZRBOB is certified.
   b. Option 2. A registered supplier shall have an independent testing program for all Arizona CBG or AZRBOB that the registered supplier produces or imports that consists of the following:
      i. An independent laboratory shall collect a representative sample from each batch;
      ii. The Director or designee shall identify up to 10% of the samples collected under subsection (F)(1)(b)(i) for analysis; and
      iii. The independent laboratory shall, for each sample identified by the Director or designee, analyze the sample using the methodology specified in ~~R20-2-759~~ R3-7-759 for compliance with each fuel property and performance standard for which the Arizona CBG or AZRBOB is certified.
2. The Director or designee may request in writing a duplicate of the batch sample collected under subsection (F)(1)(a) or (b) for analysis by a laboratory selected by the Director or designee. The registered supplier shall submit a duplicate of the sample to the Director within 24 hours of the written request.
3. Designation of independent laboratory.
   a. A registered supplier that does not develop a QA/QC program shall designate one independent laboratory for each production or import facility at which the registered supplier produces or imports Arizona CBG or AZRBOB. The independent laboratory shall collect samples and perform analyses according to subsection (F).
   b. A registered supplier shall identify the designated independent laboratory to the Director under the registration requirements of ~~R20-2-750~~ R3-7-750.
   c. A laboratory is considered independent if:
      i. The laboratory is not operated by a registered supplier or the registered supplier's subsidiary or employee,
      ii. The laboratory does not have any interest in any registered supplier, and
      iii. The registered supplier does not have any interest in the designated laboratory.
   d. Notwithstanding the restrictions in subsection (F)(3)(c), the Director shall consider a laboratory independent if it is owned or operated by a pipeline owned or operated by four or more registered suppliers.
   e. A registered supplier shall not use a laboratory that is debarred, suspended, or proposed for debarment according to the Government-wide Debarment and Suspension regulations, 40 CFR 32, or the Debarment, Suspension and Ineligibility provisions of the Federal Acquisition Regulations, 48 CFR 9.4.
4. A registered supplier shall ensure that its designated independent laboratory:
   a. Records the following at the time the designated independent laboratory collects a representative sample from a batch of Arizona CBG or AZRBOB:
      i. The producer's or importer's assigned batch number for the batch sampled;
      ii. The volume of the batch;
      iii. The identification number of the gasoline storage tank in which the batch is stored at the time the sample is collected;
      iv. The date and time the batch became Arizona CBG or AZRBOB;
      v. The date and time the sample is collected;
      vi. The grade of the batch (for example, unleaded premium, unleaded mid-grade, or unleaded); and
      vii. For Arizona CBG or AZRBOB produced by computer-controlled in-line blending, the date and time the blending process began and the date and time the blending process ended, unless exempt under subsection (G);

b. Retains each sample collected under this subsection for at least 45 days, unless this time is extended by the Director for up to 180 days;
c. Submits to the Director a quarterly report on or before the 15th day of January, April, July, and October of each year that includes, for each sample of Arizona CBG or AZRBOB analyzed under subsection (F):
i. The results of the independent laboratory's analyses for each fuel property, and
ii. The information specified in subsection (F)(4)(a) for each sample; and
d. Supplies to the Director, upon request, a duplicate of the sample.

G. Exemptions to QA/QC and independent laboratory testing requirements. A registered supplier that produces or imports Arizona CBG or AZRBOB using computer-controlled in-line blending equipment and operates under an exemption from EPA under 40 CFR 80.65(f)(iv), is exempt from the requirements of subsections (E) and (F), if reports of the results of the independent audit program of the registered supplier's computer-controlled in-line blending operation, which are submitted to EPA under 40 CFR 80.65(f)(iv), are submitted to the Director by March 1 of each year.

H. Use of laboratory analysis for certification of Arizona CBG and AZRBOB.
1. If both a registered supplier and an independent laboratory collect a sample from the same batch of Arizona CBG or AZRBOB and perform a laboratory analysis under subsection (F) to determine compliance of the sample with a fuel property, the registered supplier and independent laboratory shall use the same test methodology. The results of the analysis conducted by the registered supplier shall be used for certification of the Arizona CBG or AZRBOB under subsection (B), unless the absolute value of the difference between the two results is larger than one of the following:
a. Sulfur content: 25 ppm by weight,
b. Aromatics: 2.7% by volume,
c. Olefins: 2.5% by volume,
d. Fuel ethanol: 0.4% by volume,
e. Vapor pressure: 0.3 psi,
f. 50% distillation temperature: ASTM reproducibility for that sample using the slope from the registered supplier's results,
g. 90% distillation temperature: ASTM reproducibility for that sample using the slope from the registered supplier's results,
h. E200: 2.5% by volume,
i. E300: 3.5% by volume, or
j. API gravity: 0.3° API.
2. If the absolute value of the difference between the results of the analyses conducted by the registered supplier and independent laboratory is larger than one of the values specified in subsection (H)(1), the registered supplier shall use one of the following for certification of the batch of Arizona CBG or AZRBOB under subsection (B):
a. The larger of the two values for each fuel property, except the smaller of the two values shall be used for measures of oxygenates; or
b. Have a second independent laboratory analyze the Arizona CBG or AZRBOB for each fuel property. If the difference between the results obtained by the second independent laboratory and those obtained by the registered supplier are within the range listed in subsection (H)(1), the registered supplier's results shall be used for certifying the Arizona CBG or AZRBOB under subsection (B).

~~R20-2-753~~ R3-7-753. General Requirements for Pipelines and Third-party Terminals

A. A pipeline or third-party terminal shall not accept Arizona CBG or AZRBOB for transport unless:
1. The Arizona CBG or AZRBOB is physically transferred from an importer, refiner, oxygenate blender, pipeline, or third-party terminal registered with the Department under ~~R20-2-750~~ R3-7-750; and
2. The registered supplier provides written verification that the gasoline is Arizona CBG or AZRBOB and complies with the standards in ~~R20-2-751(A)~~ R3-7-751(A) or (B), as applicable, without reproducibility or numerical rounding.

B. A pipeline or third-party terminal that transports Arizona CBG or AZRBOB shall collect a sample of each incoming batch. The pipeline or third-party terminal shall retain the sample for at least 30 days unless this time is extended for an individual sample for up to 180 days by the Director.

C. A pipeline shall conduct quality control testing of Arizona CBG or AZRBOB at a frequency of at least one sample from one batch completing shipment for each registered supplier each day at each input location.

D. A pipeline shall provide the Director with a report summarizing the quality control testing results obtained under subsection (C) within 10 days of the end of each month. The report shall contain the quantity of Arizona CBG or AZRBOB, date tendered, whether the Arizona CBG or AZRBOB was transported by pipeline, present sample location, and laboratory analysis results.

E. If a batch does not meet the standards in ~~R20-2-751(A)~~ R3-7-751(A) or (B), as applicable, but is within reproducibility, the pipeline shall notify the Director by fax within 48 hours of the batch volume and date tendered, proposed shipment date, whether the batch was transported by the pipeline, present batch location, and laboratory analysis results.

F. If a batch does not meet the standards in ~~R20-2-751(A)~~ R3-7-751(A) or (B), as applicable, including reproducibility, the pipeline or third-party terminal shall notify the Director by fax within 24 hours of the batch quantity and date tendered, proposed shipment date, whether the batch was transported by the pipeline, present batch location, and laboratory analysis results. If the batch is in the pipeline's or third-party terminal's control, the pipeline or third-party terminal shall prevent release of the batch from a distribution point until the batch is certified as meeting the standards in ~~R20-2-751(A)~~ R3-7-751(A) or (B), as applicable.

G. A pipeline or third-party terminal shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the pipeline's or third-party terminal's laboratory testing. The QA/QC program for a pipeline or third-party terminal shall include a description of the laboratory testing protocol used to verify that Arizona CBG or AZRBOB transported to the CBG-covered area meets the standards in ~~R20-2-751(A)~~ R3-7-751(A) or (B). A pipeline or third-party terminal shall submit the QA/QC program to the Director for approval at least three months before the pipeline or third-party terminal begins to transport Arizona CBG or AZRBOB. The Director shall approve a QA/QC program only if the Director determines that the QA/QC program ensures that the pipeline's or third-party terminal's laboratory testing produces data that are complete, accurate, and reproducible. If a pipeline or third-party terminal makes significant changes to the QA/QC program, the pipeline or third-party terminal shall resubmit the QA/QC program to the Director for review and approval. Within 30 days of receiving the changed QA/QC program, the Director shall determine whether the changed QA/QC program meets the quality objectives originally approved by the Department. The Director shall approve the changed QA/QC program if it meets the quality objectives.

H. A portion of a facility that a third-party terminal uses for production, import, or oxygenate blending is exempt from this Section, but the third-party terminal shall operate the exempt portion of the facility in compliance with requirements for registered suppliers in ~~R20-2-752~~ R3-7-752 and oxygenate blenders in ~~R20-2-755~~ R3-7-755, as applicable.

I. A pipeline is not liable under ~~R20-2-761~~ R3-7-761 if it follows all of the procedures in this Section.

~~R20-2-755~~ R3-7-755. Additional Requirements for AZRBOB and Downstream Oxygenate Blending

A. Application of Arizona CBG standards to AZRBOB.
1. Determining whether AZRBOB complies with Arizona CBG standards.
   a. If a registered supplier designates a final blend as AZRBOB and complies with the provisions of this Section, the fuel properties and performance standards of the AZRBOB, for purposes of compliance with Table 2, are determined by adding the specified amount of fuel ethanol to a representative sample of the AZRBOB and testing the resulting gasoline using the test methods in ~~R20-2-759~~ R3-7-759 or certifying the ARZBOB using the CARBOB model. If the registered supplier designates a range of amounts of fuel ethanol to be added to the AZRBOB, the minimum designated amount of fuel ethanol shall be added to the AZRBOB to determine the fuel properties and performance standards of the resulting Arizona CBG. If a registered supplier does not comply with this subsection, the Department shall determine whether the AZRBOB complies with applicable fuel properties and performance standards, excluding requirements for vapor pressure, without adding fuel ethanol to the AZRBOB.
   b. In determining whether AZRBOB complies with the Arizona CBG standards, the registered supplier shall ensure that the fuel ethanol added to the representative sample under subsection (A)(1)(a) is representative of the fuel ethanol the registered supplier reasonably expects will be subsequently added to the AZRBOB.
2. Calculating the volume of AZRBOB. If a registered supplier designates a final blend as AZRBOB and complies with this Section, the volume of AZRBOB is calculated for compliance purposes under ~~R20-2-751~~ R3-7-751 by adding the minimum amount of fuel ethanol designated by the registered supplier. If a registered supplier fails to comply with this subsection, the Department shall calculate the volume of AZRBOB for purposes of compliance with applicable fuel properties and performance standards without adding the amount of fuel ethanol to the AZRBOB.

B. Restrictions on transferring AZRBOB.
1. A person shall not transfer ownership or custody of AZRBOB to any other person unless the transferee notifies the transferor in writing that:
   a. The transferee is a registered oxygenate blender and will add fuel ethanol in the amount (or within the range of amounts) designated in ~~R20-2-757~~ R3-7-757 before the AZRBOB is transferred from a final distribution facility, or
   b. The transferee will take all reasonably prudent steps necessary to ensure that the AZRBOB is transferred to a registered oxygenate blender that adds the amount (or within the range of amounts) of fuel ethanol designated in ~~R20-2-757~~ R3-7-757 to the AZRBOB before the AZRBOB is transferred from a final distribution facility.
2. A person shall not sell or supply Arizona CBG from a final distribution facility if the amount or range of amounts of fuel ethanol designated in ~~R20-2-757~~ R3-7-757 has not been added to the AZRBOB.

C. Restrictions on blending AZRBOB with other products. A person shall not combine AZRBOB supplied from the facility at which the AZRBOB is produced or imported with any other AZRBOB, gasoline, blendstock, or oxygenate, except for:
1. Fuel ethanol in the amount (or within the range of amounts) specified by the registered supplier at the time the AZRBOB is supplied from the production or import facility, or
2. Other AZRBOB for which the same fuel ethanol amount (or range of amounts) is specified by the registered supplier at the time the AZRBOB is supplied from the production or import facility.

D. Quality assurance sampling and testing requirements for a registered supplier supplying AZRBOB from a production or import facility. A registered supplier supplying AZRBOB from a production or import facility shall use an independent third-party quality assurance sampling and testing program as described in subsection (E) or conduct a quality assurance sampling and testing program that meets the requirements of 40 CFR 80.69(a)(7), as it existed on July 1, 1996, except for the changes listed in subsections (D)(1) through (3). 40 CFR 80.69(a)(7), July 1, 1996, is incorporated by reference and on file with the Department. A copy may be obtained at the Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000 or bookstore.gpo.gov. The material incorporated includes no future editions or amendments.
1. 40 CFR 80.69(a)(7). The word "RBOB" is changed to read "AZRBOB";
2. 40 CFR 80.69(a)(7). "...using the methodology specified in § 80.46..." is changed to read "...using the methodology specified in ~~R20-2-759~~ R3-7-759...;" and
3. 40 CFR 80.69(a)(7)(ii). "(within the correlation ranges specified in § 80.65(e)(2)(i))" is changed to read "(within the ranges of the applicable test methods).

E. General requirements for an independent third-party quality assurance sampling and testing program. A registered supplier may contract with an independent third party that conducts a quality assurance sampling and testing program for one or more registered suppliers. The registered supplier shall ensure that the quality assurance sampling and testing program:
1. Is designed and conducted by a third party that is independent of the registered supplier. To be considered independent:
   a. The third party shall not be an employee of a registered supplier,
   b. The third party shall not have an obligation to or interest in any registered supplier, and
   c. The registered supplier shall not have an obligation to or interest in the third party;
2. Is conducted from November 1 through March 31 on all samples collected under the program design previously approved by the Director under subsection (G);
3. Involves sampling and testing that is representative of all Arizona CBG dispensed in the CBG-covered area;
4. Analyzes each sample for oxygenate according to the methodologies specified in ~~R20-2-759~~ R3-7-759;
5. Bases results on an analysis of each sample collected during the sampling period unless a specific sample does not comply with the applicable per gallon maximum or minimum standards for the fuel property being evaluated in addition to any reproducibility applicable to the fuel property;
6. Participates in a correlation program with the Director to ensure the validity of analysis results;
7. Does not provide advance notice, except as provided in subsection (F), of the date or location of any sampling;
8. Provides a duplicate of any sample, with information regarding where and the date on which the sample was collected, upon request of the Director, within 30 days after submitting the report required under subsection (E)(10);
9. Permits a Department official to monitor sample collection, transportation, storage, and analysis at any time; and
10. Prepares and submits a report to the Director within 30 days after the sampling is completed that includes the following information:
    a. Name of the person collecting the samples;
    b. Attestation by an officer of the third party that the sampling and testing was done according to the program plan approved by the Director under subsection (G) and the results are accurate;

c. Identification of the registered supplier for whom the sampling and testing program was conducted if the sampling and testing program was conducted for only one registered supplier;
d. Identification of the area from which the samples were collected;
e. Address of each motor fuel dispensing site from which a sample was collected;
f. Dates on which the samples were collected;
g. Results of the analysis of the samples for oxygenate type and oxygen weight percent, aromatic hydrocarbon, and olefin content, E200, E300, and vapor pressure, and the calculated VOC or NOx emissions reduction percentage, as applicable;
h. Name and address of each laboratory at which the samples were analyzed;
i. Description of the method used to select the motor fuel dispensing sites from which a sample was collected;
j. Number of samples collected at each motor fuel dispensing site; and
k. Justification for excluding a collected sample if one was excluded.

F. An independent third party that contracts with one or more registered suppliers to conduct a quality assurance sampling and testing program shall begin the sampling on the date selected by the Director. The Director shall inform the third party of the date selected at least 10 business days before sampling is to begin.

G. To obtain the Director's approval of an independent third-party quality assurance sampling and testing program plan, the person seeking the approval shall:
1. Submit the plan to the Director no later than January 1 to cover the sampling and testing period from November 1 through March 31 of each year, and
2. Have the plan signed by an officer of the third party that will conduct the sampling and testing program.

H. No later than September 1 of each year, a registered supplier that intends to meet the requirements in subsection (D) by contracting with an independent third party to conduct quality assurance sampling and testing from November 1 through March 31 shall enter into the contract and pay all of the money necessary to conduct the sampling and testing program. The registered supplier may pay the money necessary to conduct the sampling and testing program to the third party or to an escrow account with instructions to the escrow agent to release the money to the third party as the testing program is implemented. No later than September 15, the registered supplier shall submit to the Director a copy of the contract with the third party, proof that the money necessary to conduct the sampling and testing program has been paid, and, if applicable, a copy of the escrow agreement.

I. Requirements for oxygenate blenders.
1. Requirement to add fuel ethanol to AZRBOB. If an oxygenate blender receives AZRBOB from a transferor to whom the oxygenate blender represents that fuel ethanol will be added to the AZRBOB, the oxygenate blender shall add fuel ethanol to the AZRBOB in the amount (or within the range of amounts) identified in the documentation accompanying the AZRBOB.
2. Additional requirements for oxygenate blending at terminals. An oxygenate blender that makes Arizona CBG by blending fuel ethanol with AZRBOB in a motor fuel storage tank, other than a truck used to deliver motor fuel to a retail outlet or bulk-purchaser consumer facility, shall determine the oxygen content and volume of the Arizona CBG before shipping, by collecting and analyzing a representative sample of the Arizona CBG, using the methodology in ~~R20-2-759~~ R3-7-759.
3. Additional requirements for oxygenate blending in trucks. An oxygenate blender that blends AZRBOB in a motor fuel delivery truck shall conduct quality assurance sampling and testing that meets the requirements in 40 CFR 80.69(e)(2), as it existed on July 1, 1996, except for the changes listed in subsections (I)(3)(a) through (c). 40 CFR 80.69(e)(2), July 1, 1996, is incorporated by reference and on file with the Department. A copy may be obtained at the Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000 or bookstore.gpo.gov. The material incorporated includes no future editions or amendments.
   a. 40 CFR 80.69(e)(2). The word "RBOB" is changed to read "AZRBOB;"
   b. 40 CFR 80.69(e)(2)(iv). "... using the testing methodology specified at § 80.46 ..." is changed to read "... using the testing methodology specified in ~~R20-2-759~~ R3-7-759...;" and
   c. 40 CFR 80.69(e)(2)(v). "(within the ranges specified in § 80.70(b)(2)(I))" is changed to read "(within the ranges of the applicable test methods)."
4. Additional requirements for in-line oxygenate blending in pipelines using computer-controlled blending.
   a. An oxygenate blender that produces Arizona CBG by blending fuel ethanol with AZRBOB into a pipeline using computer-controlled in-line blending shall, for each batch of Arizona CBG produced:
      i. Obtain a flow proportional composite sample after the addition of fuel ethanol and before combining the resulting Arizona CBG with any other Arizona CBG;
      ii. Determine the oxygen content of the Arizona CBG by analyzing the composite sample within 24 hours of blending using the methodology in ~~R20-2-759~~ R3-7-759; and
      iii. Determine the volume of the resulting Arizona CBG.
   b. If the test results for the Arizona CBG indicate that it does not contain the amount of fuel ethanol specified by the ranges of the applicable test methods, the oxygenate blender shall:
      i. Notify the pipeline to downgrade the Arizona CBG to conventional gasoline or transmix upon arrival in Arizona;
      ii. Begin an investigation to determine the cause of the noncompliance;
      iii. Collect a representative sample every two hours during each in-line blend of AZRBOB and fuel ethanol, and analyze the samples within 12 hours of collection, until the cause of the noncompliance is determined and corrected; and
      iv. Notify the Director in writing within one business day that the Arizona CBG does not comply with the requirements of this Article.
   c. The oxygenate blender shall comply with subsection (I)(4)(b)(iii) until the Director determines that the corrective action has remedied the noncompliance.
5. Recordkeeping and records retention.
   a. An oxygenate blender shall maintain, for five years from the date of each sampling, records of the following:
      i. Sample date,
      ii. Identity of blend or product sampled,
      iii. Container or other vessel sampled,
      iv. Volume of final blend or shipment,
      v. Oxygen content as determined under ~~R20-2-759~~ R3-7-759, and
      vi. Results from all testing.
   b. The Director shall deem that Arizona CBG blended by an oxygenate blender and not tested and documented as required by this Section has an oxygen content that exceeds the standards specified in ~~R20-2-751~~ R3-7-751 or exceeds the comparable PM averaging limits, if applicable, unless the oxygenate blender demonstrates to the Director that the Arizona CBG meets the standards in ~~R20-2-751~~ R3-7-751.

c. Within 20 days of the Director's written request, an oxygenate blender shall provide any records maintained by the oxygenate blender under this Section. If the oxygenate blender fails to provide records requested for a blend or shipment of Arizona CBG, the Director shall deem that the blend or shipment of Arizona CBG violates ~~R20-2-751~~ R3-7-751 or exceeds the comparable PM averaging limits, if applicable, unless the oxygenate blender demonstrates to the Director that the Arizona CBG meets the standards and limits under ~~R20-2-751~~ R3-7-751.

6. Notification requirement. An oxygenate blender shall notify the Director by fax before transporting Arizona CBG or AZRBOB into the CBG-covered area by a means other than a pipeline.
7. Quality assurance and quality control (QA/QC) program. An oxygenate blender that conducts sampling and testing under subsection (I) in the oxygenate blender's own laboratory shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the oxygenate blender's sampling and testing of Arizona CBG or AZRBOB. The oxygenate blender shall submit the QA/QC program to the Director for approval at least three months before transporting Arizona CBG. The Director shall approve a QA/QC program only if the Director determines that the QA/QC program ensures that the oxygenate blender's sampling and testing produces data that are complete, accurate, and reproducible. Instead of developing a QA/QC program, an oxygenate blender may comply with the independent testing requirements of ~~R20-2-752(F)~~ R3-7-752(F), except that, for sampling and testing conducted under subsection (I)(3), the minimum number of samples collected and tested by the independent laboratory shall be 10% of the number of samples required to be collected and tested under subsection (I).
8. An oxygenate blender that does not conduct laboratory sampling and testing required under subsection (I) in its own laboratory shall designate an independent laboratory, as described in ~~R20-2-752(F)~~ R3-7-752(F), to conduct the sampling and testing required under subsection (I)(7).
9. Within 24 hours of the Director's or designee's written request, an oxygenate blender shall submit a duplicate of any sample collected under subsection (I)(7).

J. Subsection (A)(1)(a) will not become effective until Arizona's revised State Implementation Plan is approved by EPA.

~~R20-2-756~~ R3-7-756. Downstream Blending of Arizona CBG with Nonoxygenate Blendstocks

A. A person shall not combine Arizona CBG supplied from a production or import facility with any nonoxygenate blendstock, other than vapor recovery condensate, unless the person demonstrates to the Director:
1. The blendstock added to the Arizona CBG meets all of the Arizona CBG standards regardless of the fuel properties and performance standards of the Arizona CBG to which the blendstock is added;
2. The person meets the requirements in this Article applicable to producers of Arizona CBG; and
3. The resulting fuel blend is not used within the CBG-covered area.

B. Notwithstanding subsection (A), a person may add nonoxygenate blendstock to a previously certified batch or mixture of certified batches of Arizona CBG that does not comply with one or more of the applicable per-gallon standards contained in ~~R20-2-751(A)~~ R3-7-751(A) or (B) if the person obtains prior written approval from the Director based on a demonstration that adding the blendstock will bring the previously certified Arizona CBG into compliance with the applicable per-gallon standards for Arizona CBG. The oxygenate blender or registered supplier shall certify the re-blended Arizona CBG to the Department.

~~R20-2-760~~ R3-7-760. Compliance Surveys

A. A registered supplier that elects to certify that Arizona CBG or AZRBOB meets an averaging standard under ~~R20-2-751~~ R3-7-751 shall ensure that compliance surveys are conducted in accordance with a compliance survey program plan approved by the Director. The Director shall approve a compliance survey program plan if it:
1. Consists of at least four VOC and NOx surveys conducted at least one per month between May 1 through September 15 of each year, and
2. Complies with subsection (J).

B. If a registered supplier fails to ensure that an approved compliance survey program is conducted, the Director shall issue an order requiring the registered supplier to comply with all applicable fuel property and performance standards on a per-gallon basis for six months or through the end of the survey period identified in subsection (A)(1), whichever is longer. Regardless of when a failure to survey occurs, the Director's order shall require compliance with per-gallon standards from the beginning of the survey period during which the failure to survey occurs.

C. General compliance survey requirements. A registered supplier shall ensure that a compliance survey conforms to the following:
1. Consists of all samples that are collected under an approved survey program plan during any consecutive seven days and that are not excluded under subsection (C)(4);
2. Is representative of all Arizona CBG being dispensed in the CBG-covered area as provided in subsection (G);
3. Analyzes each sample included in the compliance survey for oxygenate type and content, olefins, sulfur, aromatic hydrocarbons, E200, E300, and vapor pressure according to the test methods in ~~R20-2-759~~ R3-7-759. Vapor pressure is required to be analyzed only from May 1 through September 15;
4. Bases the results of the compliance survey upon an analysis of each sample collected during the course of the compliance survey, unless a sample does not comply with the applicable per gallon maximum or minimum fuel property standard being evaluated in addition to any reproducibility that applies to the fuel property standard; and
5. If a laboratory analyzes the compliance survey samples, the laboratory participates in a correlation program with the Director to ensure the validity of analysis results.

D. If the Director determines that a sample used in a compliance survey does not comply with ~~R20-2-751~~ R3-7-751 or another requirement under this Article, the Director shall take enforcement action against the registered supplier.

E. A registered supplier shall comply with the following VOC and NOx compliance survey requirements:
1. For each compliance survey sample, determine the VOC and NOx emissions reduction percentage based upon the tested fuel properties for that sample using the methodology for calculating VOC and NOx emissions reductions at 40 CFR 80.45, as incorporated by reference in ~~R20-2-702~~ R3-7-702;
2. The CBG-covered area fails a VOC compliance survey if the VOC emissions reduction percentage average of all samples collected during the compliance survey is less than the per-gallon standard for VOC emissions reduction percentage in Table 1, column A.
3. The CBG-covered area fails a NOx compliance survey if the NOx emissions reduction percentage average of all samples collected during the compliance survey is less than the per-gallon standard for NOx emissions reduction percentage in Table 1, column A.

F. A registered supplier shall determine the result of the series of NOx compliance surveys conducted between May 1 and September 15 as follows:

1. For each compliance survey sample, the NOx emissions reduction percentage is determined based upon the tested fuel properties for that sample using the methodology for calculating NOx emissions reduction at 40 CFR 80.45, as incorporated by reference in ~~R20-2-702~~ R3-7-702; and
2. The CBG-covered area fails the NOx series of compliance surveys conducted between May 1 and September 15 if the NOx emissions reduction percentage average for all compliance survey samples collected during that time is less than the Federal Complex Model per-gallon standard for the NOx emissions reduction percentage in Table 1, column A.

G. General requirements for an independent surveyor conducting a compliance survey. A registered supplier may have the compliance surveys required by this Section conducted by an independent surveyor. The Director shall approve a compliance survey program conducted by an independent surveyor if the compliance survey program:
1. Is designed and conducted by a surveyor that is independent of the registered supplier. To be considered independent:
   a. The surveyor shall not be an employee of any registered supplier,
   b. The surveyor shall not have an obligation to or interest in any registered supplier, and
   c. The registered supplier shall not have an obligation to or interest in the surveyor;
2. Includes enough samples to ensure that the average levels of oxygen, vapor pressure, aromatic hydrocarbons, olefins, T50, T90, and sulfur are determined with a 95 percent confidence level, with error of less than 0.1 psi for vapor pressure, 0.1 percent for oxygen (by weight), 0.5 percent for aromatic hydrocarbons (by volume), 0.5 percent for olefins (by volume), 5°F for T50 and T90, and 10 wppm for sulfur;
3. Requires that the surveyor not provide advance notice, except as provided in subsection (H), of the date or location of any survey sampling;
4. Requires that the surveyor provide a duplicate of any sample taken during the survey, with information regarding the name and address of the facility from and the date on which the sample was taken, upon request of the Director, within 30 days following submission of the survey report required under subsection (G)(6);
5. Requires that the surveyor permit a Department official to monitor sample collection, transportation, storage, and analysis at any time;
6. Requires the surveyor to submit a report of each survey to the Director within 30 days after sampling for the survey is completed that includes the following information:
   a. Name of the person conducting the survey;
   b. Attestation by an officer of the surveyor that the sampling and testing was conducted according to the compliance survey program plan and the results are accurate;
   c. Identification of the registered supplier for whom the compliance survey was conducted if the compliance survey was conducted for only one registered supplier;
   d. Identification of the area from which survey samples were selected;
   e. Dates on which the survey was conducted;
   f. Address of each facility at which a sample was collected, and the date of collection;
   g. Results of the analysis of samples for oxygenate type and oxygen weight percent, aromatic hydrocarbon, and olefin content, E200, E300, and vapor pressure, and the calculated VOC or NOx emissions reduction percentage, as applicable, for each survey conducted during the period identified in subsection (A)(1);
   h. Name and address of each laboratory at which samples were analyzed;
   i. Description of the method used to select the facilities from which a sample was collected;
   j. Number of samples collected from each facility;
   k. Justification for excluding a collected sample from the survey, if one was excluded; and
   l. Average VOC and NOx emissions reduction percentage.

H. An independent surveyor shall begin each survey on a date selected by the Director. The Director shall notify the surveyor of the date selected at least 10 business days before the survey is to begin.

I. To obtain the Director's approval of a compliance survey program plan, the person seeking approval shall:
1. Submit the plan to the Director no later than January 1 to cover the survey period of May 1 through September 15 of each year, and
2. Have the plan signed by a corporate officer of the registered supplier or by an officer of the independent surveyor.

J. No later than April 1 of each year, a registered supplier that intends to meet the requirements in subsection (A) by contracting with an independent surveyor to conduct the compliance survey plan for the next summer and winter season shall enter into the contract and pay all of the money necessary to conduct the compliance survey plan. The registered supplier may pay the money necessary to conduct the compliance survey plan to the independent surveyor or to an escrow account with instructions to the escrow agent to release the money to the independent surveyor as the compliance survey plan is implemented. No later than April 15, the registered supplier shall submit to the Director a copy of the contract with the independent surveyor, proof that the money necessary to conduct the compliance survey plan has been paid, and, if applicable, a copy of the escrow agreement.

~~R20-2-761~~ R3-7-761. Liability for Noncompliant Arizona CBG or AZRBOB

A. Persons liable. If motor fuel designated as Arizona CBG or AZRBOB does not comply with ~~R20-2-751~~ R3-7-751, the following are liable for the violation:
1. Each person who owns, leases, operates, controls, or supervises a facility where the noncompliant Arizona CBG or AZRBOB is found;
2. Each registered supplier whose corporate, trade, or brand name, or whose marketing subsidiary's corporate, trade, or brand name, appears at a facility where the noncompliant Arizona CBG or AZRBOB is found; and
3. Each person who manufactured, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation of any gasoline in a storage tank containing Arizona CBG or AZRBOB found to be noncompliant.

B. Defenses.
1. A person who is otherwise liable under subsection (A) is not liable if that person demonstrates:
   a. That the violation was not caused by the person or person's employee or agent;
   b. That product transfer documents account for all of the noncompliant Arizona CBG or AZRBOB and indicate that the Arizona CBG or AZRBOB complied with this Article; and
   c. That the person had a quality assurance sampling and testing program, as described in subsection (C) in effect at the time of the violation; except that any person who transfers Arizona CBG or AZRBOB, but does not assume title, may rely on the quality assurance program carried out by another person, including the person who owns the noncompliant Arizona CBG or AZRBOB, provided the quality assurance program is properly administered.

2. If a violation is found at a facility that operates under the corporate, trade, or brand name of a registered supplier, that registered supplier must show, in addition to the defense elements in subsection (B)(1), that the violation was caused by:
   a. A violation of law other than A.R.S. Title 41, Chapter 15, Article 6, this Article, or an act of sabotage or vandalism;
   b. A violation of a contract obligation imposed by the registered supplier designed to prevent noncompliance, despite periodic compliance sampling and testing by the registered supplier; or
   c. The action of any person having custody of Arizona CBG or AZRBOB not subject to a contract with the registered supplier but engaged by the registered supplier for transportation of Arizona CBG or AZRBOB, despite specification or inspection of procedures and equipment by the registered supplier designed to prevent violations.
3. To show that the violation was caused by any of the actions in subsection (B)(2), the person must demonstrate by reasonably specific showings, by direct or circumstantial evidence, that the violation was caused or must have been caused by another person.

C. Quality assurance sampling and testing program. To demonstrate an acceptable quality assurance program for Arizona CBG or AZRBOB, at all points in the gasoline distribution network, other than at a service station or fleet owner facility, a person shall present evidence:
1. Of a periodic sampling and testing program to determine compliance with the maximum or minimum standards in ~~R20-2-751~~ R3-7-751; and
2. That each time Arizona CBG or AZRBOB is noncompliant with one of the requirements in ~~R20-2-751~~ R3-7-751:
   a. The person immediately ceases selling, offering for sale, dispensing, supplying, offering for supply, storing, transporting, or causing the transportation of the noncompliant Arizona CBG or AZRBOB; and
   b. The person remedies the violation as soon as practicable.

Table 2. Type 2 Arizona CBG Standards

	Averaging Option		Non-averaging Option	
	A	B	C	
Fuel Property	Maximum Standard (per gallon)	Averaging Standard*	Flat Standard * (per gallon maximum)	Units of Standard
Sulfur Content	80	30	40	Parts per million by weight
Olefin Content	10.0	4.0	6.0	% by volume
90% Distillation Temperature (T90)	330	290	300	Degrees Fahrenheit
50% Distillation Temperature (T50)	220	200	210	Degrees Fahrenheit
Aromatic Hydrocarbon Content	30.0	22.0	25.0	% by volume
Oxygen content: fuel ethanol** November 1 - March 31	10% fuel ethanol**	–	10% fuel ethanol**	% by vol.
April 1 - October 31		–		
The maximum oxygen content EtOH year around			4.0	% by weight

* Instead of the standards in columns B and C, a registered supplier may comply with the standards contained in column A, and ~~R20-2-751(G)~~ R3-7-751(G), (H), and (I) for the use of the PM.
** Maximum oxygen content shall comply with the EPA oxygenate waiver requirements.
A registered supplier shall certify all Arizona CBG using fuel ethanol as the oxygenate beginning November 1 through March 31. Alternative fuel ethanol contents not less than 2.7% total oxygen may be used if approved by the Director under A.R.S. § 41-2124(D).
NOTE: Dates represent compliance dates for the owner of a motor fuel dispensing site or fleet vehicle fuel facility.

ARTICLE 9. GASOLINE VAPOR CONTROL

~~R20-2-902~~ R3-7-902. Exemptions

A. The owner or operator of a gasoline dispensing site that has decommissioned the site's stage II vapor recovery system in accordance with ~~R20-2-913~~ R3-7-913 or that is subject to A.R.S. § 41-2132, is exempt from the provisions of this Article but shall comply with the provisions of Article 10.

B. The owner or operator of a gasoline dispensing site that has a throughput that does not exceed the throughput specified in A.R.S. § 41-2135(B) may obtain an exemption by submitting a written request to the Department attesting that throughput at the gasoline dispensing site is not in excess of that specified in A.R.S. § 41-2135(B). By the 15th of each month, beginning the month after the Department approves the exemption, the person shall submit a written throughput report to the Department. If a person does not timely file a monthly throughput report or if a monthly throughput report reflects that the exemption limit is exceeded, the Department deems the exemption void.

C. To obtain an independent small business marketer exemption, a person shall derive at least 50 percent of the person's annual income from the sale of gasoline at each gasoline dispensing site for which an exemption is requested. The person shall submit a written request for exemption to the Department. The Department shall determine the percentage of total annual income represented by the sale of gasoline on the basis of the person's state and federal gross income for the preceding year for income tax purposes. The following items are excluded from income computations:
1. Purchase and sale of diesel fuel, and
2. State lottery sales net commissions and incentives.

D. Motor raceways, motor vehicle proving grounds, and marine and aircraft fueling facilities are exempt from stage II vapor recovery requirements.

~~R20-2-903~~ R3-7-903. Equipment and Installation

A. A person subject to A.R.S. § 41-2135 shall install, maintain, and operate a stage I and stage II vapor recovery system and component as specified in this Article until the stage II vapor recovery system is decommissioned in accordance with ~~R20-2-913~~ R3-7-913.

B. The Department shall reject a vapor recovery system or component from future installation if:
1. Federal regulations prohibit its use;
2. The vapor recovery system or component does not meet the manufacturer's specifications as certified by CARB using test methods approved in ~~R20-2-901~~ R3-7-901; or
3. The vapor recovery system or component fails greater than 20% of Department inspections for that system or component or the Department receives equivalent failure results from a vapor recovery registered service agency or from another jurisdiction's vapor recovery program, and the Department provides at least 30 days public notice of its proposed rejection.

C. The piping of both a stage I and stage II vapor recovery system shall be designed and constructed as certified by CARB for that specific vapor recovery system. A person shall not alter a stage I and stage II vapor recovery system or component from the CARB-certified configuration without obtaining Department approval under ~~R20-2-904~~ R3-7-904.

D. If Department inspection or test data reveal a deficiency in a fitting, assembly, or component that cannot be permanently corrected, the deficient fitting, assembly, or component shall not be used in Arizona.

E. A stage I spill containment may have a plugged drain rather than a drain valve if a hand-operated pump is kept onsite for draining entrapped liquid. A stage II vapor recovery system shall have pressure/vacuum (P/V) threaded valves on top of the vent lines for gasoline storage tanks.

~~R20-2-904~~ R3-7-904. Application Requirements and Process for Authority to Construct Plan Approval

A. A person shall not begin to construct a site requiring a vapor recovery system or to make a major modification of an existing vapor recovery system or component before obtaining approval of an authority to construct plan application. A major modification is:
1. Adding or replacing a gasoline storage tank that is equipped with a Department approved stage II vapor recovery system;
2. Adding or replacing underground piping, vapor piping within a dispenser, or a dispenser at an existing vapor recovery site unless the dispenser replacement is necessary due to unforeseen damage to the existing dispenser; or
3. Replacing a Department-approved stage II vapor recovery system of one certified configuration with an approved stage II vapor recovery system of a different certified configuration.

B. A person shall file with the Department a written change order to an authority to construct plan approval on a form provided by the Department if a modification of the approved vapor recovery system or component is needed after the Department issues an authority to construct plan approval. The person shall not make any modification until the Department approves the change order.

C. To obtain an authority to construct plan approval, a person shall submit to the Department, on a form provided by the Department, the following:
1. The name, address, and phone number of any owner, operator, and proposed contractor, if known;
2. The name of the stage I or stage II vapor recovery system or component to be installed along with the CARB certification for that system or component;
3. The street address of the site where construction or major modification will take place with an estimated timetable for construction or modification;
4. A copy of a blueprint or scaled site plan for the vapor recovery system or component including all equipment and piping detail; and
5. The application fee specified under ~~R20-2-906~~ R3-7-906.

D. After review and approval of the authority to construct plan, the Department shall issue the authority to construct plan approval and mail the plan approval to the address indicated on the application.
1. A copy of the authority to construct plan approval shall be maintained at the facility during construction so that it is accessible for Department review.
2. Construction of a stage II vapor recovery system or component at a site not having an approved authority to construct plan, shall be stopped and no further installation work done until an authority to construct plan approval is obtained.
3. An authority to construct plan approval is not transferable.

E. The Department shall deny an authority to construct plan for any of the following reasons:
1. Providing incomplete, false, or misleading information; or
2. Failing to meet the requirements stated in this Chapter.

F. If excavation is involved, the Department may visually inspect the stage II underground piping of a gasoline dispensing site before the pipeline is buried, for compliance with the authority to construct plan approval. A person who owns or operates a vapor recovery system or component shall give the Department notice by fax or e-mail at least two business days before the underground piping is complete. The Department shall require the owner or operator to excavate all piping not inspected before burial if the owner or operator does not give the required two business days' notice.

G. After construction is complete, a person who has a valid authority to construct plan approval may dispense gasoline for up to 90 days before final approval, if an initial inspection is scheduled according to ~~R20-2-905~~ R3-7-905.

H. An authority to construct plan approval expires one year from the date of issue or the completion of construction, whichever is sooner.

~~R20-2-905~~ R3-7-905. Initial Inspection and Testing

A. Within 10 days after beginning the dispensing of gasoline at a site that requires an authority to construct plan approval, a person shall provide the Department with a written certification of completion by the contractor and schedule an inspection that includes tests and acceptance criteria specified in the authority to construct plan approval. The inspection shall be witnessed by the Department at a time approved by the Department and include any of the following relevant to the specific vapor recovery system installed:
1. A dynamic pressure performance test from each dispenser for each product grade to its associated underground storage tank;
2. A pressure decay test for each vapor control system including nozzles, underground storage tanks, and tank vents. This test shall be performed with caps removed from stage I fill and vapor risers. If the pressure decay test in ~~R20-2-901(1)~~ R3-7-901(1) is used, the Department shall fail the vapor recovery system if gasoline storage tanks have less than 10 percent or greater than 60 percent vapor space. If the pressure decay test in ~~R20-2-901(2)~~ R3-7-901(2) is used, the Department shall fail the vapor recovery system if gasoline storage tanks have less than 15 percent or more than 30,000 gallons vapor space. The Department shall compute combined tank vapor space for manifolded systems;
3. Communication from dispenser to tanks for each product, using the San Diego TP-96-1 and CARB TP-201.4 test procedures;
4. Air to liquid volume ratio by volume meter of a vapor recovery system, using CARB TP-201.5 or CARB-endorsed equivalent procedures to determine air to liquid (A/L) ratios;

5. Spillage of a stage II vapor recovery system, using the CARB TP-201.2C procedure;
6. Liquid removal of a stage II vapor recovery system, using the CARB TP-201.6 procedure;
7. Flow versus pressure for components in a stage II vapor recovery system, using the CARB TP-201.2B procedure; and
8. Procedures specified by a manufacturer for testing the vapor recovery system.

B. If there is a difference between a testing contractor's and the Department's test results, the Department's test results prevail.

C. If a site fails to pass any of the tests required by subsection (A), the affected vapor recovery system or component shall remain out-of-service until the vapor recovery system and component pass all the appropriate tests in subsection (A).

D. A person who cancels an initial inspection shall notify the Department by calling the Department's designated telephone number at least one hour before the scheduled inspection and shall reschedule the inspection within 10 business days after this notification. The Department shall take enforcement action if a person fails to comply with this Section.

E. A person shall notify the Department when a vapor recovery system or component is repaired after failing an initial inspection. A registered service representative shall not proceed with a reinspection until the Department approves the reinspection date and time.

F. If a registered service representative does not start an initial inspection pressure decay test within 30 minutes of the scheduled start time, the Department shall fail the initial inspection of that site.

G. If a person cancels an initial inspection, the person shall reschedule the inspection within 90 days from the date gasoline was first dispensed.
1. The Department shall take enforcement action if the person fails to timely reschedule the inspection.
2. The registered service agency shall notify the Department in writing at least 10 business days before the inspection of the time, date, and location of the inspection.
3. The Department shall notify the registered service agency within five business days, by facsimile or electronic mail, whether it approves the inspection date and time.

~~R20-2-909~~ R3-7-909. Recordkeeping and Reporting

A. The owner or operator of a gasoline dispensing site employing stage II vapor recovery shall maintain daily records of the inspections done under this Article.

B. The owner or operator of a gasoline dispensing site employing stage II vapor recovery shall maintain a log and related records of all regularly scheduled maintenance and any repairs that have been made to stage II equipment.

C. The owner or operator of a gasoline dispensing site that is exempt under A.R.S. § 41-2135(B) from requirements to install and operate stage II vapor recovery equipment, shall maintain a log at the site showing monthly throughputs. The owner or operator shall submit throughput records to the Department as required under ~~R20-2-902(B)~~ R3-7-902(B). If any throughput requirement provided in A.R.S. § 412135(B) and this Article is exceeded for any month, the owner or operator shall notify the Department in writing within 30 days. The owner or operator shall within six months after the end of the month the throughput is exceeded, install and operate a stage II vapor recovery system conforming to this Article.

D. The owner or operator of a gasoline dispensing site shall keep all records required by this Article at the gasoline dispensing site for at least one year and shall make these records available to the Department upon request.

~~R20-2-910~~ R3-7-910. Annual Inspection and Testing

A. A person shall ensure that an annual inspection is conducted by a registered service representative on or before the annual inspection date. The annual inspection date is the last day of the month in which the last scheduled annual inspection was performed. A registered service agency shall notify the Department in writing at least 10 business days before an annual inspection of the time, date, and location of the inspection. The Department shall notify the registered service agency within five business days, by fax or e-mail, whether it approves the annual inspection date and time. The registered service agency shall not perform the annual inspection unless the Department approves the inspection date and time.

B. The annual inspection shall include the tests defined in ~~R20-2-905(A)(1)~~ R3-7-905(A)(1) through (8) that pertain to the specific vapor recovery system installed.

C. If there is a difference between a testing contractor's and the Department's test results, the Department's test results prevail.

D. If a site fails to pass any of the tests required by subsection (B), the affected vapor recovery system or component shall remain out-of-service until the vapor recovery system and component pass all appropriate tests in subsection (B).

E. After an annual inspection begins, a person shall not make a repair to the vapor recovery system or component until the results of the inspection are recorded.

F. A registered service representative shall perform all tests according to Article 9 and any other vapor recovery procedure that the Department issues to registered service agencies.

G. A person who cancels a witnessed inspection shall notify the Department by calling the Department's designated telephone number at least one hour before the scheduled inspection and shall reschedule the test to be completed by the annual inspection date. A registered service agency shall notify the Department in writing at least 10 business days before an annual inspection of the time, date, and location of the inspection. The Department shall notify the registered service agency within five business days, by fax or e-mail, of its approval of the inspection date and time. The Department shall take enforcement action if a person does not comply with this subsection.

~~R20-2-911~~ R3-7-911. Compliance Inspections

The Department shall not announce when it plans to conduct a compliance inspection of a stage I or stage II vapor recovery system or component. If results of a compliance inspection reveal a violation of A.R.S. Title 41, Chapter 15, or this Article, the Department shall require the vapor recovery system or component to undergo an appropriate test as specified in ~~R20-2-910~~ R3-7-910.

~~R20-2-913~~ R3-7-913. Stage II Decommissioning

A. The owner or operator of a gasoline dispensing site with a stage II vapor recovery system shall decommission the stage II vapor recovery system in accordance with the following schedule:
1. If the owner or operator holds a license issued by the Department numbered BMF 13676 or less, the owner or operator shall decommission the stage II vapor recovery system between October 1, 2016 and September 30, 2017; or
2. If the owner or operator holds a license issued by the Department numbered BMF 13677 or more, the owner or operator shall decommission the stage II vapor recovery system between October 1, 2017 and September 30, 2018.

B. Request for alternate decommissioning plan. The following owners or operators may submit an alternate decommissioning plan requesting to decommission the stage II vapor recovery systems at a time other than would be required under subsection (A)(1) or (A)(2) but no sooner than October 1, 2016 and no later than September 30, 2018. The owner or operator shall submit the alternate decommissioning plan to the Department for approval no later than December 31, 2015.

1. An owner or operator that holds licenses issued by the Department for three or fewer gasoline dispensing sites if all the licenses are issued in the same business name and mailing address. The owner or operator shall ensure that the alternate decommissioning plan includes the information specified in subsections (C)(1) through (4); and
2. An owner or operator that holds licenses issued by the Department for four or more gasoline dispensing sites if all the licenses are issued in the same business name and mailing address. The owner or operator shall ensure that the alternate decommissioning plan includes the information specified in subsection (C).

C. An owner or operator that submits a request for approval of an alternate decommissioning plan shall include the following information as specified under subsection (B):
1. The business name and mailing address on all licenses;
2. The name and telephone number of an individual with whom the Department can communicate;
3. The license number and address of each gasoline dispensing site and a statement of whether the owner or operator proposes to decommission each vapor recovery system between October 1, 2016 and September 30, 2017, or October 1, 2017 and September 30, 2018;
4. A statement of whether all gasoline dispensers at the gasoline dispensing site will be replaced and if so, whether the owner or operator proposes to replace the gasoline dispensers between October 1, 2016 and September 30, 2017, or October 1, 2017 and September 30, 2018; and
5. If the owner or operator owns four or more gasoline dispensing sites, an alternate decommissioning plan that includes:
   a. The license numbers and addresses of 50 percent of the gasoline dispensing sites at which the vapor recovery systems will be decommissioned between October 1, 2016 and September 30, 2017; and
   b. The license numbers and addresses of the remaining 50 percent of the gasoline dispensing sites at which the vapor recovery systems will be decommissioned between October 1, 2017 and September 30, 2018.

D. The Department shall approve or reject, on a first-come-first-served basis, an alternate decommissioning plan within three months after the alternate decommissioning plan is submitted. The Department shall allow decommissioning of stage II vapor recovery equipment at the time gasoline dispensers are replaced as indicated on the request for approval under subsection (C)(4). The Department may reject an alternate decommissioning plan if the information required under subsection (B) is not provided or if the year requested for decommissioning already has more than 60 percent of all gasoline dispensing sites scheduled for decommissioning;

E. The owner or operator of a gasoline dispensing site that is exempt under ~~R20-2-902~~ R3-7-902 shall decommission the site any time between October 1, 2016, and September 30, 2018;

F. The owner or operator of a gasoline dispensing site shall ensure that a Notice of Intent, using a form or format provided by the Department, is submitted to the Department at least 10 days before the planned decommissioning and includes the following information:
1. Name of the owner or operator of the gasoline dispensing site,
2. Address of the gasoline dispensing site,
3. Name of the decommissioning contractor,
4. Decommissioning dates,
5. Name of the vapor testing registered service representative, and
6. A statement indicating whether all gasoline dispensers at the gasoline dispensing site are being replaced.

G. If any of the information provided under subsection (F) changes, the owner or operator shall ensure that the Department receives the changed information at least 24 hours before the scheduled start of decommissioning.

H. The owner or operator of a gasoline dispensing site shall ensure that all stage II vapor recovery systems are decommissioned according to the material incorporated by reference in ~~R20-2-901(4)~~ R3-7-901(4) with the following exceptions:
1. Liquid shall be purged from the vapor piping following disconnection in section 14.6.6;
2. Vapor piping that is not disconnected from the tank top in accordance with section 14.6.7 shall be disconnected in the future if construction involving excavation that renders the piping accessible is performed; and
3. The pressure decay test conducted under section 14.6.12 shall meet the requirements in ~~R20-2-1005(A)(1)~~ R3-7-1005(A)(1).

I. The decommissioning contractor shall:
1. Complete a Decommissioning Checklist using a form or format provided by the Department,
2. Provide a copy of the completed Decommissioning Checklist to the owner or operator of the gasoline dispensing site at the time of decommissioning, and
3. Submit a copy of the completed Decommissioning Checklist to the Department within 10 days after decommissioning of the stage II vapor recovery system is complete. Decommissioning of a stage II vapor recovery system is complete on the date and at the time when the gasoline dispensing site resumes sales of motor fuel following decommissioning.

J. A gasoline dispensing site with a stage II vapor recovery system that is decommissioned is exempt from the annual inspection and testing required under ~~R20-2-910~~ R3-7-910 but shall be subject to the initial inspection and testing prescribed under ~~R20-2-1005~~ R3-7-1005 within 60 days after decommissioning is complete.

K. The requirements in Article 10 apply to all gasoline dispensing sites at which stage II vapor recovery systems have been decommissioned.

L. The Department shall place out-of-service a gasoline dispensing site at which a stage II vapor recovery system is not decommissioned according to this Section until the gasoline dispensing site is decommissioned and impose civil penalties under A.R.S. § 41-2115 on the owner or operator of the gasoline dispensing site.

ARTICLE 10. STAGE I VAPOR RECOVERY

~~R20-2-1002~~ R3-7-1002. Exemptions

A. The owner or operator of a gasoline dispensing site at which the site's stage II vapor recovery system has not been decommissioned in accordance with ~~R20-2-913~~ R3-7-913 is exempt from the provisions of this Article but shall comply with the provisions of Article 9.

B. An owner or operator of a gasoline dispensing site with a gasoline throughput that does not exceed that specified in A.R.S. § 41-2132(B) may file for an exemption from this Article. To obtain an exemption, the owner or operator of the gasoline dispensing site shall submit an annual throughput report to the Department, using a form prescribed by the Department, no later than March 30 of each year and attest to the throughput during each month of the previous calendar year. If the owner or operator fails to file an annual throughput report timely or if the annual throughput report indicates the exemption limit specified in A.R.S. § 41-2132(B) was exceeded, the Department shall deem the exemption void.

~~R20-2-1003~~ R3-7-1003. Equipment and Installation

A. The Department shall reject a vapor recovery system or component from future installation if:

1. Federal regulations prohibit its use;
2. The vapor recovery system or component does not meet the manufacturer's specifications as certified by CARB using test methods approved in ~~R20-2-1001~~ R3-7-1001; or
3. The vapor recovery system or component fails greater than 20% of Department inspections for that system or component or the Department receives equivalent failure results from a vapor recovery registered service agency or from another jurisdiction's vapor recovery program, and the Department provides at least 30 days public notice of its proposed rejection.

B. The piping of a stage I vapor recovery system shall be designed and constructed as certified by CARB for that specific vapor recovery system. A person shall not alter a stage I vapor recovery system or component from the CARB-certified configuration without obtaining Department approval under ~~R20-2-1004~~ R3-7-1004. All components installed with the stage I vapor recovery system shall be certified by CARB or approved by the Department as required under A.R.S. § 41-2132.

C. If Department inspection or test data reveal a deficiency in a fitting, assembly, or component that cannot be permanently corrected, the deficient fitting, assembly, or component shall not be used in Arizona.

D. A stage I liquid or vapor spill containment bucket may have a plugged drain rather than a drain valve if a hand-operated pump is kept onsite for draining entrapped liquid.

E. A stage I vapor recovery system shall have pressure/vacuum (P/V) threaded valves on top of the vent lines for gasoline storage tanks.

~~R20-2-1004~~ R3-7-1004. Application Requirements and Process for Authority to Construct Plan Approval

A. A person shall not begin to construct a site requiring a stage I vapor recovery system or to make a major modification of an existing vapor recovery system before obtaining approval of an authority to construct plan application. A major modification is:
1. Adding or replacing a gasoline storage tank that is equipped with a Department approved stage I vapor recovery system;
2. Modifying, adding, or replacing underground vent piping; or
3. Conducting construction under ~~R20-2-913(H)(2)~~ R3-7-913(H)(2).

B. A person shall file with the Department a written change order, using a form provided by the Department, to obtain a modification of the approved vapor recovery system or component if a modification is needed after the Department issues an authority to construct plan approval. The person shall not make any modification until the Department approves the change order.

C. To obtain an authority to construct plan approval, a person shall submit to the Department, on a form provided by the Department, the following:
1. The name, address, and telephone number of any owner, operator, and proposed contractor, if known;
2. The name of the stage I vapor recovery system or component to be installed along with the CARB certification for that system or component;
3. The street address of the site where construction or major modification will take place with an estimated timetable for construction or modification;
4. A copy of a blueprint or scaled site plan for the vapor recovery system or component including all stage I vapor recovery equipment and stage I vapor recovery piping detail; and
5. The application fee specified under ~~R20-2-1006~~ R3-7-1006.

D. A person shall ensure that an installed or modified stage I vapor recovery system meets the following requirements:
1. Has CARB-certified product and vapor adaptors that prevent loosening or over-tightening of the stage I product and vapor adaptors;
2. Consists of a two-point stage I system with separate fill and vapor connection points. Coaxial stage I vapor recovery systems shall not be used;
3. Has a submerged fill pipe that has the fill pipe's highest point of discharge no more than six inches from the tank bottom;
4. Has no tank containing motor fuel other than gasoline connected to the vapor piping;
5. Uses cement that is resistant to deterioration from exposure to water, hydrocarbons, and alcohol to join all pipes;
6. Has tank vent pipes that extend at least 12 feet above the elevation of the stage I fill points;
7. Has tank vent pipes with a minimum inside diameter of:
   a. Two inches if the pipe is not manifolded, or
   b. Three inches from the point of manifold if the pipe is manifolded;
8. Has pressure vacuum vent valves that are attached to the tank vent pipes by a threaded connection;
9. If a gasoline tank is installed in an enclosed vault, has an emergency vent in addition to the pressure vacuum vent valve required under subsection (D)(8);
10. Has a one-eighth inch threaded tap on the vent pipe between six and eight feet above ground level;
11. Has risers into gasoline storage tanks that are capped with UL-approved caps;
12. Has lead wires for instrumentation that pass through a leak-tight grommet with a compression fitting suitable for exposure to gasoline vapors;
13. Has storage tank vent pipes and fill and vapor manhole tops that are painted a color that minimizes solar gain and has a reflective effectiveness of at least 55 percent. Reflectivity shall be determined by visually comparing the paint with paint-color cards obtained from a paint manufacturer that uses the Master Pallet Notation to specify the paint color (i.e. 58YY *88*/180 where the number in italics is the paint reflectivity). Examples of colors have a reflective effectiveness of at least 55 percent include, but are not limited to, yellow, light gray, aluminum, tan, red iron oxide, cream or pale blue, light green, glossy gray, light blue, light pink, light cream, white, silver, beige, tin plate, and mirrored finish. A manhole cover that is color coded for product identification is exempt from this subsection; and
14. Complies with other requirements outlined in the authority to construct permit.

E. After review and approval of the authority to construct plan, the Department shall issue the authority to construct plan approval and mail, fax, or e-mail the plan approval to the address indicated on the application.
1. A copy of the authority to construct plan approval shall be maintained at the facility during construction so that it is accessible for Department review.
2. Construction of a stage I vapor recovery system or component at a site not having an approved authority to construct plan, shall be stopped and no further installation work done until an authority to construct plan approval is obtained.
3. An authority to construct plan approval is not transferable.

F. The Department shall deny an authority to construct plan for any of the following reasons:
1. Providing incomplete, false, or misleading information; or
2. Failing to meet the requirements stated in this Chapter.

G. If excavation is involved, the Department may visually inspect the stage I underground piping of a gasoline dispensing site before the piping is buried for compliance with the authority to construct plan approval. The owner or operator of a vapor recovery system or

component shall give the Department notice by fax or e-mail at least two business days before the underground piping is complete to schedule the inspection. The Department may require the owner or operator to excavate all piping not inspected before burial if the owner or operator does not give the required two business days' notice.

H. After construction is complete, a person who has a valid authority to construct plan approval may dispense gasoline for up to 90 days before final approval if an initial inspection is scheduled according to ~~R20-2-1005~~ R3-7-1005.

I. An authority to construct plan approval expires one year from the date of issue or the completion of construction, whichever is sooner.

~~R20-2-1007~~ R3-7-1007. Operation

A. The owner or operator of a gasoline dispensing site with stage I vapor recovery shall not transfer or permit the transfer of gasoline into any gasoline storage tank subject to this Article unless stage I vapor recovery equipment is installed, maintained, operating, and being used according to the requirements of A.R.S. Title 41, Chapter 15, Article 7, and this Article.

B. The owner or operator of a gasoline dispensing site with stage I vapor recovery shall operate the stage I vapor recovery system and associated components in compliance with the CARB certification or Department approval under A.R.S. § 41-2132 for that system and these rules.

C. The owner or operator of a gasoline dispensing site with stage I vapor recovery located in area A shall inspect the system and its components at least once every seven days. The inspections shall include all stage I fittings and spill containment.

D. The owner or operator of a gasoline dispensing site shall immediately stop using a stage I vapor recovery system or component if one or more of the following system or component defects occur:

1. Tank vent pipes are not the proper height or are not properly capped with approved pressure and vacuum vent valves;
2. Vent pipes do not meet the CARB-specified paint color code specified in ~~R20-2-1004(D)(13)~~ R3-7-1004(D)(13);
3. The stage I vapor recovery system is not properly installed or maintained as evidenced by the following:
   a. Spill containment buckets are cracked, rusted, or not clean and empty of liquid; sidewalls are not attached or are otherwise improperly installed; and drain valves are non-functioning or do not seal;
   b. A fill adaptor collar or vapor poppet (drybreak) is loose, damaged, or has a fill or vapor cap that is not installed or is missing, broken, not securely attached, or missing gaskets;
   c. Coaxial stage I is not equipped with a functioning CARB-approved poppeted fill tube or the coaxial cap is not installed or is missing, broken, not securely attached, or missing gaskets; or
   d. A fill tube is missing, broken, or not sealed; has holes or damaged overfill prevention; or the high point of the bottom opening is more than six inches above the tank bottom;
4. The tank rise cap with instrument lead wire for an electronic monitoring system is not installed tightly or any other tank riser is not sealed and capped securely;
5. An above-ground storage tank does not display a permanently attached UL approval plaque; or
6. Any other component identified in the diagrams, exhibits, attachments, or other documents and certified by CARB or required by the authority to construct permit for that system is missing, disconnected, or malfunctioning.

E. For proper operation of a stage I system under A.R.S. § 41-2132(C)(4), the owner or operator of a gasoline dispensing site shall recover vapors during pump-out from a gasoline storage tank to a mobile transporter.

F. The owner or operator of a gasoline dispensing site shall ensure that any underground tightness test is conducted in a manner that prevents gasoline vapors being emitted to the atmosphere.

~~R20-2-1009~~ R3-7-1009. Recordkeeping and Reporting

A. The owner or operator of a gasoline dispensing site employing stage I vapor recovery in area A shall maintain records of the inspections done under ~~R20-2-1007~~ R3-7-1007.

B. The owner or operator of a gasoline dispensing site employing stage I vapor recovery in area A shall maintain a log and related records of all regularly scheduled maintenance and any repairs that have been made to stage I equipment.

C. The owner or operator of a gasoline dispensing site that is exempt under A.R.S. § 41-2132(B) from requirements to install and operate stage I vapor recovery equipment shall maintain a log at the site showing monthly throughputs. The owner or operator shall make the log available to the Department within 24 hours after request. The owner or operator shall submit to the Department the throughput information required under ~~R20-2-1002(B)~~ R3-7-1002(B). If any throughput requirement provided in A.R.S. § 412132(B) and this Article is exceeded for any month, the owner or operator shall notify the Department in writing within 30 days. The owner or operator shall, within six months after the end of the month the throughput is exceeded, install and operate a stage I vapor recovery system conforming to this Article. If a stage I vapor recovery system is already installed, the owner or operator shall have the system tested under ~~R20-2-1010~~ R3-7-1010 within 30 days after the end of the month in which the throughput was exceeded.

D. The owner or operator of a gasoline dispensing site that has decommissioned a stage II vapor recovery system under ~~R20-2-913~~ R3-7-913 shall maintain a copy of the decommissioning checklist required under ~~R20-2-913(I)~~ R3-7-913(I) for three years.

E. Except as specified in subsection (D), the owner or operator of a gasoline dispensing site shall keep all records required by this Article at the gasoline dispensing site for at least one year and shall make these records available to the Department upon request.

~~R20-2-1010~~ R3-7-1010. Annual Testing and Inspection

A. A person shall ensure that an annual inspection is conducted by a registered service representative on or before the annual inspection date. The annual inspection date is the last day of the month in which the last scheduled annual inspection was performed. A registered service agency shall notify the Department in writing at least 10 business days before an annual inspection of the time, date, and location of the inspection. The Department shall notify the registered service agency within five business days, by fax or e-mail, whether it approves the annual inspection date and time. The registered service agency shall not perform the annual inspection unless the Department approves the inspection date and time.

B. The annual inspection shall include the tests defined in ~~R20-2-1005(A)(1)~~ R3-7-1005(A)(1) through (3) that pertain to the specific vapor recovery system installed.

C. To verify proper operation of a vapor recovery system, the Department may perform or may require registered service representatives to perform additional tests under ~~R20-2-1005(A)(4)~~ R3-7-1005(A)(4) during the annual inspection and testing. The Department shall provide registered service agencies with six months' notice before requiring additional annual testing under ~~R20-2-1005(A)(4)~~ R3-7-1005(A)(4).

D. If there is a difference between a testing contractor's test results and the Department's test results, the Department's test results prevail.

E. If a site fails to pass any of the tests required under subsection (B), the affected vapor recovery system or component shall remain out-of-service until the vapor recovery system and component pass all tests required under subsection (B).

F. After an annual inspection begins, a person shall not make a repair to the vapor recovery system or component until the results of the inspection are recorded.
G. A person shall notify the Department when a vapor recovery system or component is repaired after failing an annual inspection. A registered service representative shall not conduct a reinspection until the Department approves the reinspection date and time.
H. A registered service representative shall perform all tests according to this Article and any other vapor recovery procedure the Department issues to registered service agencies.
I. A person that cancels an annual inspection shall notify the Department by calling the Department's designated telephone number at least one hour before the scheduled inspection and shall reschedule the test to be completed by the annual inspection date. A registered service agency shall notify the Department in writing at least 10 business days before an annual inspection of the time, date, and location of the inspection. The Department shall notify the registered service agency within five business days, by fax or e-mail, of its approval of the inspection date and time. The Department shall take enforcement action if a person does not comply with this subsection.
J. Gasoline dispensing sites located in area B are exempt from the annual inspection and testing requirements of this Section.

~~R20-2-1011~~ R3-7-1011. Compliance Inspections and Additional Test Methods
The Department shall not announce when it plans to conduct a compliance inspection of a stage I vapor recovery system or component. If results of a compliance inspection reveal a violation of A.R.S. Title 41, Chapter 15, or this Article, the Department shall require the vapor recovery system or component to undergo an appropriate test as specified in ~~R20-2-1010~~ R3-7-1010.

NOTICES OF PUBLIC INFORMATION

Notices of Public Information contain corrections that agencies wish to make to their notices of rulemaking; miscellaneous rulemaking information that does not fit into any other category of notice; and other types of information required by statute to be published in the Register.

Because of the variety of Notices of Public Information, the Office of the Secretary of State has not established a specific publishing format for these notices. We do however require agencies to use a numbered list of questions and answers and follow our filing requirements by presenting receipts with electronic and paper copies.

NOTICE OF PUBLIC INFORMATION

DEPARTMENT OF ENVIRONMENTAL QUALITY

[M16-214]

1. Title and its heading: Title 49. The Environment
Chapter and its heading: Chapter 2. Water Quality Control
Article and its heading: Article 2.1. Total Maximum Daily Loads
Section: A.R.S. § 49-232. Lists of Impaired Waters; data requirements; rules

2. The public information relating to the listed statute

Arizona Revised Statute (A.R.S.) 49-232(A) requires the Arizona Department of Environmental Quality (ADEQ) to prepare a list of impaired waters at least once every five years to comply with Section 303(d) of the Clean Water Act [33 U.S.C. 1313(d)]. ADEQ provides public notice and allows for comment on the draft 303(d) List of impaired waters prior to its submission to the United States Environmental Protection Agency (EPA). ADEQ published a draft 303(d) List in a document entitled *Draft 2016 Clean Water Act Assessment – Arizona's Integrated 305(b) Assessment and 303(d) Listing Report* (hereafter referred to as the "Integrated Report") and provided an opportunity for public comment on the Integrated Report from June 13, 2016 to July 28, 2016. ADEQ prepares written responses to public comments received on the draft 303(d) List of impaired waters and publishes a summary of ADEQ's responses to comments in the *Arizona Administrative Register* at least 45 days before submitting the list to EPA for their approval.

3. Procedures for challenging an impaired water listing

The publication of the 303(d) List of impaired waters in the *Arizona Administrative Register* is an appealable agency action. Any party that submitted written comments on ADEQ's draft 2016 303(d) List may challenge a listing of an impaired water by submitting a notice of appeal to the Department in accordance with A.R.S. 41-1092.03. A notice of appeal challenging a listing must be submitted within 45 days of the date of publication of this notice of public information in the *Arizona Administrative Register*. The submission of a timely notice of appeal "stays" ADEQ's initial submission of a challenged listing to EPA. ADEQ may subsequently submit a challenged listing to EPA if the challenged listing is upheld in a final administrative decision by the Director under A.R.S. 41-1092.08 or if the person who challenges a listing withdraws the appeal prior to a final administrative decision by the Director.

4. 305(b) and 303(d) of the Clean Water Act

Section 305(b) of the Clean Water Act requires each state to prepare and submit to EPA a biennial report describing the water quality of all surface waters in the state. Each state must monitor water quality and review available data and information from various sources to determine if surface water quality standards are being met. From this 305(b) water quality assessment report and other sources of information, ADEQ creates the 303(d) List. The 303(d) List identifies Arizona surface waters that do not meet water quality standards. These waters are known as "water quality limited segments" or "impaired waters." Identifying a surface water as impaired may be based on an evaluation of physical, chemical, or biological data demonstrating evidence of a numeric standard exceedance, a narrative standard exceedance, designated use impairment, or a declining trend in water quality, such that the surface water would exceed a water quality standard before the next listing period.

Section 303(d) of the Clean Water Act requires each state to prepare several lists of surface water segments not meeting sur-

face water quality standards, including those not expected to meet state surface water quality standards after implementation of technology-based controls. The draft 303(d) List is revised based on public input and finalized for submission to EPA. Arizona, like most states, prepares one list containing all of the waters meeting the criteria in section 303(d). At a minimum, ADEQ must consider the following sources of data:

- Surface waters identified in the Section 305(b) Report, including Section 314 lakes assessment that do not meet water quality standards;
- Surface waters for which dilution calculations or predictive models indicate nonattainment of water quality standards;
- Surface waters for which problems have been reported by other agencies, institutions, and the public;
- Surface waters identified as impaired or threatened in the state's non-point assessments submitted to EPA under Section 319 of the Clean Water Act;
- Fish consumption advisories and restrictions on water sports and recreational contact;
- Reports of fish kills or abnormalities (cancers, lesions, tumors);
- Water quality management plans;
- The Safe Drinking Water Act 1453 source water assessments; and
- Superfund and Resource Conservation and Recovery Act (RCRA) reports and the Toxic Release Inventory.

ADEQ's 303(d) List and supporting documentation are submitted to EPA for review. The ADEQ submission to EPA will contain the 303(d) List, including the pollutants or suspected pollutants impairing water quality; the surface waters targeted for Total Maximum Daily Load (TMDL) development; a priority ranking and schedule for TMDL development; a description of the process used to develop the 303(d) List; the basis for listing decisions, including reasons for not including a surface water or segment on the list; and a summary of ADEQ responses to public comments received on the draft list. 40 CFR 130.7(b)(6)(iv) requires a state to demonstrate "good cause" for not listing a surface water where there are exceedances of water quality standards and places the burden of proof on the state to justify excluding a surface water from the list. "Good cause" factors include more recent or accurate data, flaws in the original analysis, more sophisticated water quality modeling, or changes in the conditions that demonstrate that the surface water is no longer impaired.

The 303(d) List was due to be submitted to the U.S. Environmental Protection Agency on or before April 1, 2016. State law requires that the initial 303(d) List be published in the *Arizona Administrative Register* at least 45 days before the list is submitted to the Regional Administrator. The list of impaired waters that ADEQ plans to submit to EPA is contained in the table titled "Arizona's 2016 303(d) List of Impaired Waters" published in Section 7 of this notice.

EPA has added impaired waters to Arizona's 303(d) List in previous assessment cycles. These EPA listings do not meet the requirements of A.R.S. 49-232 or impaired water identification criteria established in ADEQ's Impaired Water Identification Rules (A.A.C. R18-11-601 through R18-11-606) but do meet federal requirements.

5. Arizona laws governing ADEQ identification of impaired waters and preparation of the 303(d) List

The Arizona Legislature enacted laws governing ADEQ's development of the 303(d) List in 2000. A.R.S. 49-232(B) requires that ADEQ consider only "reasonably current, credible and scientifically defensible" data that the ADEQ has collected or received from another source in determining whether a water body is an impaired water. The results of water sampling or other assessments of water quality are considered credible and scientifically defensible data only if ADEQ has determined:

1. Appropriate quality assurance and quality control procedures were followed and documented in collecting and analyzing the data;
2. The samples or analyses are representative of water quality conditions at the time the data was collected;
3. The data consists of an adequate number of samples based on the water body in question and the parameters being analyzed; and
4. The method of sampling and analysis, including analytical, statistical and modeling methods, is generally accepted and validated in the scientific community as appropriate for use in assessing the condition of the water.

ADEQ considered reasonable current, credible and scientifically defensible data in preparing 2016 draft 303(d) List (the Impaired Water Identification Rule (IWIR)). The water quality data and information that ADEQ considered are summarized in the 2016 Integrated Report.

In 2002 ADEQ adopted, by rule, the methodology used in identifying waters as impaired. These rules specify the following:

1. Minimum data requirements and quality assurance and quality control requirements consistent with the requirements of A.R.S. 49-232(B)(1-4).
2. Appropriate sampling, analytical and scientific techniques that may be used in assessing whether a water is impaired.
3. Any statistical or modeling techniques that ADEQ uses to assess or interpret data.
4. Criteria for including and removing waters from the list of impaired waters, including any implementation procedures used for identifying impaired waters on the basis of exceedances of narrative water quality standards.

ADEQ prepared the 2016 Integrated Report in accordance with its IWIR that ADEQ adopted in 2002 [*See* A.A.C. R18-11-601 through R18-11-606]. This document contains the methods and technical support for the 2016 Assessment.

Under A.R.S. 49-232(D), ADEQ must consider available data in light of the nature of each water body being assessed (including whether a water body is an ephemeral water) when determining whether to include a water body on the 303(d) List of impaired waters.

ADEQ is prohibited by A.R.S. 49-232(F) from listing a water body as impaired based on a violation of a narrative or biological water quality standard prior to adopting implementation procedures identifying the objective bases for determining that a violation of the standard exists. None of the waters identified by ADEQ on the 2016 303(d) List are listed because of violations of narrative or biological water quality standards.

6. ADEQ response to comments on draft 303(d) List

Arizona's *Draft* 2016 Clean Water Act Assessment - *Status of Ambient Water Quality in Arizona 305(b) Assessment and 303(d) Listing Report* was made available for public review and comment from June 13, 2016 to July 28, 2016. Comments received by ADEQ are grouped by the commenter below. ADEQ responses to public comments relating to impaired waters on the 303(d) List are provided in this notice of public information.

City of Prescott

Comment #1- Streams are Misclassified

Ackers East, Ackers West, Government Canyon, North Fork Miller, North Granite Creek and Slaughterhouse Gulch are not recognized as streams by the USGS Geographic Names Information System. All of these features are identified as ephemeral by the National Hydrography Database. Additionally, all of these streams have channels above the water table and flow only in direct response to precipitation, meeting the definition of ephemeral in A.A.C. R18-11-101(18). The City requests that these waters be classified as ephemeral and reassessed.

For these ephemeral waters, A.A.C. R18-11-105(1) requires, that the partial body contact standard be used in assessing impairment. The City of Prescott requests that the partial-body contact standard for *E. coli* impairment (575 cfu/100 mL) be applied to these features.

Bannon and Aspen Creeks should be classified as intermittent and not perennial. Perennial requires continuous flow throughout the year. A.A.C. R18-11-101(30). Intermittent is the proper classification for these waters as they only flow continuously during certain times of the year and not year round. A.A.C. R-11-101(25).

Response #1

Based on data collected as part of the Granite Creek Total Maximum Daily Load, Ackers East, Ackers West, Government Canyon, North Fork Miller, North Granite Creek and Slaughterhouse Gulch are intermittent in accordance with Arizona Administrative Code (A.A.C.) R18-11-101(25). Intermittent water is defined by rule as "a stream or reach that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow." Each of these streams has been observed to flow continuously for more than a week due to snowmelt or from other sources. Ephemeral streams are defined in A.A.C. R18-11-101(18) as "a surface water that has a channel that is at all times above the water table and flows only in direct response to precipitation". Ackers East, Ackers West, Government Canyon, North Fork Miller, North Granite Creek and Slaughterhouse Gulch do not meet the definition of ephemeral because

they were observed flowing one or more week(s) after a precipitation event.

Aspen Creek has been assigned the Aquatic and Wildlife Warm, Full Body Contact, and Fish Consumption designated uses in Appendix B of the Arizona Administrative Code (A.A.C.) Title 18, Chapter 11, Article 1. Any changes to Appendix B must be completed via a formal rulemaking process. Bannon Creek is classified as intermittent/perennial based on the tributary rule A.A.C. R18-11-105. The designated uses in Appendix B and the tributary rule only distinguish between intermittent and perennial versus ephemeral designated uses. All the standards that were assessed for Aspen and Bannon Creeks are based on intermittent/perennial uses.

Comment #2 Impairment using FBC is not Appropriate

North Fork Miller, Slaughterhouse Gulch, Government Canyon, Ackers East, Ackers West, Bannon Creek, Manzanita Creek, Aspen Creek, Butte Creek, and Miller Creek are all listed as impaired using the Full Body Contact standard. That standard is not appropriate for any of these waters. Full Body Contact requires uses of the water for swimming or other activity that results in direct contact to the point of complete submergence. A.A.C. R18-11-101(21). None of the waters listed have sufficient water at any time for complete submergence to be a regular or primary activity. Partial Body Contact is a more appropriate standard and the City requests that the use for these waters be reclassified as Partial Body Contact. The City understands that the default for these creeks is Full Body Contact, pursuant to A.A.C. R-11-1-105; however, when a decision to list a particular water for impairment must be made, more evaluation of the individual creeks is required to determine what is appropriate for those creeks. A one size fits all approach is never appropriate. For the creeks listed above, a partial body contact standard is appropriate based on the nature and primary uses of those creeks.

Bannon Creek is listed as impaired for *E. coli*. Because complete submergence is not possible on this water for the vast majority of the year and because complete submergence is never a primary use on that water, it should properly be reviewed using the Partial Body Contact standard of 575 cfu/100 ml. Using that standard, there are no instances of more than one exceedance within any consecutive three year period. The first two samples that exceed the 575 cfu/ 100 ml are more than three years apart and the third does not exceed that level. As a result, the City requests that Bannon Creek be reclassified from impaired to inconclusive.

Response #2

A.A.C. R18-11-101(21) defines "Full Body Contact (FBC)" as "the use of a surface water for swimming or other recreational activity that causes the human body to come into direct contact with the water to the point of complete submergence. The use is such that ingestion of the water is likely and sensitive body organs, such as the eyes, ears, or nose, may be exposed to direct contact with the water." Full body contact is a designated use, which dictates which water quality standards apply. ADEQ disagrees that complete submergence means that the entire body submerged. The second sentence of the definition gives clarity as to what is meant by complete submergence. It states that the "ingestion of water and exposure to eyes, ears, or nose is likely". It is likely that people will come into contact with intermittent or perennial water that flows through an urban area such as the City of Prescott. The Full Body Contact designated use is applicable to North Fork Miller, Slaughterhouse Gulch, Government Canyon, Ackers East, Ackers West, Bannon Creek, Manzanita Creek, Aspen Creek, Butte Creek, and Miller Creek.

Comment #3 Natural background

Additionally, Bannon Creek is predominantly outside and away from human populations such that any exceedances for *E. coli* are most likely due to the natural background and not due to human activity. As such any exceedance on Bannon Creek should not be considered violations of the water quality standards. A.A.C. R-18-11-119.

Response #3

A.A.C. R18-11-119 states "Where the concentration of a pollutant exceeds a water quality standard and the exceedance is not caused by human activity but is due solely to naturally-occurring conditions, the exceedance shall not be considered a violation of the water quality standard." Portions of Bannon Creek are either in the city or directly next to Cougar Trail Road. ADEQ has taken into account natural conditions for Bannon Creek and does not agree that the exceedances of *E. coli* are due solely to natural conditions. The Total Maximum Daily Load for the Granite Creek Watershed, which includes Ban-

non Creek, identified numerous human influences such as urban stormwater, sanitary sewer overflows, septic seepage, cross connections and pets.

Comment #4 Name Changes
Finally, the USGS' Board on Geographic Names Decisions officially designated Bannon Creek (Pg.11) as Banning Creek in 2005 (USGS GNIS ID# 25954). We would suggest that Banning Creek is the correct name for the purpose of this listing. Similarly, Acker's West is known as Virginia Street Wash to the City of Prescott and is shown as such on the recently revised FEMA floodplain maps.

Response #4
ADEQ changed Bannon Creek to Banning Creek in the 2016 Integrated Report. Acker's West has been changed to Unnamed Tributary to Granite Creek (UGC), and Ackers East to Unnamed Tributary to UGC (UUG).

Bureau of Land Management

Comment – #1 Agua Fria River (15070102-023)
A segment of the Agua Fria River has been deemed "impaired" by the ADEQ due to selenium level AWW exceedance (2 exceedances in 4 samples) and *E. coli* FBC exceedance. The draft 2016 ADEQ report also lists arsenic DWS and bottom deposits AWW as inconclusive. These findings are not credible due to the lack of recent and/or current data. ADEQ results for arsenic, dissolved oxygen, selenium and bottom deposits are based on data collected between 2011 and 2012. Data for the *E. coli* impairment determination appear to be based on data collected in 2008 which led to the impairment listing in 2010 (ADEQ 2010).

Results are also not credible because they do not reflect current management conditions. In 2010, the Agua Fria National Monument implemented a winter season of use for livestock which has improved riparian conditions throughout the monument. Vegetation abundance, cover, and bank stability have increased which has likely influenced water quality positively.

Response #1
ADEQ supports management actions that improve riparian conditions and appreciates BLM's efforts to improve water quality. The 2016 draft Clean Water Act Assessment uses the last 5 years of data from July 1, 2010 to June 30, 2015. ADEQ makes a further distinction for how the acute and chronic criteria for the aquatic and wildlife designated use is assessed. For acute criteria ADEQ does look at the last 3 years of data, but for chronic we look at the entire assessment window. Impaired streams do not automatically drop off the 303(d) impaired waters list after a certain amount of time. ADEQ requires data to justify delisting of a waterbody as described in A.A.C. R18-11-605(E)(2).

The 2010 *E. coli* impairment will stay on the 303(d) impaired waters list until there are no exceedances under critical conditions during the last three years of monitoring (single sample maximum). The 2016 selenium impairment was added to the 303(d) impaired waters list because there were 2 exceedances in 4 samples. The chronic impairment criteria for aquatic and wildlife is two or more exceedances during the assessment period.

Roughly half of the data used in the 2016 assessment is from external agencies. ADEQ supports BLM in collecting additional data for the next assessment. ADEQ will use external data to make impairment or delisting decisions as long as the data meets the 'Credible Data Rule' in A.A.C. R18-11-602. ADEQ is willing to provide assistance to help BLM collect data that can be used in the 2018 Integrated Report.

Redhawk Copper

Comment #1 Copper Creek (15050203-022A) - Did not consider all data
The ADEQ data to support listing Copper Creek were derived from two sampling events in 2011. This limited dataset indicated that cadmium, copper, zinc, and selenium should be added to the 303(d) list. The 2011 to 2014 data collected on behalf of Redhawk indicated that out of the six metals evaluated (i.e., aluminum, cadmium, copper, iron, selenium, and zinc), sele-

nium was inconclusive and only copper exceeded the applicable standards:

- Dissolved copper, aquatic and wildlife warm water, acute and chronic
- Total copper, agricultural livestock watering

Response #1

ADEQ reviewed the March 5, 2015 technical memorandum to Joey Pace of ADEQ's Voluntary Remediation Program regarding the 'Revised Surface Water Quality Evaluation - Redhawk Voluntary Remediation Program Copper Creek, Arizona'. According to the memorandum 'Redhawk installed a surface water drainage run-on berm along an existing dirt road on the hillslope uphill from the workings' in November 2011. Data was collected from multiple sites in Copper Creek from 2011 to 2014. There were no exceedances of cadmium and zinc at the 8 sties during the 9 sampling events (from December 16, 2011 to September 5, 2014). The remedial efforts by Redhawk appear to have addressed the cadmium and zinc impairments in Copper Creek. ADEQ will update the assessment to remove cadmium and zinc impairments for Copper Creek.

Copper and selenium will both remain on the impaired waters list. According to the March 5, 2015 memorandum (Table 4), copper was exceeded in 12 of the 72 samples over three different dates. The impairment criteria for aquatic and wildlife is 'two or more exceedances' over the last 3 years (acute) or over the assessment period (chronic). After aggregating by site and time there will still be 3 exceedances of dissolved copper after the remedial run-on berm was constructed, therefore Copper Creek is impaired based on the methodology described in Chapter 2 of the 2016 Integrated Report. The detection limit for selenium was not low enough to determine if there was an exceedance of the water quality standard since the 2011 ADEQ sampling events. A detection limit of 40 ug/L was used but the applicable standard for selenium is 2 ug/L. Future sampling events should use a detection limit that is lower than the applicable standard.

Comment #2 Copper Creek (15050203-022A) - Natural background

Natural exposures of mineralized bedrock are pervasive throughout the Copper Creek area and play a role in surface water quality. Upstream of the historical town site of Copper City, natural background may be the only source. Downstream of Copper City, both anthropogenic and background sources are present; historical effects from the anthropogenic sources may even constitute "irreversible human caused conditions". Redhawk believes that the role of natural background, whether the sole or a combined contributor, should be understood before making an impairment decision. Based on experience at other creeks in Arizona, assigning impairment when both natural and anthropogenic sources are involved has led to a prolonged process of setting Total Maximum Daily Loads. This in turn has contributed to regulatory uncertainty in actual business and technical decisions for new or expanding mines. Natural background does matter in regulatory and business decisions even when it is not the only contributor to water quality.

Response #2

ADEQ disagrees that natural background contributions need to be understood before an impairment decision can be made. ADEQ does take into account situations where natural background conditions are 'solely caused by naturally-occurring conditions' (A.A.C. R18-11-119) and does not make impairment determinations when natural background is the only source of pollutants. Pollutants in Copper Creek are not solely due to natural conditions. The impaired reach of Copper Creek is within a historic mining area with manmade adit(s) and tailing piles adjacent to the stream.

Comment #3 Copper Creek (15050203-022A) - Wrong Designated Uses

The uses designated for Copper Creek in Appendix B of the Arizona Revised Statutes Title 18 Article 1 are: aquatic and wildlife warm water (A&Ww), full body contact (FBC), fish consumption (FC), and agricultural livestock watering (AgL). FC and FBC may be inappropriate designated uses for Copper Creek. It is unclear whether harvestable aquatic organisms exist, and if so, whether actual harvesting occurs. It is also unclear whether complete submergence can physically occur (as required for FBC) or whether partial submergence, such as wading under Partial Body Contact (PBC), is more realistic.

Response #3

The Integrated Report does not address changing designated uses for streams or lakes. Proposing a designated use that requires less stringent water quality criteria requires a 'use attainability analysis as described in A.A.C. R18-11-104(G) and (H). Proposing to change the designated use of a waterbody listed in Appendix B would be done when the standards rules

(A.A.C. Title 18, Chapter 11, Article 1) are reopened.

A.A.C. R18-11-101(8) defines "Aquatic and wildlife (warm water) (A&Ww)" as "the use of a surface water by animals, plants, or other warm-water organisms, generally occurring at an elevation less than 5,000 feet, for habitation, growth, or propagation." This designated use is not dependent on whether "harvestable aquatic organisms" exist. The designated use for aquatic life is dependent on the elevation and on the flow status. Streams above 5,000 feet that are intermittent or perennial are assigned the Aquatic and wildlife (warm water) designated use.

A.A.C. R18-11-101(21) defines "Full Body Contact (FBC)" as "the use of a surface water for swimming or other recreational activity that causes the human body to come into direct contact with the water to the point of complete submergence. The use is such that ingestion of the water is likely and sensitive body organs, such as the eyes, ears, or nose, may be exposed to direct contact with the water." ADEQ disagrees that complete submergence means that the entire body submerged. The second sentence of the definition gives clarity as to what is meant by complete submergence. It states that the ingestion of water and exposure to eyes, ears, or nose is likely. ADEQ has assigned FBC to all intermittent and perennial streams because ingestion of water or exposure to eyes, ears, or nose is likely for people who use the stream for recreational purposes.

Comment #4 – Name Change
Please be aware that one of the historical workings along Copper Creek is commonly known as the Childs-Aldwinkle Mine (rather than the Childs and Altwinkle Mine shown in the listing summary).

Response #4
ADEQ has changed Childs and Altwinkle Mine to Childs-Aldwinkle Mine in the 2016 Integrated Report.

Pima County

Comment #1 Santa Cruz River (15050301-001) - Credible Data
For the ADEQ sampling data collected on 9/8/2010 and 8/27/2014, the results are questionable. RWRD requested the Ambient Stream Monitoring Field Forms for this data from ADEQ. Our review of those forms indicates that they have the following irregularities:

1) ADEQ's field form for their sample taken on 9/8/2010 shows the Colilert results are >2419.6 cfu/100 ml. This value is different from the one used in the Assessment Report of 3629.4 cfu/100 ml. In fact, the assessment report value is out of bounds of the detection limit range for the method used.
2) ADEQ's field form for their sample on 8/27/2014 has "48" written in the Most Probable Number portion of the Colilert Results section of the field form. This value is different from the one used in the Assessment Report of 2419 cfu/100 mL. The incubation time and enumeration time are not entered on the form, so it is unknown whether these important criteria followed the test protocol. It is also curious to see the sampler's notes on ADEQ's form which say, "*E coli* count high. Big storm few days before sampling and big one expected. Treatment Plant may have released in anticipation of the upcoming event." (emphasis added). From this odd note surmising that Pima County RWRD had discharged in excess because of the storm, a practice that we cannot realistically engage in, it is evident that the ADEQ sampler was unprofessional and less than objective about the expected result. Pima County is offended by this remark, and it indicates the sampler's naivete regarding AZPDES permitting and regulatory constraints that apply to our facilities. This data point should also be rejected based upon sampling bias.

Eliminating these two samples would render the *E. coli* exceedance rate for this stream segment less than 10%. This low rate of exceedance should make it possible for ADEQ to describe the PBC status for *E. coli* as inconclusive.

Response #1
ADEQ has removed the 8/27/2014 *E. coli* exceedance from the assessment because several fields were missing on the field form. For 'Greater Than' results ADEQ uses 0.5 times maximum number so that calculations can be made for statistical tests such as the geometric mean. The 9/8/10 exceedance was greater than 2419.6 cfu/100 mL, which is reported in the assessment as 2419.6 * 1.5 = 3629.4 cfu/100 mL. Chapter 2 of the 2016 Integrated Report has been updated to clarify how 'Greater

Than' values are handled for assessment purposes. A result of greater than 2419.6 cfu/100 mL is an exceedance.

The Santa Cruz River (15050301-001) will remain impaired for *E. coli* with three exceedances in 26 samples (12% Exceedance Rate). ADEQ impairment criteria listed in Chapter 2 of the Integrated Report for *E. coli* is 'Two or more exceedances during the last 3 years of monitoring. If any exceedances are storm-related, a minimum of 10 samples is required and the exceedance rate over the entire assessment period must be greater than 10%.'

Comment #2 Santa Cruz River (15050301-001) - E coli and Stormwater
ADEQ frequently excludes storm-related *E. coli* samples from use in impairment determination in their Assessment Reports. In the 2012/2014 Assessment Report there were at least 14 instances where stream segments were identified as "inconclusive" for PBC or FBC because *E. coli* exceedances were storm-related. In the 2016 draft report there are three segments in the Middle Gila Watershed (HUC's 15060106B-003C; 15060106B-1588; and 15060105-373) where PBC or FBC for *E. coli* was judged inconclusive because all, or all but one, of the exceedances were storm-related. ADEQ should likewise exclude storm-related *E. coli* data in HUC 15050301-001 for the 2016 Assessment Report and identify its status as "inconclusive."

Response #2
ADEQ impairment criteria for *E. coli* listed in Chapter 2 of the Integrated Report is 'Two or more exceedances during the last 3 years of monitoring". If any exceedances are storm-related, a minimum of 10 samples is required and the exceedance rate over the entire assessment period must be greater than 10%.' This criteria does not exclude *E. coli* data but does take into account storm samples and is based on the criteria prescribed by rule A.A.C. R18-11-605(D)(2)(a)(iii). ADEQ has applied the same impairment criteria for *E. coli* for all data used in the 2016 Integrated Report.

Comment #3 Natural Background
High *E. coli* during storm events is attributable to wild animals and possibly domestic pets. The area of the Santa Cruz River in question is an attraction for wildlife and is frequented by coyotes, raccoon, javelina, deer, bobcats, small rodents, and a multitude of bird species including waterfowl. ADEQ could probably document that the predominant source of the *E. coli* is naturally occurring by conducting DNA testing or other microbial source tracking (see below.)

ADEQ should not seek to add a surface water segment to the 303(d) list if that segment would currently meet the criteria for removal from the list. A.A.C. R18-11-605(E)(2) states that "The Department shall: (a) Remove a pollutant from a surface water or segment from the 303(d) list based on one or more of the following criteria: (vi) Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable water quality standards."

ADEQ should not seek to add a surface water segment to the 303(d) list if the reason for the standard exceedance is due to naturally occurring conditions. A.R.S. §49-232(D) states that "A water in which pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable surface water quality standards shall not be listed as impaired." "Naturally occurring condition" is defined in A.A. C. R18-11-601 (10) as "the condition of a surface water or segment that would have occurred in the absence of pollutant loadings as a result of human activity."

Development of a TMDL based on *E. coli* is not practical or workable. We understand that ADEQ has developed three TMDL's for this pollutant in this state (two segments of the Upper Gila River and a portion of the Verde River) and has several others in preparation. These studies have generally identified stormflow as a significant source, with excessive loading of *E. coli* only occurring at high-flow events. ADEQ's TMDL studies have recognized that stream reaches affected by *E. coli* input during high-flow events generally meet the multiple data point, long-term mean standard, despite the episodic excursions above the single sample maximum. Furthermore, ADEQ's TMDL reports have only been able to focus on regulatory approaches for anthropogenic sources as remedies to the loading, and they cannot address getting reduction in naturally sourced *E. coli*. Thus, a TMDL for *E. coli* on the Santa Cruz River would not be able to resolve the naturally occurring bacteria mobilized by stormflow. For this reason, if ADEQ elects to keep Water Body ID 15050301-001 listed, it should simply be identified as "not attaining" because the impairment is not one for which a TMDL load allocation can reasonably be developed.

It is now common practice to apply advanced scientific DNA fingerprinting techniques for microbial source tracking to learn about the sources and relative contributions of *E. coli* in watersheds (see, for example, EPA's Wastewater Technology Fact Sheet- Bacterial Source Tracking.) Locally, Nick Paretti1 of the USGS is conducting such a study on the Upper Santa Cruz River near Tubac. This study is finding that natural sources are significant components of the *E. coli* loading of this stream and that stormflow mobilizes the non-effluent-derived *E. coli*. Since the natural sources are generally not addressable by a TMDL, it makes sense to identify and quantify this contribution before committing significant resources to the full-blown investigation and evaluation that a TMDL entails. Such a microbial source tracking study would give the Department "additional information that determines whether a water quality standard is exceeded due to a pollutant, suspected pollutant, or naturally occurring condition," in accordance with A.A.C. R18-11-605(B)(2)(c). Such data could better inform ADEQ's decision about listing the stream segment of concern.

Response #3

ADEQ's assessment of the Santa Cruz River (Canada Del Oro to HUC 15050303) is consistent with the methodology described in Chapter 2 of the 2016 Integrated Report and the Impaired Waters Identification Rule (IWIR) (Arizona Administrative Code Title 18, Chapter 11, Section 605 [R18-11-605]). The IWIR (R18-11-605(D)(2)(a.)(iii)) allows ADEQ to list waters as impaired with as few as two exceedances of the *E. coli* single sample maximum water quality standard in a three-year period regardless of the flow conditions under which the samples were collected. However, ADEQ has recognized that high *E. coli* densities in stormwater are common and listing waters based solely on two stormwater exceedances may lead to unnecessary listings. As described in the waterbody summary, *E. coli* exceedances were measured in 12% of the samples collected from this reach of the Santa Cruz with three being collected under storm conditions.

There is no indication that the data reflect only natural conditions. The Santa Cruz flows through the metropolitan Tucson area and likely includes both natural and anthropogenic sources of *E. coli* washed off the watershed during precipitation events. Microbial source tracking (MST) is a useful tool to determine sources of fecal contamination but is still an emerging science. ADEQ has employed MST in several areas across the state and found that the results are most useful when used in conjunction with local stakeholder input and on the ground examination of the watershed. Additionally, data indicate that storm flow *E. coli* levels are not solely attributable to natural conditions in urban environments. A Total Maximum Daily Load study will determine the sources and reductions needed to attain water quality. If additional data or contextual information point to natural sources as the sole source ADEQ would follow the applicable rules and statutes regarding natural conditions.

Comment #4 TMDL Priority

In addition, if ADEQ chooses not to remove the reach from listing, we believe the priority for TMDL in this segment should not be listed as "High." The naturally-occurring nature of *E. coli* along with Arizona's proclivity for monsoonal storm events that mobilize this pollutant make the "likelihood of success in restoring" *E. coli* impairments rather low. Thus, a low ranking would be justified based on EPA's Integrated Reporting Guidance.

Response #4

ADEQ will change the TMDL priority from 'High' to 'Medium' based on A.A.C. R18-11-606(B)(2)(a) 'The surface water or segment fails to meet more than one designated use'.

Freeport – Pinal Creek

Comment #1 Pinal Creek (15060103-280D) – Total versus Dissolved Metals

The assessment considered the Aquatic and Wildlife effluent dependent water (A&Wedw) designated use as "inconclusive" based on a single sample collected on April 5, 2011 that contained a dissolved copper concentration of 50 micrograms per liter (ug/L). The Pinal Creek Project submitted the water quality data for the April 5, 2011 sample to ADEQ as part of our ongoing data sharing partnership. The data submittal described qualifiers for the data based on ADEQ's Surface Water Assessment Methods and Technical Support document. The data transmittal letter, including a data quality assessment, is provided as Attachment A.

There are two problems with ADEQ's use of the April 5, 2011 sample result. One problem is that the dissolved copper result of 50 ug/L was more than 10% higher than the total copper result of less than 10 ug/L (i.e., nondetect) as described in Section 2.1 and Table 1 of Attachment A. Thus, the dissolved copper result is unreliable and unusable for assessment based on ADEQ's data quality assessment methods. The Pinal Creek Project respectfully requests that the unreliable data be removed from the assessment and the aquatic and wildlife designated use be listed as "attaining".

Response added a note to the assessment indicating "AWW is inconclusive with 1 exceedance. Note: This dissolved fraction was greater than the total copper result – the exceedance will not be used for impairment determination.".

Comment #2 Pinal Creek (15060103-280D) - Designated Use

The reach of Pinal Creek evaluated for the Clean Water Act Assessment contains three segments with different designated uses, as identified by Arizona Administrative Code Title 18, Chapter 11. The three segments and their designated uses are listed in the table below along with the water quality sampling locations reported by the Pinal Creek Project. Figure 1 shows the designated use segments and sample sites.

A complete assessment of the designated uses should consider all the designated uses of the stream reach being assessed. The Pinal Creek discussion in the April2016 draft Clean Water Act Assessment does not mention the Aquatic and Wildlife warm water, Full Body Contact, and Fish Consumption designated uses, all of which should be listed as attained based on data previously submitted by the Pinal Creek Project. In addition, there is no explanation for why the Partial Body Contact designated use was judged to be "inconclusive".

Response #2

ADEQ corrected the designated uses for the Pinal Creek sites. SRPNL006.87 (15060130-280D) will have the designated uses A&Wedw and PCB while SRPNL003.17 to 5.12 (15060130-280E) will have the A&Ww and FBC designated uses. The assessment decision will still be inconclusive for both reaches due to missing core parameters.

Comment #3 Pinal Creek (15060103-280D) - Data Gaps and Monitoring Needs

The assessment of Pinal Creek identifies data gaps and monitoring needs. The laboratory detection limits for dissolved beryllium, dissolved copper, selenium, and dissolved mercury are described as "not low enough". The table below summarizes the analytical detection limit used over the last several years and the lowest standard applicable to either of the three reaches.

The current detection limits used for dissolved beryllium, dissolved copper, and selenium are low enough to provide meaningful results with respect to the most stringent surface water standard. However, there are occasions when laboratory detection limits are higher due to analytical difficulties such as matrix interference, but that is an uncommon occurrence. The detection limit for dissolved mercury is less than the standard because commercial laboratories do not possess the analytical capabilities to attain lower detection limits. The 0.2 ug/L detection limit for dissolved mercury is the lowest detection level currently achievable with commercially available technology. Based on the information above, we request that dissolved beryllium, dissolved copper, and selenium be removed from the data gaps and monitoring needs section.

Response #3

The data gaps and monitoring needs are recommendations for how to turn an 'inconclusive' assessment decision to either an 'attainment' or 'impairment' decision. The recommendation to use lower detection limits was added to indicate that some of the samples collected had detection limits that were above the applicable standard which lead to the inconclusive designation. ADEQ will retain the monitoring recommendation to use lower detection limits in the assessment to inform future sampling. ADEQ understands that certain samples will have matrix interferances or other issues that prevent the lowest possible detection limit from being reported.

Freeport-McMoRan

Comment #1 Narrative Standards

On pages 12 and 40 of Chapter 2 of the draft 2016 Integrated Report, ADEQ suggests that narrative standards cannot be used as the basis of an impairment determination until implementation procedures for such standards are formally adopted. However, in April 2015 ADEQ published on its website revised versions of its narrative bottom deposits and narrative biocriteria implementation procedures. In these implementation documents, ADEQ did not include procedures for making impairment determinations. Rather, ADEQ stated that "guidance for 303(d) listings of impaired waters is not provided here because the 'Impaired Waters Identification Rule' language must be updated first." ADEQ further stated that "determinations of 'impairment' using [a narrative] standard cannot be made until the Impaired Waters Identification Rule has been updated in rule."

To maintain consistency, ADEQ should revise Chapter 2 of its report to state that impairment determinations based on narrative standards cannot be made until appropriate revisions have been made to ADEQ's impaired water identification rule (see A.A.C. Title 18, Chapter 11, Article 6).

Response #1

ADEQ updated Chapter 2 to make it clear that impairment determinations based on narrative standards cannot be made until appropriate revisions have been made to ADEQ's impaired water identification rule (see A.A.C. Title 18, Chapter 11, Article 6).

Comment #2 Biocriteria Exceedances

Further, in several locations throughout the individual watershed sections of the report ADEQ describes a single biocriteria sample result as an "exceedance" even though the result falls within the IBI score ranges (i.e., greater than the 10th percentile of reference condition and less than the 25th percentile of reference condition) that would be considered as "inconclusive" under the applicable standards (see A.A.C. R18-11-108.01) and ADEQ's implementation procedures for the narrative biocriteria standard. These locations include: (1) Little Colorado Watershed, p. 14 (Colter Creek (Headwaters – Nutrioso Creek)); (2) Salt Watershed, p. 10 (Boggy Creek (Headwaters – Centerfire Creek)); (3) Salt Watershed, p. 67 (West Fork Pinto Creek (Headwaters – Pinto Creek)); (4) San Pedro Watershed, p. 20 (San Pedro River (Aravaipa Creek – Gila River)); (5) San Pedro Watershed, p. 28 (San Pedro River (Peppersauce Wash – Aravaipa)); (6) Santa Cruz Watershed, p. 7 (Cienega Creek (Empire Gulch – USGS Gage station (Pantano Wash))); (7) Upper Gila Watershed, p. 8 (Bonita Creek (Park Creek – Gila River)); (8) Verde Watershed, p. 49 (Oak Creek (Slide Rock boundary – Dry Creek)); (9) Verde Watershed, p. 59 (Pine Creek (Headwaters – Unnamed Trib)); (10) Verde Watershed, p. 97 (West Beaver Creek (Rarick – Dry Beaver Creek)). ADEQ should revise its draft watershed reports to remove any reference to a single biocriteria sample result falling within the "inconclusive" IBI score ranges as an "exceedance."

Response #2

ADEQ revised the watershed reports to remove references to a single biocriteria sample result falling within the "inconclusive" IBI score ranges as an "exceedance."

Comment #3 Bottom Deposit TMDL Language

Finally, in several locations through the individual watershed sections ADEQ states that it will initiate "a bottom deposit TMDL once the Impaired Waters Identification Rule is updated." These locations include: (1) Middle Gila Watershed, p. 3 (Aqua Fria River (Sycamore Creek – Bishop Creek)); (2) Middle Gila Watershed, p. 26 (Hassayampa River (Cottonwood Creek – Martinez Wash)); (3) Middle Gila Watershed, p. 29 (Hassayampa River (Sols Wash – 8 miles below Wickenburg)); (4) San Pedro Watershed, p. 29 (San Pedro River (Peppersauce Wash – Aravaipa)); and (5) Santa Cruz Watershed, p. 35 (Sonoita Creek (1600 Feet Below Patagonia WWTP – Patagonia Lake)). The statements that ADEQ will pursue a Total Maximum Daily Load (TMDL) presumes that the identified water bodies have or will be placed on the 303(d) impaired waters list for impairment of the bottom deposits narrative criteria. Such statements should be removed because ADEQ does not currently have regulatory authority to place such waters on the 303(d) impaired waters list and conditions or implementation procedures could change in the interim such that such waters either will not qualify for placement on the 303(d) impaired waters list or necessitate a TMDL.

Response #3

ADEQ changed "Initiate a bottom deposit TMDL once the Impaired Waters Identification Rule is updated" to "Impairments due to bottom deposits cannot be made until the Impaired Waters Identification Rule is revised".

Comment #4 Boulder Creek (15030202-005B) 'Not attaining' vs. 'Impaired'.
This segment of Boulder Creek has been covered by an EPA-approved TMDL document since 2004. However, in the summary report for this segment, there is the statement that the "[r]each remains impaired for arsenic (1998)." On the prior page (p. 9), the impairment discussion for the upper reach of Boulder Creek (Wilder Creek – Butte Creek) (which is covered by the same EPA-approved TMDL document) provides that this upper "[r]each remains not-attaining . . ." (emphasis added).

Please revise the impairment discussion for Boulder Creek from Butte Creek to Copper Creek to clarify that notwithstanding the lack of monitoring data, the reach remains "not-attaining" for arsenic. In light of the fact that this reach is addressed by an EPA-approved TMDL, please remove the statement that the reach remains "impaired."

Response #4
ADEQ changed 'impaired' to 'non-attaining' in the impairment discussion for reach -005B.

Comment #5 Coors Lake/Water's of the US
Only jurisdictional "waters of the United States" can be identified as impaired waters under federal and state laws. 33 U.S.C. § 1313(d); A.R.S. § 49-231(1). Coors Lake has been determined by the Army Corps of Engineers (the "Corps") not to be a jurisdictional water of the United States (see Corps Approved Jurisdictional Determination for Coors Lake dated July 6, 2016 (copy enclosed)). In addition, consistent with information previously submitted to ADEQ on the jurisdictional status of Coors Lake, ADEQ itself has concluded that Coors Lake is not a jurisdictional water of the United States as part of its pending triennial review of Arizona's surface water quality standards (see ADEQ Memorandum titled "Proposal to Remove Coors Lake from Appendix B" (January 20, 2016) (copy enclosed)). Consistent with these agency determinations, Coors Lake should be completely removed from ADEQ's draft 2016 Integrated Report, including from the Bill Williams Watershed section and from Category 5 of the 303(d) list.

Response #5
Based on the Army Corps of Engineers jurisdictional determination, ADEQ has removed Coors Lake from the 2016 Integrated Report and 303(d) list.

Comments #6 Pinal Creek
As explained in more detail in comments submitted by the Pinal Creek Project on ADEQ's draft 2016 Integrated Report, the summary report for this 6.446 mile segment of Pinal Creek lists the designated uses as partial body contact (PBC) and aquatic and wildlife (effluent-dependent water) (A&Wedw). This description of the designated uses for Pinal Creek from the Lower Pinal Creek WTP discharge to the Salt River is not accurate. According to Appendix B of Arizona's surface water quality standards only the segment of Pinal Creek from the Lower Pinal Creek WTP discharge to See Ranch Crossing has the designated uses of PBC and A&Wedw. Below See Ranch Crossing to north of Inspiration Dam, Pinal Creek has the designated uses of full body contact (FBC) and aquatic and wildlife (warm water) (A&Ww).

Further, as again noted in the comments submitted by the Pinal Creek Project, the summary report for Pinal Creek from Lower Pinal Creek WTP discharge to Salt River identifies an alleged single chronic exceedance (50 µg/L) for dissolved copper and recommends collection of additional copper samples. The sample containing this alleged single chronic exceedance was collected on 4/5/2011. Based on this alleged exceedance, the summary report concludes that "AWEDW is inconclusive with 1 exceedance." However, the sample relating to the alleged exceedance was collected at Inspiration Dam, which is not within the segment that has the A&Wedw use.

In addition, the Pinal Creek Project submitted the results from the 4/5/2011 sampling event and other sampling information to ADEQ by letter dated November 21, 2014. In that submittal, the Pinal Creek Project specifically discussed the 4/5/2011 dissolved copper result. The Pinal Creek Project explained that because the corresponding total result for the 4/5/2011 sample was non-detect the reported dissolved copper result was unreliable for use in water quality assessments because the dissolved fraction was more than 10% higher than the total fraction. This explanation is consistent with language found in Chapter 2 (p. 8) of ADEQ's draft 2016 Integrated Report under the heading "Reviewing Dissolved and Total Standards" which states that "[i]n those cases where both total and dissolved fractions are provided, but the dissolved fraction is above

the total value, the data is flagged as unreliable for listing decisions if the dissolved fraction is more than 10 percent higher than the total fraction."

Consistent with the explanation contained in the Pinal Creek Project's submittal from late 2014 and with ADEQ's own language from its 2016 draft report, the 4/5/2011 dissolved copper sample result is unreliable for assessment purposes and any reference to the 4/5/2011 sampling result should be removed from the assessment report. Further, ADEQ needs to ensure that it appropriately identifies the designated uses for the segments of Pinal Creek below the Pinal Creek WTP discharge.

Finally, FMC supports all of comments on ADEQ's draft 2016 Integrated Report submitted by the Pinal Creek Project including the comment that beryllium (dissolved), copper (dissolved), selenium, and mercury (dissolved) be removed from the "Data Gaps and Monitoring Needs" section.

Response #6
See Response Freeport McMoRan – Pinal Creek #1 to #3.

Comments #7 Brewery Gulch / Mule Gulch
Given the recognized improvements in the watershed implemented by FMC and the fact that ADEQ previously recognized the need for a site-specific standard to account for natural background contributions of copper, these four water segments should be removed from Category 5 and placed in Category 3 consistent with the statutory language in A.R.S. 49-232(D)(see also A.A.C. R18-11-604(C)(1) and R18-11-605(E)(2)(a)(vi)). FMC also questions the continued impaired listing of these waters in light of their ephemeral status and in light of their highly questionable jurisdictional status as "waters of the United States."

Response #7
The most recent data, collected in 2007, continue to indicate that applicable dissolved copper water quality standards are not being attained. ADEQ previously recognized the water quality improvements resulting from FMC's implementation work in the 2012/14 305(b) Assessment when dissolved cadmium and zinc along with pH were removed from the 303(d) list. The 2014 Delist Report for Mule Gulch (ADEQ, 2014) notes that dissolved copper concentrations have been reduced by approximately 50-100%, however, exceedances sufficient to keep the reaches listed as impaired remain. ADEQ is continuing to collect water quality from the watershed to determine current conditions and the effectiveness of best management practices implemented by FMC since 2007. An updated analysis will be undertaken as more recent data are collected. Future actions may include delisting, development of a site specific standard and/or a Total Maximum Daily Load.

ADEQ assesses credible data from waterbodies that have applicable designated uses and associated water quality standards. Ephemeral standards are expressed in Arizona Administrative Code Title 18, Chapter 11 (R18-11) and, therefore, making 305(b) and 303(d) determinations based upon those standards are justified and required in accordance with state and federal regulations. The three reaches of Mule Gulch are assigned designated uses in A.A.C. R18-11, Appendix B and are used to determine the applicable water quality standards. Brewery Gulch was assigned designated uses as prescribed by A.A.C. R18-11-105.

ADEQ is not aware of any jurisdictional determinations in regards to Mule or Brewery Gulch.

City of Yuma

Comment #1 Selenium Delistings
The Watershed Assessments for the Colorado – Lower Gila, as well as Appendix E – Delisting Impairments, indicate that ADEQ is recommending delisting selenium for several reaches: Colorado River – Imperial Dam to Gila River, Gila River – Coyote Wash to Castle Dome Wash, and Gila River – Castle Dome Wash to Fortuna Wash. These three segments are tributary to the Colorado River reach between Main Canal and Mexico Border (assessment unit 15030107-001) which is proposed to remain on the 303(d) list for selenium.

Given that the Colorado River segment between the Gila River and the Main Canal is not listed as impaired for selenium and the upstream contributing segments of the Colorado and Gila Rivers are proposed for delisting of selenium, why would the segment between the Main Canal and Mexico Border not be considered for delisting as well?

It appears that the last exceedance sample of selenium for the Colorado River segment between the Main Canal and Mexico Border occurred in January, 2013. If the Colorado River segment between the Main Canal and Mexico Border is going to remain on the 303(d) list for selenium what is ADEQ's plan and schedule for additional sampling to determine if selenium levels are still exceeding?

Response #1

The delisting requirements for selenium are listed in Chapter 2 (Technical Methods and Support) of the 2016 Clean Water Act Assessment document. Selenium cannot be exceeded during the 5-year assessment period for chronic criteria. The segment between the Main Canal and the Mexico Border cannot be considered for delisting because there were six chronic exceedances of selenium out of 47 samples collected within the assessment period. ADEQ will continue to monitor for selenium within this reach of the Colorado River in cooperation with the United States Geologic Survey.

Prescott Creeks

Comment #1 Name Changes

Prescott Creeks recommends the correction and/or clarification of names chosen and utilized to identify several geographic features used as reference points in the draft assessment. In the proposed draft assessment, Prescott Creeks encountered several referenced geographic features names that do not correspond with widely accepted geographic names databases such as the national USGS Geographic Names Information System (GNIS). For sake of clarity, ease of data communication, and transparency, Prescott Creeks advocates alignment of names and identification system(s) used by ADEQ with widely accepted databases.

Prescott Creeks recognizes that throughout the draft assessment all streams and channels are clearly referenced with their hydrological unit code (HUC) system. That said, Prescott Creeks advocates renaming and referencing the following listed sites in the proposed draft assessment:

a. Ackers East and Ackers West- as described in the draft assessment (pp. 2-5 of Verde River Watershed Assessment) is presumably referring to small ephemeral channels of an unnamed tributary, which drains Acker Park sub-watershed to Granite Creek. Prescott Creeks concurs that the water quality standards exceedances data as presented by ADEQ requires further investigation and mitigation of the source pollutant *E. coli* at the Acker Park subwatershed. Prescott Creeks suggests revising all references to Ackers East and Ackers West to Unnamed Wash (Acker Park East) and Unnamed Wash (Acker Park West), or using a similar approach where the use of Unnamed Wash avoids confusion.

b. Bannon Creek- as described in the draft assessment (pp.11-12 of Verde River Watershed Assessment) is presumably referring to a small intermittent stream that is officially recognized by local authorities and the USGS GNIS as BANNING CREEK (since 2005), a tributary to Granite Creek. Prescott Creeks suggests changing all instances of Bannon to Banning.

c. Washington Park- as described in the draft assessment (p.35 of Verde River Watershed Assessment) in the monitoring summary for Granite Creek lies between Watson Lake Reservoir and Willow Creek downstream of Willow Creek Reservoir. It is unclear where the monitoring location is located. Prescott Creeks was also unable to find a park matching that name in Yavapai County. Some thought and attention is needed to arrive at a name for this site that best references the location for the target audience(s) of this document. Prescott Creeks suggests revising all references to this location with a correct geographic name and/or a geographically descriptive name.

Response #1

See City of Prescott comment #4 – Name Changes. For the Granite Creek reach between Watson Lake to Willow Creek (15060202-059C) the site name 'Upstream from Washington Park' was changed to 'USGS gage 09503300'.

Comment #2 Current Prescott Creek Projects

Prescott Creeks recommends corrections and/or clarifications of the water quality improvements projects implemented by Prescott Creeks through 319(h) grant funding in the Granite Creek Watershed referred to in the current draft assessment.

Prescott Creeks and ADEQ have worked closely in the planning, coordination, and implementation of specific water quality improvements projects funded through 319(h) grants that include surface water quality monitoring, watershed BMP planning, development of educational materials and tools, and implementation of physical BMP projects on the ground. In the proposed draft assessment, in 13 out of 14 assessed stream reaches within the Granite Creek Watershed it is noted: "Ongoing water quality improvements being implemented through a 319(h) grant to Prescott Creeks Preservation Association." Prescott Creeks appreciates and welcomes ADEQ recognition for the past and ongoing commitment of Prescott Creeks for improving water quality in the watershed. However, Prescott Creeks finds the above statement to be accurate for only some of the assessed streams in this draft assessment and otherwise misleading as on many of the reaches Prescott Creeks has not directly worked in the past, or is not currently working on projects funded through a 319(h) grants.

Below is an inclusive list of the 13 assessed streams listed in the draft assessment that indicates "Ongoing water quality improvements being implemented through a 319(h) grant to Prescott Creeks Preservation Association" and recommended corrections to accurately reflect Prescott Creeks efforts with 319(h) funding support.

1. Ackers East (Headwaters-Ackers West) – No past and/or present project was implemented by Prescott Creeks through 319(h) funding
2. Ackers West (Headwaters-Granite Creek) - No past and/or present project was implemented by Prescott Creeks through 319(h) funding
3. Aspen Creek (Headwaters-Granite Creek) - Prescott Creeks completed a 319(h) funded monitoring project in the past as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
4. Bannon Creek (Headwaters-Granite Creek) - Prescott Creeks completed a 319(h) funded monitoring project in the past as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
5. Butte Creek (Headwaters- Miller Creek) - Prescott Creeks completed a 319(h) funded monitoring project in the past as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done on this stream.
6. Government Canyon (Headwaters-Granite Creek) - Prescott Creeks completed a 319(h) funded monitoring project in the past as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
7. Granite Creek (Headwaters-Yavapai Reservation) - Prescott Creeks has previously completed a number of 319(h) funded projects focusing on developing and distributing educational materials and undertaking monitoring efforts (under grant contract # EV05-0128), and monitoring work on this stream as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
8. Granite Creek (Yavapai Reservation-Watson Lake) - Prescott Creeks has previously completed a number of 319(h) funded projects implementing: Educational materials, Stormwater basin, and monitoring as part of grant contract # EV05-0128; Watson Woods Riparian Preserve restoration as part of grant contract # EV07-0034; Monitoring as part of the Watershed Improvement Plan grant contract # EV09-0035; Implementation of Green Infrastructure as part of grant contract # EV13-001. No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
9. Manzanita Creek (Headwaters-Granite Creek) - Prescott Creeks completed a 319(h) funded monitoring project in the past as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
10. Miller Creek (Headwaters- Granite Creek) - Prescott Creeks completed few 319(h) funded projects in the past only implementing educational materials, and monitoring as part of (grant contract # EV05-0128), and monitor this stream as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
11. North Fork Miller (Headwaters-Miller Creek) -Prescott Creeks completed a 319(h) funded monitoring project in the past as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.
12. North Granite Creek (Headwaters-Granite Creek) - Prescott Creeks completed a 319(h) funded monitoring project in the past as part of the Watershed Improvement Plan (grant contract # EV09-0035). No ongoing 319(h) funded work is currently being done by Prescott Creeks on this stream reach.

13. Slaughterhouse Gulch (Headwaters-Granite Creek) - Slaughterhouse Gulch, a tributary of Granite Creek, channel restoration and wetland protection is currently funded by a 319(h) grant (grant contract # EV16-0002) to implement.

Response #1

ADEQ appreciates Prescott Creeks' efforts and has changed the 2016 Integrated Report to reflect Prescott Creek's current work.

7. Arizona's 2016 303(d) List of Impaired Waters

This list contains assessment units that were assessed as impaired (Category 5) by ADEQ or EPA during the current and previous assessment listing cycles. The year each parameter was listed is located in parentheses after each parameter (2016 listings are in **bold**).

ASSESSMENT UNIT	SIZE (ACRES/MILES)	CAUSE(S) OF IMPAIRMENT (YEAR FIRST LISTED)
Bill Williams Watershed		
Alamo Lake 15030204-0040	1414 a	Ammonia (2004), mercury in fish tissue (2002- EPA), high pH (1996)
Bill Williams River Alamo Lake to Castaneda Wash 15030204-003	35.9 mi	Ammonia (2006)
Boulder Creek Tributary at 344114/1131800 to Wilder Creek 15030202-006B	14.4 mi	Beryllium (dissolved)(2010)
Colorado-Grand Canyon Watershed		
Colorado River Parashant Canyon to Diamond Creek 15010002-003	27.6 mi	Selenium (total) and suspended sediment concentration (2004)
Kanab Creek Jump-up Canyon to Colorado River 15010003-001	12.8 m	**Selenium (total) (2016)**
Lake Powell 14070006-1130	9770 a	Mercury in fish tissue (2010- EPA)
Paria River Utah border to Colorado River 14070007-123	29.4 mi	Suspended sediment concentration (2004), *E. coli* (2006), **selenium (total) (2016)**
Virgin River Sullivan's Canyon to Beaver Dam Wash 15010010-004	9.7 mi	Selenium (total) (2012)

Virgin River Beaver Dam Wash to Big Bend Wash 15010010-003	10.1 mi	Selenium (total) and suspended sediment concentration (2004), *E. coli* (2010)
Colorado-Lower Gila Watershed		
Colorado River Hoover Dam to Lake Mohave 15030101-015	40.4 mi	Selenium (total) (2004)
Colorado River Main Canal to Mexico border 15030107-001	32.2 mi	Selenium (total) (2006)
Lake Mohave 15030101-0960	27044 a	Selenium (total) (2010)
Painted Rock Borrow Pit Lake 15070201-1010	186 a	Low dissolved oxygen (1992)
Little Colorado Watershed		
Black Canyon Lake 15020010-0180	37.4 a	Ammonia (2010)
Lyman Lake 15020001-0850	1308 a	Mercury in fish tissue (2004- EPA)
Pintail Lake 15020005-5000	25.7 a	Ammonia (2010)
Puerco River Dead Wash to Ninemile Wash 15020007-007	0.2 mi	Copper (dissolved) (2010), *E. coli* (2012/14)
Telephone Lake 15020005-1500	22.3 a	Ammonia (2010)
Middle Gila Watershed		
Agua Fria River Sycamore Creek to Big Bug Creek 15070102-023	9.1 mi	*E. coli* (2010), **selenium (total) (2016)**
Alvord Lake 15060106B-0050	27 a	Ammonia (2004)
Arnett Creek Headwaters to Queen Creek 15050100-1818	11.1 mi	Copper (dissolved) (2010)

Chaparral Park Lake 15060106B-0300	12 a	Low dissolved oxygen and *E. coli* (2004)
Cortez Park Lake 15060106B-0410	2 a	Low dissolved oxygen and high pH (2004)
Gila River San Pedro River to Mineral Creek 15050100-008	19.8 mi	Suspended sediment concentration (2006)
Hassayampa River Buckeye Canal to Gila River 15070103-001B	2.3 m	***E. coli* (2016)**
Lake Pleasant 15070102-1100	8000 a	Mercury in fish tissue (2006- EPA)
Mineral Creek Devil's Canyon to Gila River 15050100-012B	19.6 mi	Copper (dissolved) (1992), selenium (total) (2004), low dissolved oxygen (2006)
Money Metals Trib Headwaters to Unnamed Tributary (UB1) 15070102-123	0.5 m	**Copper and zinc (2016)**
Queen Creek Headwaters to Superior WWTP discharge 15050100-014A	8.8 mi	Copper (dissolved) (2002), lead (total) (2010), selenium (total) (2012)
Queen Creek Superior WWTP discharge to Potts Canyon 15050100-014B	5.9 mi	Copper (dissolved) (2004)
Queen Creek Potts Canyon to Whitlow Canyon 15050100-014C	8.0 mi	Copper (dissolved) (2010)
Unnamed Trib to Eugene Gulch Headwaters to Eugene Gulch 15070102-1994	0.7 m	**Copper (dissolved) (2016)**
Salt Watershed		
Apache Lake 15060106A-0070	2,190 a	Low dissolved oxygen(2006)
Canyon Lake 15060106A-0250	450 a	Low dissolved oxygen(2004)

Christopher Creek Headwaters to Tonto Creek 15060105-353 *Also on Not Attaining (4A) List	8 mi	**Low dissolved oxygen (2016)**
Crescent Lake 15060101-0420	157 a	High pH (2002- EPA)
Five Point Tributary Headwaters to Pinto Creek 15060103-885	2.9 mi	Copper (dissolved) (2006)
Pinto Creek West Fork Pinto Creek to Roosevelt Lake 15060103-018C *Also on Not Attaining (4A) List	17.8 mi	Selenium (total) (2004)
Roosevelt Lake 15060103-1240	18345 a	Mercury in fish tissue (2006- EPA)
Salt River Canyon Creek to Cherry Creek 15060103-007	19.6 mi	Selenium (total) (2012/14)
Salt River Pinal Creek to Roosevelt Lake 15060103-004	7.5 mi	*E. coli* (2010)
Tonto Creek Tributary @ 341810/1110414 to Haigler Creek 15060105-013B	8.5 mi	Mercury in fish tissue (2010- EPA)
Tonto Creek Haigler Creek to Spring Creek 15060105-011	7.8 mi	Mercury in fish tissue (2010-EPA)
Tonto Creek Spring Creek to Rye Creek 15060105-009	19.5 mi	Mercury in fish tissue (2010-EPA)
Tonto Creek Rye Creek to Gun Creek 15060105-008	4.7 mi	Mercury in fish tissue (2010-EPA)
Tonto Creek Gun Creek to Greenback Creek 15060105-006	18.6 mi	Mercury in fish tissue (2010-EPA)

Tonto Creek (TON) Greenback Creek to Roosevelt Lake 15060105-004	2.6 m	Mercury in fish tissue (2010-EPA)
San Pedro Watershed		
Aravaipa Creek Aravaipa Cyn Wilderness - San Pedro River 15050203-004C	12.6 m	***E. coli* (2016)**
Brewery Gulch Headwaters to Mule Gulch 15080301-337	1 mi	Copper (dissolved) (2004-EPA and ADEQ 2006/08)
Copper Creek Headwaters - Prospect Canyon 15050203-022A	6.6 m	**Copper and selenium (2016)**
Mule Gulch Headwaters to above Lavender Pit 15080301-090A	3 mi	Copper (dissolved) (1990)
Mule Gulch Above Lavender Pit to Bisbee WWTP discharge 15080301-090B	0.8 miles	Copper (dissolved) (1990)
Mule Gulch Bisbee WWTP discharge to Highway 80 bridge 15080301-090C	3.8 mi	Copper (total and dissolved) (1990)
San Pedro River Mexico border to Charleston 15050202-008	28.3 mi	*E. coli* and copper (dissolved) (2010), **dissolved oxygen (2016)**
San Pedro River Babocomari Creek to Dragoon Wash 15050202-003	17 mi	*E. coli* (2004)
Santa Cruz Watershed		
Nogales Wash Mexico border to Potrero Creek 15050301-011	6.2 mi	Ammonia and copper (dissolved) (2004), total residual chlorine (1996), *E. coli* (1998)
Parker Canyon Lake 15050301-1040	130 a	Mercury in fish tissue (2004- EPA)
Potrero Creek Interstate 19 to Santa Cruz River 15050301-500B	4.9 mi	*E. coli*, low dissolved oxygen and total residual chlorine (2010)

Rose Canyon Lake 15050302-1260	7 a	Low pH (2004- EPA)
Santa Cruz River Canada Del Oro to HUC 15050303 15050301-001	8.6 m	***E. coli* (2016)**
Santa Cruz River Josephine Canyon to Tubac Bridge 15050301-008A	4.8 mi	Ammonia and *E. coli* (2010)
Santa Cruz River Tubac Bridge - Sopori Wash 15050301-008B	8.9 mi	***E. coli* (2016)**
Santa Cruz River Nogales WWTP - Josephine Can 15050301-009	9.1 mi	*E. coli* (2012/14)
Sonoita Creek 1600 feet below Patagonia WWTP discharge to Patagonia Lake 15050301-013C	8.9 mi	Zinc (total) (2004), low dissolved oxygen (1998)
Upper Gila River		
Blue River Strayhorse Creek to San Francisco River 15040004-025B	25.4 mi	*E. coli* (2006)
Cave Creek Headwaters to South Fork Cave Creek 15040006-852A	7.5 mi	Selenium (total) (2004)
Gila River Bonita Creek to Yuma Wash 15040005-022	5.8 mi	Lead (total) (2010)
San Francisco River Blue River to Limestone Gulch 15040004-003	18.7 mi	*E. coli* (2006)
San Francisco River Limestone Gulch to Gila River 15040004-001	12.8 mi	*E. coli* (2010)
Verde Watershed		

Oak Creek Spring Creek to Verde River 15060202-016	12.7 m	***E. coli* (2016)**
Verde River Bartlett Dam to Camp Creek 15060203-004	6.6 mi	Arsenic (total) (2010)
Verde River Sycamore Creek to Oak Creek 15060202-025	25.2 m	**Dissolved oxygen and *E. coli* (2016)**
Willow Creek Reservoir 15060202-1660	294 a	Ammonia (2012)

NOTICE OF PUBLIC INFORMATION

DEPARTMENT OF REAL ESTATE

[M16-215]

1. Title of the substantive policy statement and the substantive policy statement number by which the document is referenced:

No. 2005.03 Short Title: Disclosure of Licensee's Home Address

2. The public information relating to the substantive policy statement:

The Arizona Department of Real Estate (Department) is repealing the substantive policy statement specified in paragraph 1, effective August 29, 2016. The information provided in No. 2005.03 was repealed because it is no longer accurate.

3. The name and address of agency personnel with whom persons may communicate regarding this notice of public information:

Name: Louis Dettorre
Address: Department of Real Estate
2910 N. 44th St., Suite 100
Phoenix, AZ 85018
Telephone: (602) 771-7760
Fax: (602) 468-2562
E-mail: ldettorre@azre.gov

NOTICES OF SUBSTANTIVE POLICY STATEMENT

The Administrative Procedure Act (APA) requires the publication of Notices of Substantive Policy Statement issued by agencies (A.R.S. § 41-1013(B)(14)).

Substantive policy statements are written expressions which inform the general public of an agency's current approach to rule or regulation practice.

Substantive policy statements are advisory only. A substantive policy statement does not include internal procedural documents that only affect the internal procedures of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules made in accordance with the APA.

If you believe that a substantive policy statement does impose additional requirements or penalties on regulated parties you may petition the agency under A.R.S. § 41-1033 for a review of the statement.

NOTICE OF SUBSTANTIVE POLICY STATEMENT

REAL ESTATE DEPARTMENT

[M16-216]

1. Subject of the substantive policy statement and the substantive policy statement number by which the policy statement is referenced:

Non-commercial Requests to Inspect Department Records & Fees: No. 2005.09

2. Date the substantive policy statement was issued and the effective date of the policy statement if different from the issuance date:

Effective: June 18, 1999; Revised & Renumbered May 28, 2004; Renumbered April 1, 2005; Revised August 21, 2006; Revised August 29, 2016.

3. Summary if the contents of the substantive policy statement:

This policy statement clarifies the Department's policy on non-commercial requests to inspect department records and fees. The information provided in No. 2005.09 was updated to reflect the average expected deliverables for completing public records request. Further the statutory references in substantive policy statement No. 2005.09 were updated to reflect current state law.

4. A statement as to whether the substantive policy statement is a new statement or a revision:

This is a revision to an existing policy statement, previously no. 2005.09.

5. The name and address of the person to whom questions and comments about the substantive policy statement may be directed:

Name:	Louis Dettorre
Address:	Department of Real Estate 2910 N. 44th St., Suite 100 Phoenix, AZ 85018
Telephone:	(602) 771-7760
Fax:	(602) 468-0562
E-mail:	ldettorre@azre.gov

6. Information about where a person may obtain a copy of the substantive policy statement and the costs for obtaining the policy statement:

Copies of this policy statement may be obtained at no cost via e-mail to the person listed above or on the Department web site: www.azre.gov. Hard copies may be obtained by contacting the person listed above for $0.25 per page.

NOTICE OF SUBSTANTIVE POLICY STATEMENT

REAL ESTATE DEPARTMENT

[M16-217]

1. Subject of the substantive policy statement and the substantive policy statement number by which the policy statement is referenced:

Real Estate Licensee Advertising: No. 2007.18

2. Date the substantive policy statement was issued and the effective date of the policy statement if different from the issuance date:

Effective: February 12, 2007, Repealed August 8, 2016, Revised and Reinstated September 7, 2016.

3. Summary if the contents of the substantive policy statement:

This policy statement clarifies the Department's policy and rules related to real estate licensee advertising. Authority is found in A.R.S. §§ 32-2102, 32-2153(A)(3), and A.A.C. R4-28-502.

4. A statement as to whether the substantive policy statement is a new statement or a revision:

This is a revision to an existing policy statement, previously no. 2007.18. The SPS was repealed and published in Vol. 22, Issue 36 of the Public Register. However, after further review, the ADRE determined that the SPS had substantive value, therefore revised and reinstated the SPS.

5. The name and address of the person to whom questions and comments about the substantive policy statement may be directed:

Name:	Louis Dettorre
Address:	Department of Real Estate 2910 N. 44th St., Suite 100 Phoenix, AZ 85018
Telephone:	(602) 771-7760
Fax:	(602) 468-0562
E-mail:	ldettorre@azre.gov

6. Information about where a person may obtain a copy of the substantive policy statement and the costs for obtaining the policy statement:

Copies of this policy statement may be obtained at no cost via e-mail to the person listed above or on the Department web site: www.azre.gov. Hard copies may be obtained by contacting the person listed above for $0.25 per page.

GOVERNOR EXECUTIVE ORDERS

The Administrative Procedure Act (APA) requires the full-text publication of Governor Executive Orders.

With the exception of egregious errors, content (including spelling, grammar, and punctuation) of these orders has been reproduced as submitted.

In addition, the *Register* shall include each statement filed by the Governor in granting a commutation, pardon or reprieve, or stay or suspension of execution where a sentence of death is imposed.

EXECUTIVE ORDER 2016-03

Internal Review of Administrative Rules; Moratorium to Promote Job Creation and Customer-Service-Oriented Agencies

Editor's Note: This Executive Order is being reproduced in each issue of the Administrative Register until its expiration on December 31, 2016, as a notice to the public regarding state agencies' rulemaking activities.

[M16-29]

WHEREAS, Arizona is poised to lead the nation in job growth;

WHEREAS, burdensome regulations inhibit job growth and economic development;

WHEREAS, small businesses and startups are especially hurt by regulations;

WHEREAS, each agency of the State of Arizona should promote customer-service-oriented principles for the people that it serves;

WHEREAS, each State agency should undertake a critical and comprehensive review of its administrative rules and take action to reduce the regulatory burden, administrative delay, and legal uncertainty associated with government regulation;

WHEREAS, overly burdensome, antiquated, contradictory, redundant, and nonessential regulations should be repealed;

WHEREAS, Article 5, Section 4 of the Arizona Constitution and Title 41, Chapter 1, Article 1 of the Arizona Revised Statutes vests the executive power of the State of Arizona in the Governor;

NOW, THEREFORE, I, Douglas A. Ducey, by virtue of the authority vested in me by the Constitution and laws of the State of Arizona hereby declare the following:

1. A State agency subject to this Order, shall not conduct any rulemaking except as permitted by this Order.
2. A State agency subject to this Order, shall not conduct any rulemaking, whether informal or formal, without the prior written approval of the Office of the Governor. In seeking approval, a State agency shall address one or more of the following as justification for the rulemaking:
   a. To fulfill an objective related to job creation, economic development, or economic expansion in this State.
   b. To reduce or ameliorate a regulatory burden while achieving the same regulatory objective.
   c. To prevent a significant threat to the public health, peace, or safety.
   d. To avoid violating a court order or federal law that would result in sanctions by a court or the federal government against an agency for failure to conduct the rulemaking action.
   e. To comply with a federal statutory or regulatory requirement if such compliance is related to a condition for the receipt of federal funds or participation in any federal program.
   f. To comply with a state statutory requirement.
   g. To fulfill an obligation related to fees or any other action necessary to implement the State budget that is certified by the Governor's Office of Strategic Planning and Budgeting.
   h. To promulgate a rule or other item that is exempt from Title 41, Chapter 6, Arizona Revised Statutes, pursuant to section 41-1005, Arizona Revised Statutes.
   i. To address matters pertaining to the control, mitigation, or eradication of waste, fraud, or abuse within an agency or wasteful, fraudulent, or abusive activities perpetrated against an agency.
   j. To eliminates rules that are antiquated, redundant or otherwise no longer necessary for the operation of state government.
3. For the purposes of this Order, the term "State agencies," includes without limitation, all executive departments, agencies, offices, and all state boards and commissions, except for: (a) any State agency that is headed by a single elected State official, (b) the Corporation Commission and (c) any board or commission established by ballot measure during or after the November 1998 general election. Those State agencies, boards and commissions excluded

from this Order are strongly encouraged to voluntarily comply with this Order in the context of their own rulemaking processes.

4. This Order does not confer any legal rights upon any persons and shall not be used as a basis for legal challenges to rules, approvals, permits, licenses or other actions or to any inaction of a State agency. For the purposes of this Order, "person," "rule," and "rulemaking" have the same meanings prescribed in Arizona Revised Statutes Section 41-1001.
5. This Executive Order expires on December 31, 2016.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Arizona.

Douglas A. Ducey
GOVERNOR

DONE at the Capitol in Phoenix on this Eighth day of February in the Year Two Thousand and Fifteen and of the Independence of the United States of America the Two Hundred and Thirty-Fourth.

ATTEST:
Michele Reagan
Secretary of State

REGISTER INDEXES

The *Register* is published by volume in a calendar year (See "Information" in the front of each issue for a more detailed explanation).

Abbreviations for rulemaking activity in this Index include:

PROPOSED RULEMAKING
PN = Proposed new Section
PM = Proposed amended Section
PR = Proposed repealed Section
P# = Proposed renumbered Section

SUPPLEMENTAL PROPOSED RULEMAKING
SPN = Supplemental proposed new Section
SPM = Supplemental proposed amended Section
SPR = Supplemental proposed repealed Section
SP# = Supplemental proposed renumbered Section

FINAL RULEMAKING
FN = Final new Section
FM = Final amended Section
FR = Final repealed Section
F# = Final renumbered Section

SUMMARY RULEMAKING
PROPOSED SUMMARY
PSMN = Proposed Summary new Section
PSMM = Proposed Summary amended Section
PSMR = Proposed Summary repealed Section
PSM# = Proposed Summary renumbered Section
FINAL SUMMARY
FSMN = Final Summary new Section
FSMM = Final Summary amended Section
FSMR = Final Summary repealed Section
FSM# = Final Summary renumbered Section

EXPEDITED RULEMAKING
PROPOSED EXPEDITED
PEN = Proposed Expedited new Section
PEM = Proposed Expedited amended Section
PER = Proposed Expedited repealed Section
PE# = Proposed Expedited renumbered Section
SUPPLEMENTAL EXPEDITED
SPEN = Supplemental Proposed Expedited new Section
SPEM = Supplemental Proposed Expedited amended Section
SPER = Supplemental Proposed Expedited repealed Section
SPE# = Supplemental Proposed Expedited renumbered Section
FINAL EXPEDITED
FEN = Final Expedited new Section
FEM = Final Expedited amended Section
FER = Final Expedited repealed Section
FE# = Final Expedited renumbered Section

EXEMPT RULEMAKING
EXEMPT PROPOSED
PXN = Proposed Exempt new Section
PXM = Proposed Exempt amended Section
PXR = Proposed Exempt repealed Section
PX# = Proposed Exempt renumbered Section
EXEMPT SUPPLEMENTAL PROPOSED
SPXN = Supplemental Proposed Exempt new Section
SPXR = Supplemental Proposed Exempt repealed Section
SPXM = Supplemental Proposed Exempt amended Section
SPX# = Supplemental Proposed Exempt renumbered Section
FINAL EXEMPT RULMAKING
FXN = Final Exempt new Section
FXM = Final Exempt amended Section
FXR = Final Exempt repealed Section
FX# = Final Exempt renumbered Section

EMERGENCY RULEMAKING
EN = Emergency new Section
EM = Emergency amended Section
ER = Emergency repealed Section
E# = Emergency renumbered Section
EEXP = Emergency expired

RECODIFICATION OF RULES
RC = Recodified

REJECTION OF RULES
RJ = Rejected by the Attorney General

TERMINATION OF RULES
TN = Terminated proposed new Sections
TM = Terminated proposed amended Section
TR = Terminated proposed repealed Section
T# = Terminated proposed renumbered Section

RULE EXPIRATIONS
EXP = Rules have expired
See also "emergency expired" under emergency rulemaking

CORRECTIONS
C = Corrections to Published Rules

2016 *Arizona Administrative Register* Volume 22 Page Guide

RULEMAKING ACTIVITY INDEX

Rulemakings are listed in the Index by Chapter, Section number, rulemaking activity abbreviation and by volume page number. Use the page guide above to determine the *Register* issue number to review the rule. Headings for the Subchapters, Articles, Parts, and Sections are not indexed.

THIS INDEX INCLUDES RULEMAKING ACTIVITY THROUGH ISSUE 39 OF VOLUME 22.

OTHER NOTICES AND PUBLIC RECORDS INDEX

Other notices related to rulemakings are listed in the Index by notice type, agency/county and by volume page number. Agency policy statements and proposed delegation agreements are included in this section of the Index by volume page number.

Public records, such as Governor Office executive orders, proclamations, declarations and terminations of emergencies, summaries of Attorney General Opinions, and county notices are also listed in this section of the Index as published by volume page number.

THIS INDEX INCLUDES OTHER NOTICE ACTIVITY THROUGH ISSUE 39 OF VOLUME 22.

2016 RULES EFFECTIVE DATES CALENDAR

A.R.S. § 41-1032(A), as amended by Laws 2002, Ch. 334, § 8 (effective August 22, 2002), states that a rule generally becomes effective 60 days after the day it is filed with the Secretary of State's Office. The following table lists filing dates and effective dates for rules that follow this provision. Please also check the rulemaking Preamble for effective dates.

January		February		March		April		May		June	
Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date
1/1	3/1	2/1	4/1	3/1	4/30	4/1	5/31	5/1	6/30	6/1	7/31
1/2	3/2	2/2	4/2	3/2	5/1	4/2	6/1	5/2	7/1	6/2	8/1
1/3	3/3	2/3	4/3	3/3	5/2	4/3	6/2	5/3	7/2	6/3	8/2
1/4	3/4	2/4	4/4	3/4	5/3	4/4	6/3	5/4	7/3	6/4	8/3
1/5	3/5	2/5	4/5	3/5	5/4	4/5	6/4	5/5	7/4	6/5	8/4
1/6	3/6	2/6	4/6	3/6	5/5	4/6	6/5	5/6	7/5	6/6	8/5
1/7	3/7	2/7	4/7	3/7	5/6	4/7	6/6	5/7	7/6	6/7	8/6
1/8	3/8	2/8	4/8	3/8	5/7	4/8	6/7	5/8	7/7	6/8	8/7
1/9	3/9	2/9	4/9	3/9	5/8	4/9	6/8	5/9	7/8	6/9	8/8
1/10	3/10	2/10	4/10	3/10	5/9	4/10	6/9	5/10	7/9	6/10	8/9
1/11	3/11	2/11	4/11	3/11	5/10	4/11	6/10	5/11	7/10	6/11	8/10
1/12	3/12	2/12	4/12	3/12	5/11	4/12	6/11	5/12	7/11	6/12	8/11
1/13	3/13	2/13	4/13	3/13	5/12	4/13	6/12	5/13	7/12	6/13	8/12
1/14	3/14	2/14	4/14	3/14	5/13	4/14	6/13	5/14	7/13	6/14	8/13
1/15	3/15	2/15	4/15	3/15	5/14	4/15	6/14	5/15	7/14	6/15	8/14
1/16	3/16	2/16	4/16	3/16	5/15	4/16	6/15	5/16	7/15	6/16	8/15
1/17	3/17	2/17	4/17	3/17	5/16	4/17	6/16	5/17	7/16	6/17	8/16
1/18	3/18	2/18	4/18	3/18	5/17	4/18	6/17	5/18	7/17	6/18	8/17
1/19	3/19	2/19	4/19	3/19	5/18	4/19	6/18	5/19	7/18	6/19	8/18
1/20	3/20	2/20	4/20	3/20	5/19	4/20	6/19	5/20	7/19	6/20	8/19
1/21	3/21	2/21	4/21	3/21	5/20	4/21	6/20	5/21	7/20	6/21	8/20
1/22	3/22	2/22	4/22	3/22	5/21	4/22	6/21	5/22	7/21	6/22	8/21
1/23	3/23	2/23	4/23	3/23	5/22	4/23	6/22	5/23	7/22	6/23	8/22
1/24	3/24	2/24	4/24	3/24	5/23	4/24	6/23	5/24	7/23	6/24	8/23
1/25	3/25	2/25	4/25	3/25	5/24	4/25	6/24	5/25	7/24	6/25	8/24
1/26	3/26	2/26	4/26	3/26	5/25	4/26	6/25	5/26	7/25	6/26	8/25
1/27	3/27	2/27	4/27	3/27	5/26	4/27	6/26	5/27	7/26	6/27	8/26
1/28	3/28	2/28	4/28	3/28	5/27	4/28	6/27	5/28	7/27	6/28	8/27
1/29	3/29	2/29	4/29	3/29	5/28	4/29	6/28	5/29	7/28	6/29	8/28
1/30	3/30			3/30	5/29	4/30	6/29	5/30	7/29	6/30	8/29
1/31	3/31			3/31	5/30			5/31	7/30		

July		August		September		October		November		December	
Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date	Date Filed	Effective Date
7/1	8/30	8/1	9/30	9/1	10/31	10/1	11/30	11/1	12/31	12/1	1/30/13
7/2	8/31	8/2	10/1	9/2	11/1	10/2	12/1	11/2	1/1/13	12/2	1/31/13
7/3	9/1	8/3	10/2	9/3	11/2	10/3	12/2	11/3	1/2/13	12/3	2/1/13
7/4	9/2	8/4	10/3	9/4	11/3	10/4	12/3	11/4	1/3/13	12/4	2/2/13
7/5	9/3	8/5	10/4	9/5	11/4	10/5	12/4	11/5	1/4/13	12/5	2/3/13
7/6	9/4	8/6	10/5	9/6	11/5	10/6	12/5	11/6	1/5/13	12/6	2/4/13
7/7	9/5	8/7	10/6	9/7	11/6	10/7	12/6	11/7	1/6/13	12/7	2/5/13
7/8	9/6	8/8	10/7	9/8	11/7	10/8	12/7	11/8	1/7/13	12/8	2/6/13
7/9	9/7	8/9	10/8	9/9	11/8	10/9	12/8	11/9	1/8/13	12/9	2/7/13
7/10	9/8	8/10	10/9	9/10	11/9	10/10	12/9	11/10	1/9/13	12/10	2/8/13
7/11	9/9	8/11	10/10	9/11	11/10	10/11	12/10	11/11	1/10/13	12/11	2/9/13
7/12	9/10	8/12	10/11	9/12	11/11	10/12	12/11	11/12	1/11/13	12/12	2/10/13
7/13	9/11	8/13	10/12	9/13	11/12	10/13	12/12	11/13	1/12/13	12/13	2/11/13
7/14	9/12	8/14	10/13	9/14	11/13	10/14	12/13	11/14	1/13/13	12/14	2/12/13
7/15	9/13	8/15	10/14	9/15	11/14	10/15	12/14	11/15	1/14/13	12/15	2/13/13
7/16	9/14	8/16	10/15	9/16	11/15	10/16	12/15	11/16	1/15/13	12/16	2/14/13
7/17	9/15	8/17	10/16	9/17	11/16	10/17	12/16	11/17	1/16/13	12/17	2/15/13
7/18	9/16	8/18	10/17	9/18	11/17	10/18	12/17	11/18	1/17/13	12/18	2/16/13
7/19	9/17	8/19	10/18	9/19	11/18	10/19	12/18	11/19	1/18/13	12/19	2/17/13
7/20	9/18	8/20	10/19	9/20	11/19	10/20	12/19	11/20	1/19/13	12/20	2/18/13
7/21	9/19	8/21	10/20	9/21	11/20	10/21	12/20	11/21	1/20/13	12/21	2/19/13
7/22	9/20	8/22	10/21	9/22	11/21	10/22	12/21	11/22	1/21/13	12/22	2/20/13
7/23	9/21	8/23	10/22	9/23	11/22	10/23	12/22	11/23	1/22/13	12/23	2/21/13
7/24	9/22	8/24	10/23	9/24	11/23	10/24	12/23	11/24	1/23/13	12/24	2/22/13
7/25	9/23	8/25	10/24	9/25	11/24	10/25	12/24	11/25	1/24/13	12/25	2/23/13
7/26	9/24	8/26	10/25	9/26	11/25	10/26	12/25	11/26	1/25/13	12/26	2/24/13
7/27	9/25	8/27	10/26	9/27	11/26	10/27	12/26	11/27	1/26/13	12/27	2/25/13
7/28	9/26	8/28	10/27	9/28	11/27	10/28	12/27	11/28	1/27/13	12/28	2/26/13
7/29	9/27	8/29	10/28	9/29	11/28	10/29	12/28	11/29	1/28/13	12/29	2/27/13
7/30	9/28	8/30	10/29	9/30	11/29	10/30	12/29	11/30	1/29/13	12/30	2/28/13
7/31	9/29	8/31	10/30			10/31	12/30			12/31	3/1/13

REGISTER PUBLISHING DEADLINES

The Secretary of State's Office publishes the Register weekly. There is a three-week turnaround period between a deadline date and the publication date of the Register. The weekly deadline dates and issue dates are shown below. Council meetings and Register deadlines do not correlate. Also listed are the earliest dates on which an oral proceeding can be held on proposed rulemakings or proposed delegation agreements following publication of the notice in the Register.

Deadline Date (paper only) Friday, 5:00 p.m.	***Register* Publication Date**	**Oral Proceeding may be scheduled on or after**
June 10, 2016	July 1, 2016	August 1, 2016
June 17, 2016	July 8, 2016	August 8, 2016
June 24, 2016	July 15, 2016	August 15, 2016
July 1, 2016	July 22, 2016	August 22, 2016
July 8, 2016	July 29, 2016	August 29, 2016
July 15, 2016	August 5, 2016	September 6, 2016
July 22, 2016	August 12, 2016	September 12, 2016
July 29, 2016	August 19, 2016	September 19, 2016
August 5, 2016	August 26, 2016	September 26, 2016
August 12, 2016	September 2, 2016	October 3, 2016
August 19, 2016	September 9, 2016	October 11, 2016
August 26, 2016	September 16, 2016	October 17, 2016
September 2, 2016	September 23, 2016	October 24, 2016
September 9, 2016	September 30, 2016	October 31, 2016
September 16, 2016	October 7, 2016	November 7, 2016
September 23, 2016	October 14, 2016	November 14, 2016
September 30, 2016	October 21, 2016	November 21, 2016
October 7, 2016	October 28, 2016	November 28, 2016
October 14, 2016	November 4, 2016	December 5, 2016
October 21, 2016	November 11, 2016	December 12, 2016
October 28, 2016	November 18, 2016	December 19, 2016
November 4, 2016	November 25, 2016	December 26, 2016
November 11, 2016	December 2, 2016	January 2, 2017
November 18, 2016	December 9, 2016	January 9, 2017
November 25, 2016	December 16, 2016	January 16, 2017
December 2, 2016	December 23, 2016	January 23, 2017
December 9, 2016	December 30, 2016	January 30, 2017
December 16, 2016	January 6, 2017	February 6, 2017
December 23, 2016	January 13, 2017	February 13, 2017
December 30, 2016	January 20, 2017	February 20, 2017

GOVERNOR'S REGULATORY REVIEW COUNCIL DEADLINES

The following deadlines apply to all Five-Year-Review Reports and any adopted rule submitted to the Governor's Regulatory Review Council. Council meetings and *Register* deadlines do not correlate. We publish these deadlines as a courtesy.

All rules and Five-Year Review Reports are due in the Council office by noon of the deadline date. The Council's office is located at 100 N. 15th Ave., Suite 402, Phoenix, AZ 85007. For more information, call (602) 542-2058 or visit www.grrc.state.az.us.

GOVERNOR'S REGULATORY REVIEW COUNCIL DEADLINES FOR 2016

DEADLINE TO BE PLACED ON COUNCIL AGENDA	FINAL MATERIALS DUE FROM AGENCIES	DATE OF COUNCIL STUDY SESSION	DATE OF COUNCIL MEETING
November 17, 2015	December 18, 2015	December 29, 2015	January 5, 2016
December 21, 2015	January 15, 2016	January 26, 2016	February 2, 2016
January 19, 2016 (Tuesday)	February 12, 2016	February 23, 2016	March 1, 2016
February 16, 2016 (Tuesday)	March 18, 2016	March 29, 2016	April 5, 2016
March 21, 2016	April 15, 2016	April 26, 2016	May 5, 2016
April 18, 2016	May 20, 2016	June 1, 2016 (Wednesday)	June 7, 2016
May 23, 2016	June 17, 2016	June 28, 2016	July 6, 2016 (Wednesday)
June 20, 2016	July 15, 2016	July 26, 2016	August 2, 2016
July 18, 2016	August 19, 2016	August 30, 2016	September 7, 2016 (Wednesday)
August 22, 2016	September 16, 2016	September 27, 2016	October 4, 2016
September 19, 2016	October 14, 2016	October 25, 2016	November 1, 2016
October 17, 2016	November 18, 2016	November 29, 2016	December 6, 2016
November 21, 2016	December 16, 2016	December 28, 2016 (Wednesday)	January 4, 2017 (Wednesday)

*Materials must be submitted by **noon** on dates listed as a deadline for placement on a particular agenda. Placement on a particular agenda is not guaranteed.