

Arizona Administrative REGISTER

Published by the Department of State ~ Office of the Secretary of State

Vol. 22, Issue 24

~ Administrative Register Contents ~

June 10, 2016

Information 1412

Rulemaking Guide 1413

RULES AND RULEMAKING

Proposed Rulemaking, Notices of

 9 A.A.C. 14 Department of Health Services - Laboratories 1415

OTHER AGENCY NOTICES

Proposed Delegation Agreement, Notices of

 Department of Environmental Quality 1545

GOVERNOR'S OFFICE

Governor's Executive Orders

 E.O. 2016-03: Internal Review of Administrative Rules; Moratorium to Promote Job Creation and Customer-Service-Oriented Agencies 1547

Governor's Proclamations

 American Eagle Day 1549

 Arizona Pollinator Week 1549

 Arizona Youth Leadership Conference Week 1550

 Post-Traumatic Stress Injury Awareness Month/Post-Traumatic Stress Injury Awareness Day 1551

ARIZONA COUNTY NOTICES

 Maricopa County 1552

INDEXES

 Register Index Ledger 1573

 Rulemaking Activity, Cumulative Index for 2016 1574

 Other Notices and Public Records, Cumulative Index for 2016 1577

CALENDAR/DEADLINES

 Rules Effective Dates Calendar 1579

 Register Publishing Deadlines 1581

GOVERNOR'S REGULATORY REVIEW COUNCIL

 Governor's Regulatory Review Council Deadlines 1582

DIRECTOR
Public Services Division
Scott Cancelosi

PUBLISHER
Secretary of State
MICHELE REAGAN

RULES MANAGING EDITOR
Arizona Administrative Register
Rhonda Paschal

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 Statutes 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.

Arizona Administrative REGISTER

Vol. 22

Issue 24

PUBLISHER
SECRETARY OF STATE
Michele Reagan

PUBLIC SERVICES STAFF
DIRECTOR
Scott Cancelosi

RULES MANAGING EDITOR
Rhonda Paschal

SUBSCRIPTIONS
ADMINISTRATIVE REGISTER
The printed version of the *Administrative Register* is the official publication of Arizona state agency rules.
Rates: \$276 yearly
New subscriptions, renewals and address changes contact us at (602) 364-3223.

This publication is available online for free at www.azsos.gov.

ADMINISTRATIVE CODE
A price list for the *Arizona Administrative Code* is available online. You may also request a paper price list by mail. To purchase a paper Chapter, contact us at (602) 364-3223.

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.

CONTACT US
The Honorable Michele Reagan
Office of the Secretary of State
1700 W. Washington Street, Fl. 7
Phoenix, AZ 85007
(602) 364-3223

The Office of the Secretary of State is an equal opportunity employer.



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.

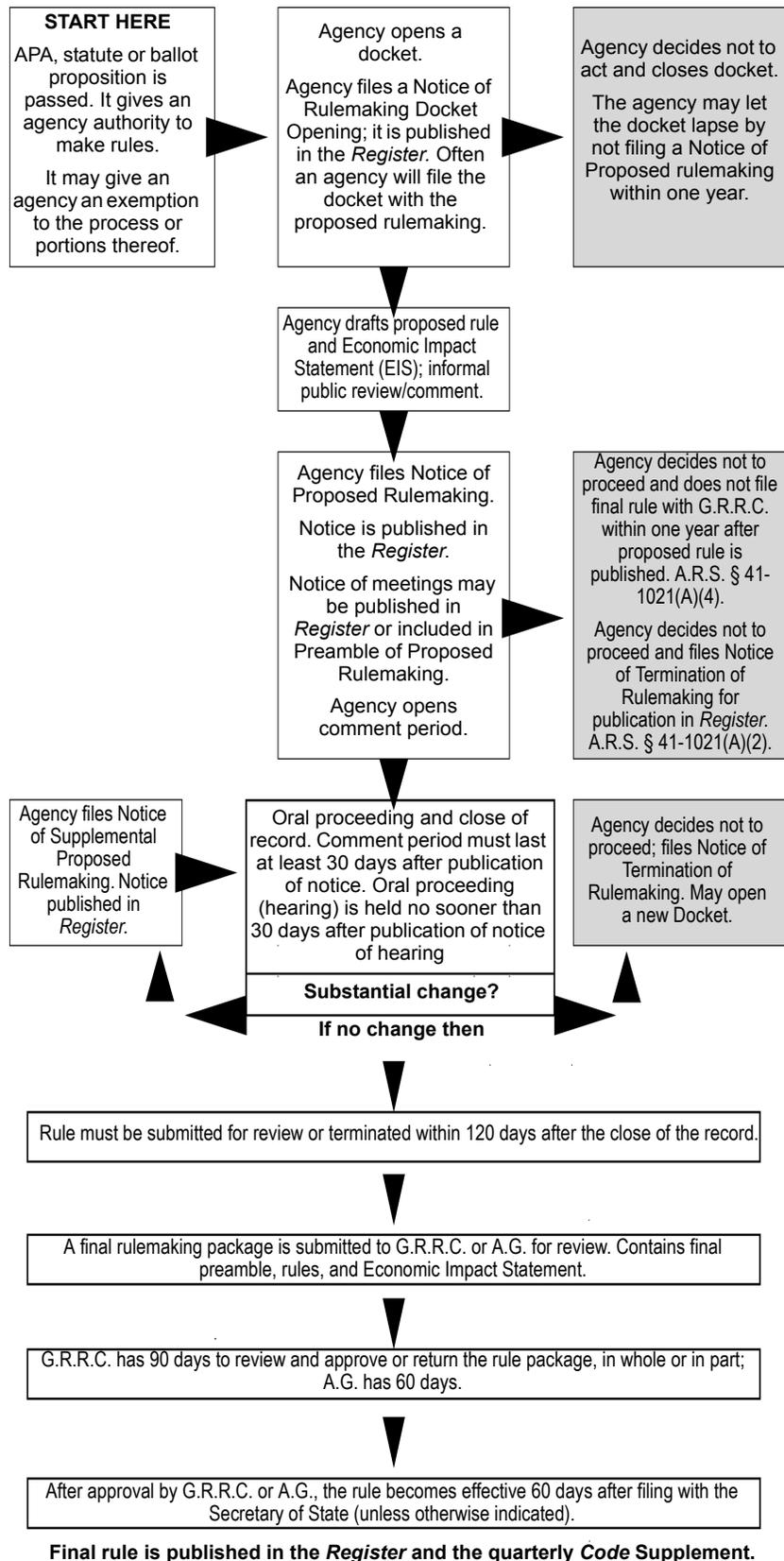
An agency may not have a public meeting scheduled on the Notice of Proposed Rulemaking. If not, you may request that the agency schedule a proceeding. This request must be put in writing within 30 days after the published Notice of Proposed Rulemaking.

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 compiled 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 PROPOSED RULEMAKING

This section of the Arizona Administrative Register contains Notices of Proposed Rulemakings.

A proposed rulemaking is filed by an agency upon completion and submittal of a Notice of Rulemaking Docket Opening. Often these two documents are filed at the same time and published in the same Register issue.

When an agency files a Notice of Proposed Rulemaking under the Administrative Procedure Act (APA), the notice is published in the Register within three weeks of filing. See the publication schedule in the back of each issue of the Register for more information.

Under the APA, an agency must allow at least 30 days to elapse after the publication of the Notice of Proposed Rulemaking in the Register before beginning any proceedings for making, amending, or repealing any rule. (A.R.S. §§ 41-1013 and 41-1022)

The Office of the Secretary of State is the filing office and publisher of these rules. Questions about the interpretation of the proposed rules should be addressed to the agency the promulgated the rules. Refer to item #4 below to contact the person charged with the rulemaking and item #10 for the close of record and information related to public hearings and oral comments.

NOTICE OF PROPOSED RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 14. DEPARTMENT OF HEALTH SERVICES LABORATORIES

[R16-87]

PREAMBLE

<u>1.</u>	<u>Article, Part, or Section Affected (as applicable)</u>	<u>Rulemaking Action</u>
	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	Re-number
	Table 6.1	Re-number
	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. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the proposed rule:

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

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

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

or

Name: Robert Lane, Manager
Address: Department of Health Services
Office of Administrative Counsel and Rules
1740 W. Adams St., Suite 203
Phoenix, AZ 85007
Telephone: (602) 542-1020
Fax: (602) 364-1150
E-mail: Robert.Lane@azdhs.gov

5. 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 Arizona Department of Health Services (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 the Arizona Department of Environmental Quality (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. ADEQ has recently revised its rules in 18 A.A.C. 4, Article 1 to conform to changes made in 2014 to federal Environmental Protection Agency (EPA) regulations in 40 CFR parts 141 and 142. Therefore, the Department sought and obtained an exception from the rulemaking moratorium established by Executive Order 2016-03 and is amending the rules in 9 A.A.C. 14, Article 6 to be consistent with 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 to reduce the regulatory burden while achieving the same regulatory objective. The proposed amendments conform to rulemaking format and style requirements of the Governor's Regulatory Review Council and the Office of the Secretary of State.

6. 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.

7. 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

8. The preliminary 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 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 the flexibility ADEQ has when addressing issues through retaining primacy. 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.

9. The agency's contact person who can answer questions about the economic, small business, and consumer impact statement:

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

or

Name: Robert Lane, Manager
 Address: Department of Health Services
 Office of Administrative Counsel and Rules
 1740 W. Adams St., Suite 203
 Phoenix, AZ 85007
 Telephone: (602) 542-1020
 Fax: (602) 364-1150
 E-mail: Robert.Lane@azdhs.gov

10. The time, place, and nature of the proceedings to make, amend, repeal, or renumber the rule, or if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:

The Department has scheduled the following oral proceeding:

Date and time: Wednesday, July 13, 2016, 10:00 a.m.
 Location: 250 N. 17th Ave., 1st Floor
 Phoenix, AZ 85007

Close of record: Wednesday, July 13, 2016, 4:00 p.m.

A person may submit written comments on the proposed rules no later than the close of record to either of the individuals listed in items 4 and 9.

A person with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Robert Lane at Robert.Lane@azdhs.gov or (602) 542-1020. Requests should be made as early as possible to allow time to arrange the accommodation.

11. 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.

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

Not applicable

13. 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

- R9-14-601. Definitions
R9-14-602. Exemptions from Applicability
R9-14-603. License Application and Process; Transferability
R9-14-605. Compliance Monitoring
R9-14-606. Provisional Licensing
R9-14-607. Fees
R9-14-608. Installment Payment of Fees by Small Businesses
R9-14-609. Proficiency Evaluation Testing
R9-14-610. Approved Methods and References
R9-14-611. Compliance Testing for Drinking Water Compliance Testing Parameters
R9-14-612. Compliance Testing for Wastewater Compliance Testing Parameters
R9-14-613. Compliance Testing for Solid Waste Compliance Testing Parameters
R9-14-614. Compliance Testing for Air and Stack Compliance Testing Parameters
R9-14-615. Quality Assurance
R9-14-616. Operation
R9-14-617. Laboratory Records and Reports
R9-14-620. Changes to a License
R9-14-621. Time-frames
Table 4-6.1 Time-frames (in days)
Exhibit I. Approved Methods; Method Fees; Instrumentation Fees Repealed
Exhibit II. Alternate Default Limits Repealed
Table 6.2.A. Approved Methods and Method Fees for Drinking Water Parameters
Table 6.2.B. Approved Methods and Method Fees for Wastewater Parameters
Table 6.2.C. Approved Methods and Method Fees for Waste Parameters
Table 6.2.D. Approved Methods and Method Fees for Air and Stack Parameters
Table 6.2.E. Methods Director-Approved under R9-14-610(E) and Method Fees
Table 6.3. Instrumentation Fees
Table 6.4. Alternate Default Limits

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-β-D-galactopyranoside-4-methylumbelliferyl-β-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
 - ii. 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;
 - e- 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
 - e. 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;
 - ~~e.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 4 ~~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/nerlewww/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, at <http://seal-analytical.com>, 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, February 2005, 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.I, 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 Pt. 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. Pawleeki-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/sourcealt.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/nerlewww/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/nerlewww/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/nerlewww/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 <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 Pt. 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 Determination 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™ 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 Pt. 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/pub/titleord.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 http://www.epa.gov/epawaste/hazard/testmethods/pdfs/5035a_r1.pdf.
- 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 <http://www3.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/4025.pdf>.
- F4 EPA, Method 3570: Microscale Solvent Extraction (MSE) (rev. 0 November 2002), available at http://www.epa.gov/epaoswer/hazwaste/test/new_meth.htm <http://www.epa.gov/wastes/hazard/testmethods/pdfs/3570.pdf>.
- 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 <http://www3.epa.gov/waste/hazard/testmethods/sw846/pdfs/3511.pdf>.
- 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 <http://www3.epa.gov/epawaste/hazard/testmethods/pdfs/5030c.pdf>.
- 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 http://www3.epa.gov/epawaste/hazard/testmethods/pdfs/8015d_r4.pdf.
- 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 http://www3.epa.gov/epawaste/hazard/testmethods/pdfs/5021a_r1.pdf.
- 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 <http://www3.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/9015.pdf>.
- 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 <http://www3.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/9013a.pdf>.
- 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.
- F11 Method 8330B, Nitroaromatics, Nitramines, and Nitrate Esters by High Performance Liquid Chromatography, Revision 2, October 2006, available at <http://www3.epa.gov/epawaste/hazard/testmethods/pdfs/8330b.pdf>.
- F12 EPA 8260C (SW-846) Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC-MS), Revision 3, 2006, available at <https://www.epa.gov/sites/production/files/2015-12/documents/8260c.pdf>.
- F13 SW 846 Update V, Revision 2, July 2014, Chapters ONE through FIVE, applicable to 6010D, 6020B, 8260C, and 8270D, available at <https://www.epa.gov/hw-sw846/sw-846-compendium>.
- G National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, Pub. No. 84-400 94-113, NIOSH Manual of Analytical Methods: Volume 1, (3rd ed. February 1984), updated May 1985, August 1987, and May 1989 (4th edition, August 1994), available from Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325 or at <http://www.cdc.gov/niosh/nmam/method-a.html>.
- G1 Method for the Determination of Asbestos in Bulk Building Materials, EPA/600R-93/116, July 1993, available at <http://www.nist.gov/nvlap/upload/EPA-600-R-93-116.pdf>. A concurrent certification is also required for Asbestos in Bulk samples, December 1982, EPA 600/M4-82-020 (A4.29), as outlined in NVLAP Lab Bulletin, LB-68-2012, available at http://www.nist.gov/nvlap/upload/LB_68_2012.pdf.
- H Environmental Monitoring Systems Laboratory Research Triangle Park, EPA, Pub. No. EPA 600/M4 82 020, Interim Method for the Determination of Asbestos in Bulk Insulation Samples (December 1982), available at http://www.rti.org/pubs/test_method.pdf.
- H1 Eric J. Chatfield and M. Jane Dillon, EPA, Pub. No. EPA 600/4 83-043, Method 100.1: Analytical Method for Determination of Asbestos Fibers in Water (September 1983), available at <http://www.nemi.gov>.
- H2 Kim A. Brackett et al., EPA, Pub. No. EPA/600/R 94/134, Method 100.2: Determination of Asbestos Structures

- over 10 µm in Length in Drinking Water (June 1994), available at <http://www.nemi.gov>.
- I ASTM, Annual Book of ASTM Standards, Vols. 11.01 and 11.02 (1995), individual standards available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, W. Conshohocken, PA 19428-2959 or at www.astm.org.
- J U.S. Geological Survey, U.S. Department of the Interior, "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," published in Techniques of Water Resources Investigations of the United States Geological Survey at bk. 5, ch. A1 (3rd ed. 1989), available from National Technical Information Service, 5285 Pt. Royal Rd., Springfield, VA 22161.
- J1 L.L. Thatcher et al., U.S. Department of the Interior, "Methods for Determination of Radioactive Substances in Water and Fluvial Sediments," published in Chapter A5 in Book of Techniques of Water-Resources Investigations of the United States Geological Survey, at bk. 5, ch. A5 (3rd ed. 1989), available from National Technical Information Service, 5285 Pt. Royal Rd., Springfield, VA 22161 1977, available from U.S. Geological Survey Information Services, Box 25286, Federal Center, Denver, CO 80225-0425.
- K Division Bureau of State Laboratory Services, Arizona Department of Health Services, Method No. BLS-188, Ethylene Glycol in Waste Water (rev. April 1991); and Bureau of State Laboratory Services, Arizona Department of Health Services, C₁₀ - C₃₂ Hydrocarbons in Soil - 8015AZ (rev. 1.0 September 1998), available from the Bureau of State Laboratory Services, 250 N. 17th Ave., Phoenix, AZ 85007, and at www.azdhs.gov/lab/license/tech/bls188.pdf and www.azdhs.gov/lab/license/tech/8015azr1.pdf <http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#technical-resources-additional>.
- K1 Office of Water, EPA, Pub. No. EPA 821-R-98-002, Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry (February 1999), available at <http://www.nemi.gov>.
- K2K1 Office of Water, EPA, Pub. No. EPA-821-B-98-016 (821B98016), Analytical Methods for the Determination of Pollutants in Pharmaceutical Manufacturing Industry Wastewater (July 1998), available at <http://www.epa.gov/water/science/guide/pharm/compend1.pdf> <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- L Herman L. Krieger and Earl L. Whittaker, EPA, Pub. No. EPA-600/4-80-032 (600480032), Prescribed Procedures for Measurement of Radioactivity in Drinking Water (August 1980), available from National Technical Information Service, 5285 Pt. Royal Rd., Springfield, VA 22161 at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- M1 Environmental Monitoring Systems Laboratory-Cincinnati, EPA, Pub. No. EPA/600/4-90/027F (600490027F), Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (4th ed. edition August 1993), available from National Technical Information Service, 5285 Pt. Royal Rd., Springfield, VA 22161 at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- N1 Environmental Monitoring Systems Laboratory-Cincinnati, EPA, Pub. No. EPA-600-4-91-002 (600491002), Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms (3rd ed. edition July 1994), available at <http://nepis.epa.gov/pubtitleord.htm> <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- 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-id?tpl=/ecfrbrowse/Title40/40cfr50_main_02.tpl.
- O1 Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air, Compendium Method IO-3.4, Determination of Metals in Ambient Particulate Matter Using Inductively Coupled Plasma (ICP) Spectroscopy, EPA/625/R-96/010AC (625R96010AC), June 1999, available at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- O2 Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air, Compendium Method IO-3.5, Determination of Metals in Ambient Particulate Matter Using Inductively Coupled Plasma/Mass Spectrometry (ICP/MS), EPA/625/R-96/010AB (625R96010AB), June 1999, available at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- O3 Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air, Compendium Method IO-3.1, Selection, Preparation and Extraction, EPA/625/R-96/010AD (625R96010AD), June 1999, available at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- O4 Determination of Lead in TSP by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) with Heated Ultrasonic Nitric and Hydrochloric Acid Filter Extraction; available from the Bureau of State Laboratory Services, 250 N. 17th Ave., Phoenix, AZ 85007, and at <http://www.azdhs.gov/documents/preparedness/state-laboratory/lab-licensure-certification/technical-resources/additional-resources/lead-in-ambient-air-by-icp-ms-eql-0510-191.pdf>.
- P EPA, Pub. No. EPA/600/4-84/013, USEPA Manual of Methods for Virology (rev. June 2001), Chapters 4-12 and 14-16 1 through 16 available at www.epa.gov/nerelewww/about.htm and Chapter 13 available at <http://nepis.epa.gov/pubtitleord.htm> <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- P1 Jay Vasconcelos and Stephanie Harris, EPA, Pub. No. EPA 910/9-92-029 (910992029), Consensus Method for



- Determining Groundwaters Under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA) (October 1992), 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.
- P2 G. Shay Fout et al., EPA, Pub. No. EPA/600/R-95/178 (600R95178), ICR Microbial Laboratory Manual (April 1996), available at <http://nepis.epa.gov/pubtitleord.htm> at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- P3 Charles P. Gerba, University of Arizona, U of A 2000: *Ascaris lumbricoides* *Ascaris lumbricoides* in Water (1999), available from the University of Arizona, Microbial Analytical Laboratory, Building No. 90, Rm. 406, Tucson, AZ 85721.
- P4 EPA, Pub. No. EPA 815 R 05 001, Method 1622: Cryptosporidium in Water by Filtration/IMS/FA (December 2005), available at <http://www.epa.gov/microbes/>, modified to require flow cytometer counted spiking suspensions for MS samples and ongoing precision and recovery samples.
- P5 EPA, Pub. No. EPA 815 R 05 002, Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA (December 2005), available at <http://www.epa.gov/microbes/>, modified to require flow cytometer counted spiking suspensions for MS samples and ongoing precision and recovery samples.
- Q 40 CFR Part 60 app. A Chapter I, Subchapter C, Part 60 (July 2006 January 2008), available at <http://www.access.gpo.gov/nara/cfr/cfr-table-search.html> <http://www.ecfr.gov/cgi-bin/text-idx?SID=059c1fa5bb66be2b9393d76638c87a0c&node=pt40.8.60&rgn=div5>.
- Q1 EPA Performance Specification PS-12B: Analysis of Vapor Phase Mercury Emissions from Stationary Sources Using a Sorbent Trap Monitoring System, available at <http://www.epa.gov/ttnemc01/perfspec/ps-12B.pdf>.
- R Office of Air Quality, ADEQ, Arizona Testing Manual for Air Pollutant Emissions (rev. F March 1992), available from the Office of Air Quality, ADEQ, 1110 W. Washington St., Phoenix, AZ 85007 and at <http://www.azdeq.gov/environ/air/compliance/download/manual.pdf>.
- S 40 CFR Part 61 apps. B and C (July 2006 January 2008), available at <http://www.access.gpo.gov/nara/cfr/cfr-table-search.html> http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr61_main_02.tpl.
- S1 EPA, Pub. No. EPA/625/R-96/010b (625R96010b), Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (2nd ed. edition January 1999), available at <http://nepis.epa.gov/pubtitleord.htm> <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- U Environmental Measurements Laboratory, U.S. Department of Energy, Pub. No. HASL-300, EML Procedures Manual, Vol. I (28th ed. edition February 1997), available from National Technical Information Service NTIS, 5285 Prt. Port Royal Rd., Springfield, VA 22161.
- V Eastern Environmental Radiation Facility, EPA, Pub. No. EPA 520/5-84-006 (520584006), Eastern Environmental Radiation Facility Radiochemistry Procedures Manual (2nd prtg. 1988 December 1987), 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.
- W Environmental Monitoring and Support Laboratory Las Vegas, EPA, Pub. No. EMSL-LV-0539-17 (EMSLLV053917), Radiochemical Analytical Procedures for Analysis of Environmental Samples (March 1979), 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.
- X Office of Ground Water and Drinking Water, EPA, Pub. No. EPA/600/4-91/016 (600491016), Test Methods for *Escherichia coli* *Escherichia coli* in Drinking Water: EC Medium with Mug Tube Procedure, Nutrient Agar with Mug Membrane Filter Procedure (July 1991), available at <http://nepis.epa.gov/pubtitleord.htm> <http://nepis.epa.gov/EPA/html/Pubs/pubtitleORD.htm> or by calling (800) 490-9198.
- Y Office of Water, EPA, Pub. No. EPA 821 R 99 013, Method OIA 1677: Available Cyanide by Flow Injection, Ligand Exchange, and Amperometry (August 1999), available at <http://www.epa.gov/waterscience/methods/cyanide/> Method OIA-1677-09, Available Cyanide by Ligand Exchange and Flow Injection Analysis (FIA). 2010, available from ALPKEM, a Division of OI Analytical, 151 Graham Road, College Station, TX 77845 or by calling (979) 690-1711.
- 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.
- Z1 EPA, Pub. No. EPA 821/R/01/034, EPA Method 1605: *Aeromonas* in Finished Water by Membrane Filtration Using Ampicillin Dextrin Agar with Vancomycin (ADA-V) (October 2001), available at <http://www.epa.gov/safewater/methods/pdfs/met1605.pdf>.

- Z2 EPA, Pub. No. EPA-821-R-93-010-A, 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 Pt. Royal Rd., Springfield, VA 22161.
- Z1 EPA Method 1681, July 2006, EPA-821-R-06-013, Fecal Coliform in Sewage Sludge (Biosolids) by Multiple Tube Fermentation using A-1 Medium, available at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- Z3Z2 EPA, Pub. No. EPA-821-R-02-013 (821R02013), Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (4th ed. edition October 2002), available at www.epa.gov/ost/wet/disk3/ <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- Z4Z3 IDEXX Laboratories, Inc., IDEXX SimPlate™ HPC Method for Heterotrophs in Water (November 2000), available from IDEXX Laboratories, Inc., One IDEXX Dr., Westbrook, ME 04092.
- Z5Z4 William A. Yanko, EPA, Pub. No. EPA/600/1-87/014 (600187014), Occurrence of Pathogens in Distribution and Marketing Municipal Sludges (1987), available from National Technical Information Service, 5285 Pt. Royal Rd., Springfield, VA 22161 at <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- 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.
- Z7 Colisure Test, IDEXX Laboratories Inc., February 28, 1994, available from IDEXX Laboratories, Inc., One IDEXX Dr., Westbrook, ME 04092 or by calling 1-800-548-6733.
- Z8 Presence/Absence for Coliforms and *E. coli* in Water, Charm Services Inc., December 21, 1997, available at 659 Andover Street, Lawrence, MA 01843, 987-687-9200, <http://www.charm.com>.
- Z40Z9 OI Analytical/ALPKEM, Nitrogen, Total Kjeldahl, Method PAI-DK01 (Block Digestion, Steam Distillation, Titrimetric Detection) (rev. December 22, 1994), available from OI Analytical/ALPKEM, P.O. Box 9010, College Station, TX 77842.
- Z44Z10 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.
- Z42Z11 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.
- Z43Z12 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/water/science/WET/disk2/ <http://nepis.epa.gov/EPA/html/pubs/pubtitle.html> or by calling (800) 490-9198.
- Z13 Lozarchak, J. 2001, "Short-term Chronic Toxicity Tests on *Daphnia magna* (Survival and Growth Tests)", USEPA, available from the Department at 250 N. 17th Ave, Phoenix, AZ 85007, and at <http://www.azdhs.gov/documents/preparedness/state-laboratory/lab-licensure-certification/technical-resources/additional-resources/lazorchak-toxicity-method.pdf>.
- 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 licensee 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>; 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, ~~the~~ 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. A description of all procedures to be followed when the method is performed;
 - ~~e.b.~~ b. A list of the concentrations for calibration standards, check standards, and spikes;
 - ~~d.c.~~ c. Requirements for instrumental conditions and set up;
 - ~~e.d.~~ d. A requirement for frequency of calibration;
 - ~~f.e.~~ 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.~~ 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 Laboratory Accreditation Conference, US EPA ORD/NERL, Mailcode E243-05, RTP, NC 27711, or at ~~www.epa.gov/nelac/~~ <http://nelac-institute.org/content/CSDP/standards.php>;
 - ~~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 licensee~~ 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 ~~4~~ 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 ~~4~~ 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 ~~4~~ 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 4-6.1. 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 <i>E. coli</i> , by Membrane Filtration	Z8	1604	\$228
Coliforms, Total, by Multiple Tube Fermentation	C2	9221B and C	\$228
		C1	Hach 8001
Coliforms, Total, by Presence/Absence	C2	9221D	\$228



<i>Escherichia coli</i>	X	Tube Procedure	\$228
		Membrane Filter Procedure	\$228
<i>Cryptosporidium</i>	P4	1622	\$381
<i>Giardia and Cryptosporidium</i>	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
C2		4500-ClO ₂ -C	\$39
		4500-ClO ₂ -D	\$76
		4500-ClO ₂ -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
300.0			\$26
C2		4500-NO ₂ -B	\$76
		4500-NO ₂ -E	\$76
		4500-NO ₂ -F	\$76
		4110B	\$26
Odor		C2	2150B
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
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-SO ₄ -C	\$76
		4500-SO ₄ -D	\$76
		4500-SO ₄ -E	\$76
		4500-SO ₄ -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	€	3030E	\$7
Nitric Acid/Hydrochloric Acid	€	3030F	\$7
Nitric Acid/Perchloric Acid	€	3030H	\$7
Nitric Acid/Perchloric Acid/Hydrofluoric Acid	€	3030I	\$7
Nitric Acid/Sulfuric Acid	€	3030G	\$7
Preliminary Filtration	€	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
	€	3111D	\$26
		3113B	\$26
Antimony	A1	200.8	\$26
		200.9	\$26
	€	3113B	\$26
Arsenic	A1	200.8	\$26
		200.9	\$26
	€	3113B	\$26
		3114B	\$76
Barium	A1	200.7	\$10
		200.8	\$26
	€	3111D	\$26
		3113B	\$26
Beryllium	A1	200.7	\$10
		200.8	\$26
		200.9	\$26



	€	3113B	\$26
Cadmium	A1	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3113B	\$26
Chromium, Total	A1	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3113B	\$26
Copper	A1	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3111B	\$26
		3113B	\$26
Iron	A1	200.7	\$10
		200.9	\$26
	€	3111B	\$26
		3113B	\$26
Lead	A1	200.8	\$26
		200.9	\$26
	€	3113B	\$26
Manganese	A1	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3111B	\$26
		3113B	\$26
Mercury	A	245.2	\$52



	A1	245.1	\$52
		200.8	\$26
	€	3112B	\$52
Nickel	A1	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3111B	\$26
		3113B	\$26
Selenium	A1	200.8	\$26
		200.9	\$26
	€	3113B	\$26
		3114B	\$76
Silver	A1	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3111B	\$26
		3113B	\$26
Strontium	A1	200.7	\$10
	€	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
	€	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 Heptachlorepoide 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 Trichloroethane Trichloroethylene Toluene 1,2,4 Trichlorobenzene 1,1-Dichloroethylene 1,1,2 Trichloroethane Vinyl chloride Xylenes, Total Chloroform Bromodichloromethane Dibromochloromethane	D3	502.2 (2.1)	\$152



<p>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-Trichloroethane Trichloroethylene Toluene 1,2,4-Trichlorobenzene 1,1-Dichloroethylene 1,1,2-Trichloroethane Vinyl Chloride Xylenes, Total Chloroform Bromodichloromethane Dibromochloromethane</p>	<p>D3</p>	<p>524.2 (4.1)</p>	<p>\$152</p>
<p>EDB/DBCP</p>	<p>D3</p>	<p>504.1 (1.1)</p>	<p>\$116</p>
<p>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</p>	<p>D3</p>	<p>505 (2.1)</p>	<p>\$152</p>
<p>Phthalate and Adipate Esters by GC-PID: Di-(2-ethylhexyl)adipate Di-(2-ethylhexyl)phthalate</p>	<p>D3</p>	<p>506 (1.1)</p>	<p>\$116</p>
<p>Pesticides by GC-NPD Atrazine Alachlor Simazine</p>	<p>D3</p>	<p>507 (2.1)</p>	<p>\$116</p>



<p>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</p>	<p>D3</p>	<p>508 (3.1)</p>	<p>\$152</p>
<p>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</p>	<p>D3</p>	<p>508.1(2.0)</p>	<p>\$152</p>
<p>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</p>	<p>D3</p>	<p>525.2 (2.0)</p>	<p>\$152</p>



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
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
	H	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
	H	R-1120-76	\$206
	L	900	\$206
	V	00-01	\$206
	W	Gross Beta	\$206
Iodine	B	Precipitation Method, Distillation Method	\$206
	C2	7500-1B	\$206
		7500-1C	\$206
		7500-1D	\$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	
	H	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
H		R-1142-76	\$206	
L		904	\$206	
V		Ra-05	\$206	
W		Radium 228	\$206	
Strontium	B	Strontium	\$206	
	C2	7500 Sr B	\$206	
	H	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- ³ H-B	\$206
	H	R-1171-76	\$206
	L	906	\$206
	V	H-02	\$206
	W	Tritium	\$206
Uranium	C2	7500-U-B	\$206
	I	D5174-91	\$206
	H	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
<i>Ascaris lumbricoides</i>	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
<i>Entamoeba histolytica</i>	C2	10550	\$228
	C	9711C	\$228
Enteric viruses	I	D4994-89	\$381
<i>Escherichia coli</i> (NPDES) by Colilert MPN, in conjunction with SM 9221B and 9221C	C2	9223B	\$152
<i>Escherichia coli</i> (NPDES) in conjunction with SM 9221B and 9221C	C2	9221F	\$152
<i>Giardia</i> and <i>Cryptosporidium</i>	C2	9711B	\$381
	P2	600/R-95/178	\$381
<i>Helminth Ova</i> in sludge	Z5	600/1-87-014	\$381
<i>Salmonella</i> 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-NH ₃ -B	\$39
		4500-NH ₃ -C	\$39

		4500-NH ₃ -D	\$39
		4500-NH ₃ -E	\$39
		4500-NH ₃ -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-NH ₃ -B and either (a) 4500-N _{org} -B or (b) 4500-N _{org} -C	\$115
		4500-NH ₃ -C	\$39
	Z10	PA1DK01	\$76
	Z11	PA1DK02	\$76
	Z12	PA1DK03	\$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-NO ₃ -E	\$76
		4500-NO ₃ -F	\$76
		4500-NO ₃ -H	\$76
	Nitrite (as N)	A	354.1
A2		300.0	\$26
C2		4500-NO ₂ -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	2540E	\$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-SiO ₂ -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-SO ₄ -C	\$76
		4500-SO ₄ -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-SO ₃ -B	\$76



	C1	Hach 8071	\$39
Temperature, Degrees Celsius	C2	2550B	\$13
Total, Fixed and Volatile Solids in Solid and Semisolid 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



	€	3111B	\$26
		3113B	\$26
Arsenic	A	206.5	\$39
	At	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3113B	\$26
		3500-As-C	\$76
	€†	Hach 8013	\$39
Barium	At	200.7	\$10
		200.8	\$26
	€	3111D	\$26
		3113B	\$26
Beryllium	At	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	3111D	\$26
		3113B	\$26
		3500-Be-D	\$76
Cadmium	At	200.7	\$10
		200.8	\$26
		200.9	\$26
	€	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
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

	E	3111B	\$26
Ruthenium	A	267.2	\$26
	E	3111B	\$26
Selenium	A1	200.7	\$10
		200.8	\$26
		200.9	\$26
	E	3113B	\$26
		3114B	\$76
	Silver	A1	200.7
200.8			\$26
200.9			\$26
E		3111B	\$26
		3111C	\$26
		3113B	\$26
Strontium	A1	200.7	\$10
	E	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
	E	3111B	\$26
Tin	A1	200.7	\$10
		200.9	\$26
	E	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
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
Perechlorate	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
Florisol 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 Pentafluorobenzoylation 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
§280A: Polychlorinated Dibenzo <i>p</i> -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
Tetrazenes 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	Q	Appendix C	\$393
Formaldehyde	F	8520	\$393
Hydrocarbons	Q	Appendix E	\$393
Lead	Q	Appendix G	\$393
Nitrogen Dioxide	Q	Appendix F	\$393
Ozone	Q	Appendix D	\$393
		Appendix H	\$393
Particulate Matter	Q	Appendix B	\$393
		Appendix J	\$393
		Appendix K	\$393
Sulfur Oxides	Q	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
		Method 19	\$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 $\pm 50\%$
LOQ/MRL (processed)	LCS/LFB or $\pm 50\%$
QCS (non-processed)	ICV/continuing IPC/manufacture's limits
QCS (processed)	LCS/LFB/manufacture's limits
IDOC limits	LFB/LCS
LFB/LCS/LFM/duplicate RPD	IDOC limits/ $\leq 20\%$
Non-CCC compounds	CCC limits
ICV/CCV	$\pm 10\%$

- A. For 8000 methods that do not specify the QC limits for Matrix Spike/LCS, a licensee may use the default limit of $\pm 30\%$.
- 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 $\pm 50\%$.

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
Aero monas	A4.35	1605	\$228

<u>Coliforms, Fecal</u>	<u>C</u>	<u>9221E (2006)</u>	<u>\$228</u>
		<u>9222D (2006)</u>	<u>\$228</u>
<u>Coliforms, Total and E. coli, by Colilert (ONPG-MUG)</u>	<u>C and Z</u>	<u>9223B (2004) and IDEXX</u>	<u>\$152</u>
<u>Coliforms, Total, and E. coli, by Colisure</u>	<u>C2 and Z7</u>	<u>9223B (2004) and IDEXX</u>	<u>\$152</u>
<u>Coliforms, Total, by Membrane Filtration</u>	<u>C</u>	<u>9222B (2006)</u>	<u>\$228</u>
		<u>9222C (2006)</u>	<u>\$228</u>
<u>Coliforms, Total and E. coli, by Membrane Filtration</u>	<u>A4.36</u>	<u>1604</u>	<u>\$228</u>
<u>Coliforms, Total, and E. coli by Colitag</u>	<u>C and Z5</u>	<u>9223B (2004) and CPI</u>	<u>\$152</u>
<u>Coliforms, Total, and E. coli by Modified Colitag</u>	<u>C and D8</u>	<u>9223B (2004) and Modified Colitag</u>	<u>\$152</u>
<u>Coliforms, Total, and E. coli by E.colite</u>	<u>C and Z8</u>	<u>9223B (2004) and Charm Sciences, Inc.</u>	<u>\$152</u>
<u>Coliforms, Total, and E. coli by m-ColiBlue24 Test</u>	<u>C and Z6</u>	<u>9222H (2006) and Hach 10029</u>	<u>\$228</u>
<u>Coliforms, Total, and E. coli by ReadyCult Coliforms 100 Presence/Absence</u>	<u>C and Z14</u>	<u>19223B (2004) and EM Science</u>	<u>\$152</u>
<u>Coliforms, Total, and E. coli by MF using Chromocult Coliform Agar</u>	<u>C and Z15</u>	<u>9223B (2004) and EM Science</u>	<u>\$152</u>
<u>Coliforms, Total, by Multiple Tube Fermentation</u>	<u>C</u>	<u>9221B and C (2006)</u>	<u>\$228</u>
<u>Coliforms, Total, by Presence/Absence</u>	<u>C</u>	<u>9221D (2006)</u>	<u>\$228</u>
<u>Escherichia coli</u>	<u>C</u>	<u>9222G (2006)</u>	<u>\$228</u>
	<u>X</u>	<u>Tube Procedure</u>	<u>\$228</u>
		<u>Membrane Filter Procedure</u>	<u>\$228</u>
<u>Cryptosporidium</u>	<u>A4.32</u>	<u>1622</u>	<u>\$381</u>
<u>Giardia and Cryptosporidium</u>	<u>A4.39</u>	<u>1623</u>	<u>\$381</u>
	<u>A4.33</u>	<u>1623.1</u>	<u>\$381</u>
<u>Heterotrophic Plate Count</u>	<u>C</u>	<u>9215B (2004)</u>	<u>\$152</u>
	<u>Z3</u>	<u>SimPlate</u>	<u>\$152</u>
<u>Heterotrophic Plate Count (For Bottled Water Only)</u>	<u>C</u>	<u>9215D (2004)</u>	<u>\$152</u>
<u>Microscopic Particulate Analysis</u>	<u>P1</u>	<u>910/9-92-029</u>	<u>\$228</u>
<u>Viruses</u>	<u>P2</u>	<u>600/R-95/178</u>	<u>\$381</u>
<u>Coliphage</u>	<u>A4.37</u>	<u>1601</u>	<u>\$228</u>
	<u>A4.38</u>	<u>1602</u>	<u>\$228</u>
2. <u>Inorganic Chemistry and Physical Properties of Drinking Water</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Alkalinity</u>	<u>C</u>	<u>2320B (2011)</u>	<u>\$19</u>
<u>Asbestos</u>	<u>A4.30</u>	<u>100.1 (9/83)</u>	<u>\$503</u>



	<u>A4.31</u>	<u>100.2 (6/94)</u>	<u>\$503</u>
<u>Bromate</u>	<u>A4.1</u>	<u>317.0 (2.0)</u>	<u>\$76</u>
	<u>A4.3</u>	<u>326.0 (1.0)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
		<u>321.8 (1.0)</u>	<u>\$152</u>
	<u>A4.41</u>	<u>302.0 (1.0)</u>	<u>\$26</u>
<u>Bromide</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A4.1</u>	<u>317.0 (2.0)</u>	<u>\$76</u>
	<u>A4.3</u>	<u>326.0 (1.0)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
<u>Calcium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3500-Ca B (2011)</u>	<u>\$76</u>
<u>Carbon, Dissolved Organic</u>	<u>A4.12</u>	<u>415.3 (1.1)</u>	<u>\$76</u>
	<u>A4.13</u>	<u>415.3 (1.2)</u>	<u>\$76</u>
	<u>C</u>	<u>5310B (2011)</u>	<u>\$39</u>
		<u>5310C (2011)</u>	<u>\$39</u>
		<u>5310D (2011)</u>	<u>\$39</u>
<u>Carbon, Total Organic</u>	<u>A4.12</u>	<u>415.3 (1.1)</u>	<u>\$76</u>
	<u>A4.13</u>	<u>415.3 (1.2)</u>	<u>\$76</u>
	<u>C</u>	<u>5310B (2011)</u>	<u>\$39</u>
		<u>5310C (2011)</u>	<u>\$39</u>
		<u>5310D (2011)</u>	<u>\$39</u>
<u>Chloride</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-CI B (2011)</u>	<u>\$39</u>
		<u>4500-CI D (2011)</u>	<u>\$39</u>
		<u>4110B (2011)</u>	<u>\$26</u>
<u>Chloramine</u>	<u>C</u>	<u>4500-CI F (2011)</u>	<u>\$39</u>
		<u>4500-CI G (2011)</u>	<u>\$76</u>
<u>Chlorate</u>	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
<u>Chlorine, Total Residual and Free</u>	<u>A4.44</u>	<u>334.0 (9/2000)</u>	<u>\$39</u>
	<u>C</u>	<u>4500-CI D (2011)</u>	<u>\$39</u>
		<u>4500-CI E (2011)</u>	<u>\$39</u>

		<u>4500-CI F (2011)</u>	<u>\$39</u>
		<u>4500-CI G (2011)</u>	<u>\$39</u>
		<u>4500-CI H (2011)</u>	<u>\$39</u>
		<u>4500-CI I (2011)</u>	<u>\$39</u>
<u>Chlorine Dioxide</u>	<u>A4.4</u>	<u>327.0 (1.1)</u>	<u>\$76</u>
	<u>C</u>	<u>4500-CIO₂ E (2011)</u>	<u>\$39</u>
	<u>C7</u>	<u>ChlordioX Plus</u>	<u>\$79</u>
<u>Chlorite</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A4.1</u>	<u>317.0 (2.0)</u>	<u>\$76</u>
	<u>A4.3</u>	<u>326.0 (1.0)</u>	<u>\$76</u>
	<u>A4.4</u>	<u>327.0 (1.1)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-CIO₂ E (2011)</u>	<u>\$39</u>
	<u>C7</u>	<u>ChlordioX Plus</u>	<u>\$79</u>
<u>Color</u>	<u>C</u>	<u>2120B (2011)</u>	<u>\$32</u>
<u>Corrosivity</u>	<u>C</u>	<u>2330B (2010)</u>	<u>\$39</u>
<u>Cyanide</u>	<u>A2</u>	<u>335.4 (1.0)</u>	<u>\$76</u>
	<u>A6</u>	<u>QuikChem 10-204-00-1-X (2.1)</u>	<u>\$76</u>
	<u>C</u>	<u>4500-CN B (2011)</u>	<u>\$7</u>
		<u>4500-CN C (2011)</u>	<u>\$13</u>
		<u>4500-CN E (2011)</u>	<u>\$76</u>
		<u>4500-CN F (2011)</u>	<u>\$76</u>
	<u>E7</u>	<u>Kelada-01</u>	<u>\$76</u>
<u>Cyanide, Available/Amenable</u>	<u>A4.26</u>	<u>OIA-1677 DW</u>	<u>\$76</u>
	<u>C</u>	<u>4500-CN G (2011)</u>	<u>\$76</u>
	<u>I</u>	<u>D6888-04</u>	<u>\$76</u>
<u>Fluoride</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A3</u>	<u>380-75WE (2/76)</u>	<u>\$39</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-F B (2011)</u>	<u>\$39</u>
		<u>4500-F C (2011)</u>	<u>\$26</u>
		<u>4500-F D (2011)</u>	<u>\$39</u>
		<u>4500-F E (2011)</u>	<u>\$39</u>
<u>4110B (2011)</u>		<u>\$26</u>	



<u>Hardness</u>	<u>A1</u>	200.7 (4.4), Sum of Ca and Mg as their carbonates	\$10
	<u>C</u>	2340 B (2011), Sum of Ca and Mg as their carbonates	\$10
		2340 C (2011)	\$39
<u>Magnesium</u>	<u>A1</u>	200.7 (4.4)	\$10
		200.8 (5.4)	\$26
	<u>A4.10</u>	200.5 (4.2)	\$10
	<u>C</u>	3111B (2011)	\$26
		3500-Mg B (1997)	\$76
<u>Methylene Blue Active Substances</u>	<u>C</u>	5540 C (2011)	\$39
<u>Nitrate</u>	<u>A2</u>	300.0 (2.1)	\$26
		353.2 (2.0)	\$76
	<u>A5</u>	300.1 (1.0)	\$26
	<u>C</u>	4500-NO ₃ D (2011)	\$39
		4500-NO ₃ E (2011)	\$76
		4500-NO ₃ F (2011)	\$76
		4110B (2011)	\$26
<u>Nitrite</u>	<u>A2</u>	300.0 (2.1)	\$26
		353.2 (2.0)	\$76
	<u>A5</u>	300.1 (1.0)	\$26
	<u>C</u>	4500-NO ₂ B (2011)	\$76
		4500-NO ₃ E (2011)	\$76
		4500-NO ₃ F (2011)	\$76
		4110B (2011)	\$26
<u>Odor</u>	<u>C</u>	2150B (2011)	\$32
<u>Orthophosphate</u>	<u>A2</u>	300.0 (2.1)	\$26
		365.1 (2.0)	\$76
	<u>A5</u>	300.1 (1.0)	\$26
	<u>C</u>	4500-P E (2011)	\$76
		4500-P F (2011)	\$76
4110B (2011)		\$26	
<u>Ozone</u>	<u>C</u>	4500-O ₃ B (2011)	\$39
<u>Perchlorate</u>	<u>A4.2</u>	314.1 (1.0)	\$76
	<u>A4.5</u>	331.0 (1.0)	\$76
	<u>A4.11</u>	332.0 (1.0)	\$76
	<u>A5</u>	314.0 (1.0)	\$76

<u>pH (Hydrogen Ion)</u>	<u>A</u>	<u>150.1</u>	<u>\$39</u>
		<u>150.2</u>	<u>\$39</u>
	<u>C</u>	<u>4500-H B (2011)</u>	<u>\$39</u>
<u>Residue, Filterable (TDS)</u>	<u>C</u>	<u>2540C (2011)</u>	<u>\$39</u>
<u>Sediment Concentration</u>	<u>I</u>	<u>D 3977-97</u>	<u>\$13</u>
<u>Silica</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>4500-SiO₂ C (2011)</u>	<u>\$76</u>
		<u>4500-SiO₂ D (2011)</u>	<u>\$76</u>
		<u>4500-SiO₂ E (2011)</u>	<u>\$76</u>
<u>Sodium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
<u>Specific Conductance</u>	<u>C</u>	<u>2510B (2011)</u>	<u>\$39</u>
<u>Sulfate</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
		<u>375.2 (2.0)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-SO₄ C (2011)</u>	<u>\$76</u>
		<u>4500-SO₄ D (2011)</u>	<u>\$76</u>
		<u>4500-SO₄ E (2011)</u>	<u>\$76</u>
		<u>4500-SO₄ F (2011)</u>	<u>\$76</u>
	<u>4110B (2011)</u>	<u>\$26</u>	
<u>Temperature, Degrees Celsius</u>	<u>C</u>	<u>2550 (2010)</u>	<u>\$13</u>
<u>Turbidity, Nephelometric (NTU)</u>	<u>A2</u>	<u>180.1 (2.0)</u>	<u>\$39</u>
	<u>C</u>	<u>2130B (2011)</u>	<u>\$39</u>
<u>UV-Absorption at 254 nm</u>	<u>A4.12</u>	<u>415.3 (1.1)</u>	<u>\$76</u>
	<u>A4.13</u>	<u>415.3 (1.2)</u>	<u>\$76</u>
	<u>C</u>	<u>5910B (2011)</u>	<u>\$76</u>
3. <u>Metals in Drinking Water</u>			
a. <u>Sample Preparation for Metals in Drinking Water</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Acid Extractable Metals</u>	<u>C</u>	<u>3030C (2004)</u>	<u>\$7</u>
<u>Microwave Assisted Digestion</u>	<u>C</u>	<u>3030K (2004)</u>	<u>\$7</u>
<u>Nitric Acid</u>	<u>C</u>	<u>3030E (2004)</u>	<u>\$7</u>
<u>Nitric Acid/Hydrochloric Acid</u>	<u>C</u>	<u>3030F (2004)</u>	<u>\$7</u>



<u>Nitric Acid/Perchloric Acid</u>	<u>C</u>	<u>3030H (2004)</u>	<u>\$7</u>
<u>Nitric Acid/Perchloric Acid/Hydrofluoric Acid</u>	<u>C</u>	<u>3030I (2004)</u>	<u>\$7</u>
<u>Nitric Acid/Sulfuric Acid</u>	<u>C</u>	<u>3030G (2004)</u>	<u>\$7</u>
<u>Preliminary Filtration</u>	<u>C</u>	<u>3030B (2004)</u>	<u>\$7</u>
b. <u>Methods to Analyze Metals in Drinking Water</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Aluminum</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111D (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Antimony</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
<u>Arsenic</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
		<u>3114B (2011)</u>	<u>\$76</u>
<u>Barium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111D (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Beryllium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
<u>Cadmium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>

<u>Chromium, Hexavalent by IC</u>	<u>A4.43</u>	<u>218.7 (1.0)</u>	<u>\$116</u>
<u>Chromium, Total</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
<u>Cobalt</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
<u>Copper</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Iron</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Lead</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
<u>Manganese</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Mercury</u>	<u>A</u>	<u>245.2</u>	<u>\$52</u>
	<u>A1</u>	<u>245.1 (3.0)</u>	<u>\$52</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>C</u>	<u>3112B (2011)</u>	<u>\$52</u>
<u>Molybdenum</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
<u>Nickel</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>



		<u>3113B (2010)</u>	<u>\$26</u>
<u>Selenium</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
		<u>3114B (2011)</u>	<u>\$76</u>
<u>Silver</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Strontium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>C</u>	<u>3500-Sr B (2011)</u>	<u>\$26</u>
		<u>3500-Sr C (2011)</u>	<u>\$20</u>
		<u>3500-Sr D (2011)</u>	<u>\$26</u>
<u>Thallium</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
<u>Uranium</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>C</u>	<u>7500 U-C (2011)</u>	<u>\$206</u>
	<u>I</u>	<u>D3972-97, 02</u>	<u>\$206</u>
		<u>D5174-97, 02</u>	<u>\$206</u>
<u>Vanadium</u>	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
<u>Zinc</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
4. <u>Organic Chemistry of Drinking Water</u>			
a. <u>Methods to Comply with National Primary Drinking Water Regulations</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>



<p><u>Disinfectant Byproducts, Solvents and Pesticides:</u> <u>Alachlor</u> <u>Atrazine</u> <u>Dibromochloropropane</u> <u>Endrin</u> <u>Ethylene dibromide</u> <u>Heptachlor</u> <u>Heptachlorepoide</u> <u>Hexachlorobenzene</u> <u>Hexachlorocyclopentadiene</u> <u>Lindane</u> <u>Methoxychlor</u> <u>Simazine</u> <u>1,1,2-Trichloroethane</u> <u>Trichloroethylene</u> <u>1,1,1-Trichloroethane</u> <u>Tetrachloroethylene</u> <u>Carbontetrachloride</u> <u>Chloroform</u> <u>Bromodichloromethane</u> <u>Dibromochloromethane</u> <u>Bromoform</u> <u>Total Trihalomethanes</u></p>	<p><u>D3</u></p>	<p><u>551.1 (1.0)</u></p>	<p><u>\$116</u></p>
<p><u>VOCs by GC:</u> <u>Benzene</u> <u>Carbon Tetrachloride</u> <u>(mono) Chlorobenzene</u> <u>o-Dichlorobenzene</u> <u>para-Dichlorobenzene</u> <u>1,2-Dichloroethane</u> <u>cis-1,2-Dichloroethylene</u> <u>Trans-1,2-Dichloroethylene</u> <u>Dichloromethane</u> <u>1,2-Dichloropropane</u> <u>Ethylbenzene</u> <u>Styrene</u> <u>Tetrachloroethylene</u> <u>1,1,1-Trichloroethane</u> <u>Trichloroethylene</u> <u>Toluene</u> <u>1,2,4-Trichlorobenzene</u> <u>1,1-Dichloroethylene</u> <u>1,1,2-Trichloroethane</u> <u>Vinyl chloride</u> <u>Xylenes, Total</u> <u>Chloroform</u> <u>Bromodichloromethane</u> <u>Dibromochloromethane</u></p>	<p><u>D3</u></p>	<p><u>502.2 (2.1)</u></p>	<p><u>\$152</u></p>
<p><u>VOCs by GC-MS:</u> <u>Benzene</u> <u>Carbon Tetrachloride</u> <u>(mono) Chlorobenzene</u> <u>o-Dichlorobenzene</u> <u>para-Dichlorobenzene</u> <u>1,2-Dichloroethane</u> <u>cis-1,2-Dichloroethylene</u> <u>Trans-1,2-Dichloroethylene</u> <u>Dichloromethane</u> <u>1,2-Dichloropropane</u></p>	<p><u>A4.19</u></p>	<p><u>524.4</u></p>	<p><u>\$152</u></p>



<p><u>Ethylbenzene</u> <u>Styrene</u> <u>Tetrachloroethylene</u> <u>1,1,1-Trichloroethane</u> <u>Trichloroethylene</u> <u>Toluene</u> <u>1,2,4-Trichlorobenzene</u> <u>1,1-Dichloroethylene</u> <u>1,1,2-Trichloroethane</u> <u>Vinyl Chloride</u> <u>Xylenes, Total</u> <u>Chloroform</u> <u>Bromodichloromethane</u> <u>Dibromochloromethane</u></p>	<p><u>D3</u></p>	<p><u>524.2 (4.1)</u></p>	<p><u>\$152</u></p>
<p><u>VOCs by GC:</u> <u>Benzene</u> <u>Carbon Tetrachloride</u> <u>(mono) Chlorobenzene</u> <u>o-Dichlorobenzene</u> <u>para-Dichlorobenzene</u> <u>1,2-Dichloroethane</u> <u>cis-1,2-Dichloroethylene</u> <u>Trans-1,2-Dichloroethylene</u> <u>Dichloromethane</u> <u>1,2-Dichloropropane</u> <u>Ethylbenzene</u> <u>Styrene</u> <u>Tetrachloroethylene</u> <u>1,1,1-Trichloroethane</u> <u>Trichloroethylene</u> <u>Toluene</u> <u>1,2,4-Trichlorobenzene</u> <u>1,1-Dichloroethylene</u> <u>1,1,2-Trichloroethane</u> <u>Vinyl chloride</u> <u>Xylenes, Total</u> <u>Chloroform</u> <u>Bromodichloromethane</u> <u>Dibromochloromethane</u> <u>Bromoform</u> <u>Total Trihalomethanes</u> <u>Dibromochloropropane</u> <u>Ethylenedibromide</u></p>	<p><u>A4.20</u></p>	<p><u>524.3 (1.0)</u></p>	<p><u>\$152</u></p>
<p><u>EDB/DBCP</u></p>	<p><u>D3</u></p>	<p><u>504.1 (1.1)</u></p>	<p><u>\$116</u></p>



<p><u>Pesticides and PCBs by GC (Microextraction):</u> <u>Alachlor</u> <u>Atrazine</u> <u>Chlorodane</u> <u>Endrin</u> <u>Heptachlor</u> <u>Heptachlor Epoxide</u> <u>Hexachlorobenzene</u> <u>Hexachlorocyclopentadiene</u> <u>Lindane</u> <u>Methoxychlor</u> <u>Aroclor 1016</u> <u>Aroclor 1221</u> <u>Aroclor 1232</u> <u>Aroclor 1242</u> <u>Aroclor 1248</u> <u>Aroclor 1254</u> <u>Aroclor 1260</u> <u>Simazine</u> <u>Toxaphene</u></p>	<p><u>D3</u></p>	<p><u>505 (2.1)</u></p>	<p><u>\$152</u></p>
<p><u>Phthalate and Adipate Esters by GC-PID:</u> <u>Di (2-ethylhexyl)adipate</u> <u>Di (2-ethylhexyl)phthalate</u></p>	<p><u>D3</u></p>	<p><u>506 (1.1)</u></p>	<p><u>\$116</u></p>
<p><u>Pesticides by GC-NPD</u> <u>Atrazine</u> <u>Alachlor</u> <u>Simazine</u></p>	<p><u>D3</u></p>	<p><u>507 (2.1)</u></p>	<p><u>\$116</u></p>
<p><u>Chlorinated Pesticides by GC-ECD:</u> <u>Chlordane</u> <u>Endrin</u> <u>Heptachlor</u> <u>Heptachlor Epoxide</u> <u>Hexachlorobenzene</u> <u>Hexachlorocyclopentadiene</u> <u>Lindane</u> <u>Methoxychlor</u> <u>Aroclor 1016</u> <u>Aroclor 1221</u> <u>Aroclor 1232</u> <u>Aroclor 1242</u> <u>Aroclor 1248</u> <u>Aroclor 1254</u> <u>Aroclor 1260</u> <u>Toxaphene</u></p>	<p><u>D3</u></p>	<p><u>508 (3.1)</u></p>	<p><u>\$152</u></p>



<p><u>Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD:</u> <u>Alachlor</u> <u>Atrazine</u> <u>Chlorodane</u> <u>Endrin</u> <u>Heptachlor</u> <u>Heptachlor Epoxide</u> <u>Hexachlorobenzene</u> <u>Hexachlorocyclopentadiene</u> <u>Lindane</u> <u>Methoxychlor</u> <u>Aroclor 1016</u> <u>Aroclor 1221</u> <u>Aroclor 1232</u> <u>Aroclor 1242</u> <u>Aroclor 1248</u> <u>Aroclor 1254</u> <u>Aroclor 1260</u> <u>Simazine</u> <u>Toxaphene</u></p>	<p><u>D3</u></p>	<p><u>508.1(2.0)</u></p>	<p><u>\$152</u></p>
<p><u>Organics by GC-MS:</u> <u>Alachlor</u> <u>Atrazine</u> <u>Benzo(a)pyrene</u> <u>Chlorodane</u> <u>Di (2-ethylhexyl)adipate</u> <u>Di (2-ethylhexyl)phthalate</u> <u>Endrin</u> <u>Heptachlor</u> <u>Heptachlor Epoxide</u> <u>Hexachlorobenzene</u> <u>Hexachlorocyclopentadiene</u> <u>Lindane</u> <u>Methoxychlor</u> <u>Aroclor 1016</u> <u>Aroclor 1221</u> <u>Aroclor 1232</u> <u>Aroclor 1242</u> <u>Aroclor 1248</u> <u>Aroclor 1254</u> <u>Aroclor 1260</u> <u>Pentachlorophenol</u> <u>Simazine</u> <u>Toxaphene</u></p>	<p><u>D3</u></p>	<p><u>525.2 (2.0)</u></p>	<p><u>\$152</u></p>
<p><u>1, 4-Dioxane by GC/MS</u></p>	<p><u>A4.21</u></p>	<p><u>522</u></p>	<p><u>\$152</u></p>
<p><u>Carbamates by HPLC/Post Column:</u></p>	<p><u>A4.8</u></p>	<p><u>531.2 (1.0)</u></p>	<p><u>\$116</u></p>
<p><u>Carbofuran</u></p>	<p><u>D3</u></p>	<p><u>531.1 (3.1)</u></p>	<p><u>\$116</u></p>
<p><u>Oxamyl</u></p>			
<p><u>Chlorinated Acids and Dalapon by GC-ECD:</u></p>	<p><u>A4.6</u></p>	<p><u>515.4 (1.0)</u></p>	<p><u>\$116</u></p>
<p><u>2,4-D</u></p>			
<p><u>Dalapon</u></p>	<p><u>A5</u></p>	<p><u>515.3 (1.0)</u></p>	<p><u>\$116</u></p>
<p><u>Dinoseb</u></p>			
<p><u>Pentachlorophenol</u></p>	<p><u>D</u></p>	<p><u>515.1 (4.0)</u></p>	<p><u>\$116</u></p>
<p><u>Picloram</u></p>			
<p><u>Silvex (2,4,5-TP)</u></p>			

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



<u>EDB/DBCP</u>	<u>D3</u>	<u>504.1 (1.1)</u>	<u>\$26</u>
<u>Pesticides and PCBs by GC (Microextraction)</u>	<u>D3</u>	<u>505 (2.1)</u>	<u>\$26</u>
<u>Phthalate and Adipate Esters by GC-PID</u>	<u>D3</u>	<u>506 (1.1)</u>	<u>\$26</u>
<u>Pesticides by GC-NPD</u>	<u>D3</u>	<u>507 (2.1)</u>	<u>\$26</u>
<u>Chlorinated Pesticides by GC-ECD</u>	<u>D3</u>	<u>508 (3.1)</u>	<u>\$26</u>
<u>Chlorinated Pesticides, Herbicides, Organohalides by GC-ECD</u>	<u>D3</u>	<u>508.1(2.0)</u>	<u>\$26</u>
<u>Organics by GC-MS</u>	<u>D3</u>	<u>525.2 (2.0)</u>	<u>\$26</u>
<u>Carbamates by HPLC/Post Column</u>	<u>A4.8</u>	<u>531.2 (1.0)</u>	<u>\$26</u>
	<u>D3</u>	<u>531.1 (3.1)</u>	<u>\$26</u>
<u>Chlorinated Acids and Dalapon by GC-ECD</u>	<u>A4.6</u>	<u>515.4 (1.0)</u>	<u>\$26</u>
	<u>A5</u>	<u>515.3 (1.0)</u>	<u>\$26</u>
	<u>D</u>	<u>515.1 (4.0)</u>	<u>\$26</u>
<u>Chlorinated Acids By GC-ECD</u>	<u>D3</u>	<u>515.2 (1.1)</u>	<u>\$26</u>
<u>PAHs By HPLC/UV/FL</u>	<u>D1</u>	<u>550 (7/90)</u>	<u>\$26</u>
		<u>550.1 (7/90)</u>	<u>\$26</u>
<u>Haloacetic Acids and Dalapon by GC-ECD</u>	<u>D2</u>	<u>552.1 (1.0)</u>	<u>\$26</u>
	<u>D3</u>	<u>552.2 (1.0)</u>	<u>\$26</u>
<u>Chlorinated Acids By HPLC/PDA/UV</u>	<u>D2</u>	<u>555 (1.0)</u>	<u>\$26</u>
<u>Dioxins and Furans</u>	<u>A4.22</u>	<u>1613 Rev B (10/94)</u>	<u>\$65</u>
<u>Paraquat</u>	<u>A5</u>	<u>549.2 (1.0)</u>	<u>\$26</u>
<u>Benzidines and Nitrogen Compounds</u>	<u>D2</u>	<u>553 (1.1)</u>	<u>\$116</u>
<u>Carbonyl Compounds</u>	<u>D2</u>	<u>554 (1.0)</u>	<u>\$116</u>
<u>Phenols</u>	<u>A5</u>	<u>528 (1.0)</u>	<u>\$152</u>
<u>Phenylurea Compounds</u>	<u>A5</u>	<u>532 (1.0)</u>	<u>\$116</u>
<u>Selected Semivolatiles</u>	<u>A5</u>	<u>526 (1.0)</u>	<u>\$152</u>
<u>Pesticides and Flame Retardants by GCMS</u>	<u>A4.7</u>	<u>527 (1.0)</u>	<u>\$152</u>
<u>Explosives and Related Compounds</u>	<u>A4.15</u>	<u>529 (1.0)</u>	<u>\$152</u>
<u>Acetanilide Degradation Products</u>	<u>A4.16</u>	<u>535 (1.1)</u>	<u>\$194</u>
<u>Acetanilide Parent Compound</u>	<u>D3</u>	<u>525.2 (2.0)</u>	<u>\$26</u>
<u>Nitrosamines by MS/MS</u>	<u>A4.14</u>	<u>521 (1.0)</u>	<u>\$194</u>

5. Radiochemistry of Drinking Water

<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Cesium</u>	<u>B</u>	<u>p. 4</u>	<u>\$206</u>
	<u>C</u>	<u>7500-Cs B (2011)</u>	<u>\$206</u>
		<u>7120 (2011)</u>	<u>\$206</u>
	<u>J1</u>	<u>R-1110-76</u>	<u>\$206</u>



		<u>R-1111-76</u>	<u>\$206</u>
	<u>L</u>	<u>901</u>	<u>\$206</u>
		<u>901.1</u>	<u>\$206</u>
	<u>U</u>	<u>Ga-01-R</u>	<u>\$206</u>
	<u>W</u>	<u>p. 92</u>	<u>\$206</u>
<u>Gamma Emitters</u>	<u>C</u>	<u>7500-Cs B (2011)</u>	<u>\$206</u>
		<u>7500-I B (2011)</u>	<u>\$206</u>
		<u>7120 (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>901.1</u>	<u>\$206</u>
		<u>901.0</u>	<u>\$206</u>
		<u>902.0</u>	<u>\$206</u>
	<u>U</u>	<u>Ga-01-R</u>	<u>\$206</u>
<u>W</u>	<u>p. 92</u>	<u>\$206</u>	
<u>Gross Alpha</u>	<u>B</u>	<u>EPA 00-02</u>	<u>\$206</u>
	<u>C</u>	<u>7110C (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>900.0</u>	<u>\$206</u>
	<u>V</u>	<u>00-01</u>	<u>\$206</u>
		<u>00-02</u>	<u>\$206</u>
<u>Gross Alpha and Beta</u>	<u>B</u>	<u>p. 1</u>	<u>\$206</u>
	<u>C</u>	<u>7110B (2011)</u>	<u>\$206</u>
	<u>Jl</u>	<u>R-1120-76</u>	<u>\$206</u>
	<u>L</u>	<u>900.0</u>	<u>\$206</u>
	<u>V</u>	<u>00-01</u>	<u>\$206</u>
	<u>W</u>	<u>p. 1</u>	<u>\$206</u>
<u>Iodine</u>	<u>B</u>	<u>p. 6, p. 9</u>	<u>\$206</u>
	<u>C</u>	<u>7120 (2011)</u>	<u>\$206</u>
		<u>7500-I B (2011)</u>	<u>\$206</u>
		<u>7500-I C (2011)</u>	<u>\$206</u>



		<u>7500-I D (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>901.1</u>	<u>\$206</u>
		<u>902.0</u>	<u>\$206</u>
	<u>U</u>	<u>Ga-01-R</u>	<u>\$206</u>
	<u>W</u>	<u>p. 92</u>	<u>\$206</u>
<u>Radium 226</u>	<u>B</u>	<u>p. 13, p. 16</u>	<u>\$206</u>
	<u>C</u>	<u>7500-Ra B (2011)</u>	<u>\$206</u>
		<u>7500-Ra C (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>903.0</u>	<u>\$206</u>
		<u>903.1</u>	<u>\$206</u>
	<u>U</u>	<u>Ra-04</u>	<u>\$206</u>
		<u>Ra-05</u>	<u>\$206</u>
	<u>V</u>	<u>EPA Ra-03</u>	<u>\$206</u>
		<u>EPA Ra-04</u>	<u>\$206</u>
	<u>W</u>	<u>p. 19</u>	<u>\$206</u>
<u>Radium 228</u>	<u>B</u>	<u>p. 24</u>	<u>\$206</u>
	<u>C</u>	<u>7500-Ra D (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>904.0</u>	<u>\$206</u>
	<u>V</u>	<u>Ra-05</u>	<u>\$206</u>
	<u>W</u>	<u>p. 19</u>	<u>\$206</u>
<u>Strontium</u>	<u>B</u>	<u>p. 29</u>	<u>\$206</u>
	<u>C</u>	<u>7500-Sr B (2011)</u>	<u>\$206</u>
	<u>J1</u>	<u>R-1160-76</u>	<u>\$206</u>
	<u>L</u>	<u>905.0</u>	<u>\$206</u>
	<u>U</u>	<u>Sr-01</u>	<u>\$206</u>
		<u>Sr-02</u>	<u>\$206</u>
	<u>V</u>	<u>Sr-04</u>	<u>\$206</u>
<u>W</u>	<u>p. 65</u>	<u>\$206</u>	
<u>Tritium</u>	<u>B</u>	<u>p. 34</u>	<u>\$206</u>
	<u>C</u>	<u>7500-³H B (2011)</u>	<u>\$206</u>
	<u>J1</u>	<u>R-1171-76</u>	<u>\$206</u>

Uranium	<u>L</u>	<u>906.0</u>	<u>\$206</u>
	<u>V</u>	<u>H-02</u>	<u>\$206</u>
	<u>W</u>	<u>p.87</u>	<u>\$206</u>
	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A7</u>	<u>D5174-97, 02</u>	<u>\$206</u>
	<u>C</u>	<u>7500-U B (2011)</u>	<u>\$206</u>
		<u>7500-U C (2011)</u>	<u>\$206</u>
	<u>JI</u>	<u>R-1180-76</u>	<u>\$206</u>
		<u>R-1181-76</u>	<u>\$206</u>
		<u>R-1182-76</u>	<u>\$206</u>
	<u>L</u>	<u>908.0</u>	<u>\$206</u>
		<u>908.1</u>	<u>\$206</u>
	<u>U</u>	<u>U-02</u>	<u>\$206</u>
		<u>U-04</u>	<u>\$206</u>
	<u>V</u>	<u>00-07</u>	<u>\$206</u>
<u>W</u>	<u>p. 33</u>	<u>\$206</u>	

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
<u>Ascaris lumbricoides</u>	<u>C8</u>	<u>10550</u>	<u>\$228</u>
	<u>P3</u>	<u>UofA2000</u>	<u>\$228</u>
<u>Coliforms, Fecal, number per 100 ml or number per gram dry weight, by Membrane Filter</u>	<u>C</u>	<u>9222D (2006)</u>	<u>\$228</u>
<u>Coliforms, Fecal, by Multiple Tube Fermentation (may be used for sewage sludge), number per 100 ml by MPN</u>	<u>C</u>	<u>9221C, E (2006)</u>	<u>\$228</u>
<u>Coliforms, Total, by Membrane Filter</u>	<u>C</u>	<u>9222B (2006)</u>	<u>\$228</u>
<u>Coliforms, Total, by Multiple Tube Fermentation</u>	<u>C</u>	<u>9221B (2006)</u>	<u>\$228</u>
<u>Control of pathogens and vectors in sewage</u>	<u>E3</u>	<u>625/R-92/013</u>	<u>\$76</u>
<u>Cryptosporidium</u>	<u>A4.32</u>	<u>1622</u>	<u>\$381</u>
<u>Cryptosporidium and Giardia</u>	<u>A4.39</u>	<u>1623</u>	<u>\$381</u>
	<u>C</u>	<u>9711B (2011)</u>	<u>\$381</u>
	<u>P2</u>	<u>600/R-95/178</u>	<u>\$381</u>
<u>E. coli, number per 100 ml, MPN multiple tube</u>	<u>C</u>	<u>9222B (2006)</u>	<u>\$228</u>
<u>E. coli, number per 100 ml, MPN multiple tube/multiple well</u>	<u>C</u>	<u>9223B (2004)</u>	<u>\$228</u>
<u>E. coli by m-ColiBlue</u>	<u>C1 and Z6</u>	<u>Hach 10029</u>	<u>\$228</u>



<u>Enterococci, number per 100 ml MF</u>	<u>C</u>	<u>9230C (2007)</u>	<u>\$228</u>
<u>Escherichia coli by Colilert MPN, in conjunction with SM 9221B and 9221C</u>	<u>C</u>	<u>9223B (2004)</u>	<u>\$152</u>
<u>Escherichia coli in conjunction with SM 9221B and 9221C</u>	<u>C</u>	<u>9221F (2006)</u>	<u>\$152</u>
<u>Entamoeba histolytica</u>	<u>C</u>	<u>9711C (2011)</u>	<u>\$228</u>
<u>Enteric viruses</u>	<u>I</u>	<u>D4994-89</u>	<u>\$381</u>
<u>Enteric viruses in sewage sludge</u>	<u>E3</u>	<u>EPA 625/R-92/103</u>	<u>\$381</u>
<u>Fecal Coliforms by Colilert-18 (APP and Reuse only)</u>	<u>C</u>	<u>9020B (2005)/9223B (2004)</u>	<u>\$152</u>
<u>Fecal Coliforms by Colilert-18 (NPDES-ATP Permits only)</u>	<u>C</u>	<u>9020B (2005)/9223B (2004)</u>	<u>\$152</u>
<u>Fecal Coliforms in sewage sludge by MTF</u>	<u>Z1</u>	<u>EPA 1681</u>	<u>\$228</u>
<u>Helminth Ova in sludge</u>	<u>Z4</u>	<u>600/1-87-014</u>	<u>\$381</u>
<u>Salmonella in sludge MPN</u>	<u>E5</u>	<u>9260D (1988)</u>	<u>\$228</u>
<u>Salmonella in Sewage Sludge (Biosolids) by Modified MSRV</u>	<u>A4.34</u>	<u>1682</u>	<u>\$228</u>
<u>Streptococcus, Fecal, by Membrane Filter</u>	<u>C</u>	<u>9230C (2007)</u>	<u>\$194</u>
<u>Streptococcus, Fecal, by Multiple Tube Fermentation</u>	<u>C</u>	<u>9230B (2007)</u>	<u>\$194</u>
<u>Viruses</u>	<u>C</u>	<u>9510 (2011)</u>	<u>\$381</u>
	<u>P</u>	<u>Methods for Virology</u>	<u>\$381</u>
	<u>P2</u>	<u>600/R-95/178</u>	<u>\$381</u>

2. Wastewater Inorganic Chemistry, Nutrients and Demand

<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Acid Mine Drainage</u>	<u>A4.27</u>	<u>1627</u>	<u>\$303</u>
<u>Acidity</u>	<u>C</u>	<u>2310B (2011)</u>	<u>\$39</u>
<u>Alkalinity, Total</u>	<u>A</u>	<u>310.2 (1974)</u>	<u>\$19</u>
	<u>C</u>	<u>2320B (2011)</u>	<u>\$19</u>
<u>Ammonia</u>	<u>A2</u>	<u>350.1 (2.0)</u>	<u>\$39</u>
	<u>C</u>	<u>4500-NH₃ B (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ C (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ D (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ E (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ G (2011)</u>	<u>\$39</u>
<u>C1</u>	<u>Hach 10205</u>	<u>\$39</u>	
<u>Ammonia in sludge only</u>	<u>E5</u>	<u>4500-NH₃B&C (1990)</u>	<u>\$39</u>
<u>Biochemical Oxygen Demand/Carbonaceous Biochemical Oxygen Demand</u>	<u>C</u>	<u>5210B (2011)</u>	<u>\$152</u>
	<u>C3</u>	<u>Hach 10360</u>	<u>\$152</u>
<u>Boron</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>

	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>4500-B B (2011)</u>	<u>\$76</u>
<u>Bromide</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
<u>Calcium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3500-Ca B (2011)</u>	<u>\$39</u>
<u>Carbon, Total Organic (TOC)</u>		<u>5310 B (2011)</u>	<u>\$39</u>
	<u>C</u>	<u>5310 C (2011)</u>	<u>\$39</u>
		<u>5310D (2011)</u>	<u>\$39</u>
<u>Chemical Oxygen Demand</u>	<u>A</u>	<u>410.3 (1978)</u>	<u>\$39</u>
	<u>A2</u>	<u>410.4 (2.0)</u>	<u>\$76</u>
		<u>5220 B (2011)</u>	<u>\$39</u>
	<u>C</u>	<u>5220 C (2011)</u>	<u>\$39</u>
		<u>5220 D (2011)</u>	<u>\$76</u>
	<u>C1</u>	<u>Hach 8000</u>	<u>\$39</u>
<u>Chloride</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
		<u>4500-CI B (2011)</u>	<u>\$39</u>
		<u>4500-CI C (2011)</u>	<u>\$39</u>
	<u>C</u>	<u>4500-CI D (2011)</u>	<u>\$39</u>
		<u>4500-CI E (2011)</u>	<u>\$39</u>
<u>Chlorine, Total Residual</u>		<u>4500-CI B (2011)</u>	<u>\$39</u>
		<u>4500-CI C (2011)</u>	<u>\$39</u>
	<u>C</u>	<u>4500-CI D (2011)</u>	<u>\$39</u>
		<u>4500-CI E (2011)</u>	<u>\$39</u>
		<u>4500-CI F (2011)</u>	<u>\$39</u>
		<u>4500-CI G (2011)</u>	<u>\$39</u>
	<u>C1</u>	<u>Hach 10014</u>	<u>\$39</u>
<u>Color</u>	<u>C</u>	<u>2120 B (2011)</u>	<u>\$32</u>
<u>Cyanide, Available</u>	<u>C</u>	<u>4500-CN G (2011)</u>	<u>\$76</u>



	<u>E7</u>	<u>Kelada-01</u>	<u>\$76</u>
	<u>Y</u>	<u>OIA-1677-09 (8/99)</u>	<u>\$76</u>
<u>Cyanide, Free</u>	<u>Y</u>	<u>OIA-1677-09 (8/99)</u>	<u>\$76</u>
<u>Cyanide, Total</u>	<u>A2</u>	<u>335.4 (1.0)</u>	<u>\$76</u>
	<u>A6</u>	<u>QuickChem 10-204-00-1-X (2.1)</u>	<u>\$76</u>
	<u>C</u>	<u>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)</u>	<u>\$89</u>
	<u>E7</u>	<u>Kelada-01</u>	<u>\$76</u>
<u>Fluoride</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-F B (2011)</u>	<u>\$39</u>
		<u>4500-F C (2011)</u>	<u>\$39</u>
		<u>4500-F D (2011)</u>	<u>\$39</u>
<u>4500-F E (2011)</u>		<u>\$39</u>	
<u>Hardness</u>	<u>A</u>	<u>130.1 (1976)</u>	<u>\$10</u>
	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>2340B (2011)</u>	<u>\$39</u>
<u>2340C (2011)</u>		<u>\$39</u>	
<u>Kjeldahl, Total Nitrogen</u>	<u>A</u>	<u>351.1 (1978)</u>	<u>\$76</u>
	<u>A2</u>	<u>351.2 (2.0)</u>	<u>\$76</u>
	<u>C</u>	<u>Combination of 4500-NH₃ B (2011) and either 4500-N_{org} B (2011) or 4500-N_{org} C (2011)</u>	<u>\$115</u>
		<u>4500-NH₃ C (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ D (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ E (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ F (2011)</u>	<u>\$39</u>
		<u>4500-NH₃ G (2011)</u>	<u>\$39</u>
	<u>4500-NH₃ H (2011)</u>	<u>\$39</u>	
<u>Z9</u>	<u>PAI-DK01 (12/94)</u>	<u>\$76</u>	
<u>Z10</u>	<u>PAI-DK02 (12/94)</u>	<u>\$76</u>	
<u>Z11</u>	<u>PAI-DK03 (12/94)</u>	<u>\$76</u>	
<u>Methylene Blue Active Substances</u>	<u>C</u>	<u>5540C (2011)</u>	<u>\$39</u>
<u>Nitrate (as N)</u>	<u>A</u>	<u>352.1 (1971)</u>	<u>\$76</u>

	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>3500-NO₃ D (2011)</u>	<u>\$39</u>
<u>Nitrate-Nitrite (as N)</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
		<u>353.2 (2.0)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-NO₃ E (2011)</u>	<u>\$76</u>
		<u>4500-NO₃ F (2011)</u>	<u>\$76</u>
		<u>4500-NO₃ H (2011)</u>	<u>\$76</u>
<u>Nitrite (as N)</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
		<u>353.2 (2.0)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-NO₂ B (2011)</u>	<u>\$76</u>
		<u>4500-NO₃ E (2011)</u>	<u>\$76</u>
		<u>4500-NO₃ F (2011)</u>	<u>\$76</u>
<u>Oil and Grease and Total Petroleum Hydrocarbons</u>	<u>A4.24</u>	<u>1664 Rev B</u>	<u>\$76</u>
	<u>C</u>	<u>5520B (2011)</u>	<u>\$76</u>
<u>Orthophosphate</u>	<u>A</u>	<u>365.3 (2.0)</u>	<u>\$76</u>
	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
		<u>365.1 (2.0)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-P E (2011)</u>	<u>\$76</u>
		<u>4500-P F (2011)</u>	<u>\$76</u>
<u>Oxygen-consumption Rate (SOUR)</u>	<u>C</u>	<u>2710B (2011)</u>	<u>\$39</u>
<u>Oxygen, Dissolved</u>	<u>C</u>	<u>4500-O B (2011)</u>	<u>\$26</u>
		<u>4500-O C (2011)</u>	<u>\$26</u>
		<u>4500-O D (2011)</u>	<u>\$26</u>
		<u>4500-O E (2011)</u>	<u>\$26</u>
		<u>4500-O F (2011)</u>	<u>\$26</u>
		<u>4500-O G (2011)</u>	<u>\$26</u>
	<u>C1</u>	<u>1002-8-2009</u>	<u>\$26</u>
	<u>C3</u>	<u>Hach 10360</u>	<u>\$26</u>
<u>pH (Hydrogen Ion)</u>	<u>A</u>	<u>150.2</u>	<u>\$39</u>
	<u>C</u>	<u>4500-H B (2011)</u>	<u>\$39</u>
<u>Phenols</u>	<u>A</u>	<u>420.1 (1978)</u>	<u>\$116</u>



	<u>A2</u>	<u>420.4 (1.0)</u>	<u>\$116</u>
	<u>C</u>	<u>5530 B (2010)</u>	<u>\$116</u>
		<u>5530 D (2010)</u>	<u>\$116</u>
<u>Phosphorus, Total</u>	<u>A</u>	<u>365.3 (1978)</u>	<u>\$76</u>
		<u>365.4 (1974)</u>	<u>\$76</u>
	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
	<u>A2</u>	<u>365.1 (2.0)</u>	<u>\$76</u>
	<u>C</u>	<u>4500-P B (2011)</u>	<u>\$76</u>
		<u>4500-P E (2011)</u>	<u>\$76</u>
		<u>4500-P F (2011)</u>	<u>\$76</u>
		<u>4500-P G (2011)</u>	<u>\$76</u>
<u>4500-P H (2011)</u>		<u>\$76</u>	
<u>Potassium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3500-K B (2011)</u>	<u>\$26</u>
<u>Residue, Filterable (TDS)</u>	<u>C</u>	<u>2540C (2011)</u>	<u>\$39</u>
	<u>E8</u>	<u>I-1750-85</u>	<u>\$39</u>
<u>Residue, Nonfilterable (TSS)</u>	<u>C</u>	<u>2540D (2011)</u>	<u>\$39</u>
<u>Residue, Settleable Solids</u>	<u>C</u>	<u>2540F (2011)</u>	<u>\$39</u>
<u>Residue, Total</u>	<u>C</u>	<u>2540B (2011)</u>	<u>\$39</u>
<u>Residue, Volatile</u>	<u>A</u>	<u>160.4 (1971)</u>	<u>\$39</u>
	<u>C</u>	<u>2540E (2011)</u>	<u>\$39</u>
<u>Silica, Dissolved</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>4500-SiO₂ B (2011)</u>	<u>\$76</u>
		<u>4500-SiO₂ C (2011)</u>	<u>\$76</u>
		<u>4500-SiO₂ E (2011)</u>	<u>\$76</u>
<u>4500-SiO₂ F (2011)</u>		<u>\$76</u>	
<u>Sodium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3500-Na B (2011)</u>	<u>\$26</u>
		<u>3500-Na D (2011)</u>	<u>\$26</u>
		<u>3111B (2011)</u>	<u>\$26</u>
<u>Sodium Azide</u>	<u>C</u>	<u>4110C (2011)</u>	<u>\$76</u>

<u>Specific Conductance</u>	<u>A</u>	<u>120.1 (1982)</u>	<u>\$39</u>
	<u>C</u>	<u>2510B (2011)</u>	<u>\$39</u>
<u>Sulfate</u>	<u>A2</u>	<u>300.0 (2.1)</u>	<u>\$26</u>
		<u>375.2 (2.0)</u>	<u>\$76</u>
	<u>A5</u>	<u>300.1 (1.0)</u>	<u>\$26</u>
	<u>C</u>	<u>4500-SO₄ C (2011)</u>	<u>\$76</u>
		<u>4500-SO₄ D (2011)</u>	<u>\$76</u>
		<u>4500-SO₄ E (2011)</u>	<u>\$76</u>
		<u>4500-SO₄ F (2011)</u>	<u>\$76</u>
	<u>4500-SO₄ G (2011)</u>	<u>\$76</u>	
<u>Sulfide (includes total and soluble)</u>	<u>C</u>	<u>4500-S²⁻ B (2011)</u>	<u>\$39</u>
		<u>4500-S²⁻ D (2011)</u>	<u>\$76</u>
		<u>4500-S²⁻ F (2011)</u>	<u>\$39</u>
		<u>4500-S²⁻ G (2011)</u>	<u>\$39</u>
	<u>C1</u>	<u>Hach 8131</u>	<u>\$39</u>
<u>Sulfite</u>	<u>C</u>	<u>4500-SO₃ B (2011)</u>	<u>\$76</u>
<u>Temperature, Degrees Celsius</u>	<u>C</u>	<u>2550B (2010)</u>	<u>\$13</u>
<u>Total, Fixed and Volatile Solids in Solid and Semisolid Samples in Sludge</u>	<u>C</u>	<u>2540G (2011)</u>	<u>\$39</u>
<u>Turbidity, NTU</u>	<u>A2</u>	<u>180.1 (2.0)</u>	<u>\$39</u>
	<u>C</u>	<u>2130B (2011)</u>	<u>\$39</u>
3. <u>Metals in Wastewater</u>			
a. <u>Sample Preparation for Metals in Wastewater</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Acid Extractable Metals</u>	<u>C</u>	<u>3030C (2004)</u>	<u>\$7</u>
<u>Digestion for Metals</u>	<u>C</u>	<u>3030D (2004)</u>	<u>\$7</u>
<u>Microwave Digestion</u>	<u>E6</u>	<u>CEM Microwave Digestion</u>	<u>\$7</u>
<u>Nitric Acid</u>	<u>C</u>	<u>3030E (2004)</u>	<u>\$7</u>
<u>Nitric Acid/Hydrochloric Acid</u>	<u>C</u>	<u>3030F (2004)</u>	<u>\$7</u>
<u>Nitric Acid/Perchloric Acid</u>	<u>C</u>	<u>3030H (2004)</u>	<u>\$7</u>
<u>Nitric Acid/Perchloric Acid/Hydrofluoric Acid</u>	<u>C</u>	<u>3030I (2004)</u>	<u>\$7</u>
<u>Nitric Acid/Sulfuric Acid</u>	<u>C</u>	<u>3030G (2004)</u>	<u>\$7</u>
<u>Preliminary Filtration</u>	<u>C</u>	<u>3030B (2004)</u>	<u>\$7</u>
b. <u>Methods to Analyze Metals in Wastewater</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Aluminum</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>



		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
		<u>3111D (2011)</u>	<u>\$26</u>
<u>Antimony</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>A4.25</u>	<u>1638</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Arsenic</u>	<u>A</u>	<u>206.5 (1978)</u>	<u>\$39</u>
	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
		<u>3500-As B (2011)</u>	<u>\$76</u>
<u>Barium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111D (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Beryllium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111D (2011)</u>	<u>\$26</u>
		<u>3111E (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Cadmium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>A4.25</u>	<u>1638</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>

		<u>3111C (2011)</u>	<u>\$26</u>	
		<u>3113B (2010)</u>	<u>\$26</u>	
		<u>3500-Cd D (2011)</u>	<u>\$76</u>	
<u>Chromium (VI) Hexavalent</u>	<u>A1</u>	<u>218.6 (3.3)</u>	<u>\$26</u>	
	<u>C</u>	<u>3500-Cr B (2011)</u>	<u>\$39</u>	
		<u>3111C (2011)</u>	<u>\$26</u>	
<u>Chromium, Total</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>	
		<u>200.8 (5.4)</u>	<u>\$26</u>	
		<u>200.9 (2.2)</u>	<u>\$26</u>	
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>	
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>	
		<u>3111C (2011)</u>	<u>\$26</u>	
		<u>3113B (2010)</u>	<u>\$26</u>	
		<u>3500-Cr B (2011)</u>	<u>\$76</u>	
	<u>Cobalt</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
			<u>200.8 (5.4)</u>	<u>\$26</u>
<u>200.9 (2.2)</u>			<u>\$26</u>	
<u>A4.10</u>		<u>200.5 (4.2)</u>	<u>\$10</u>	
<u>C</u>		<u>3111B (2011)</u>	<u>\$26</u>	
		<u>3111C (2011)</u>	<u>\$26</u>	
		<u>3113B (2010)</u>	<u>\$26</u>	
<u>Copper</u>		<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
			<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>200.9 (2.2)</u>		<u>\$26</u>	
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>	
	<u>A4.25</u>	<u>1638</u>	<u>\$26</u>	
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>	
		<u>3111C (2011)</u>	<u>\$26</u>	
		<u>3113B (2010)</u>	<u>\$26</u>	
		<u>3500-Cu B (2011)</u>	<u>\$76</u>	
		<u>3500-Cu C (2011)</u>	<u>\$76</u>	
<u>Gold</u>	<u>A</u>	<u>231.2 (1978)</u>	<u>\$26</u>	
	<u>A1</u>	<u>200.8 (5.4)</u>	<u>\$26</u>	
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>	
<u>Iridium</u>	<u>A</u>	<u>235.2 (1978)</u>	<u>\$26</u>	
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>	
<u>Iron</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>	



		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3111C (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
		<u>3500-Fe B (2011)</u>	<u>\$76</u>
<u>Lead</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>A4.25</u>	<u>1638</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3111C (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>3500-Pb B (2011)</u>		<u>\$76</u>	
<u>Lithium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
<u>Magnesium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
<u>Manganese</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>3500-Mn B (2011)</u>		<u>\$76</u>	
<u>Mercury</u>	<u>A</u>	<u>245.2 (1974)</u>	<u>\$52</u>
	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>245.1 (3.0)</u>	<u>\$52</u>
	<u>A4.17</u>	<u>1631E</u>	<u>\$152</u>
	<u>A4.23</u>	<u>245.7 (2.0)</u>	<u>\$15</u>
	<u>C</u>	<u>3112B (2011)</u>	<u>\$52</u>
<u>Molybdenum</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>



	<u>C</u>	<u>3111D (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Nickel</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>A4.25</u>	<u>1638</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3111C (2011)</u>	<u>\$26</u>
<u>3113B (2010)</u>		<u>\$26</u>	
<u>Osmium</u>	<u>A</u>	<u>252.2 (1978)</u>	<u>\$26</u>
	<u>C</u>	<u>3111D (2011)</u>	<u>\$26</u>
<u>Palladium</u>	<u>A</u>	<u>253.2 (1978)</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
<u>Platinum</u>	<u>A</u>	<u>255.2 (1978)</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
<u>Rhodium</u>	<u>A</u>	<u>265.2 (1978)</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
<u>Ruthenium</u>	<u>A</u>	<u>267.2 (1978)</u>	<u>\$26</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
<u>Selenium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3113B (2010)</u>	<u>\$26</u>
		<u>3114B (2011)</u>	<u>\$76</u>
<u>Silver</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
		<u>200.8 (5.4)</u>	<u>\$26</u>
		<u>200.9 (2.2)</u>	<u>\$26</u>
	<u>A4.10</u>	<u>200.5 (4.2)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3111C (2011)</u>	<u>\$26</u>
		<u>3113B (2010)</u>	<u>\$26</u>
<u>Strontium</u>	<u>A1</u>	<u>200.7 (4.4)</u>	<u>\$10</u>
	<u>C</u>	<u>3111B (2011)</u>	<u>\$26</u>
		<u>3500-Sr B (2011)</u>	<u>\$26</u>
		<u>3500-Sr C (2011)</u>	<u>\$20</u>



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

	<u>Z2</u>	<u>821-R-02-013</u>	<u>\$194</u>
	<u>Z13</u>	<u>Lozarchak, J. 2001</u>	<u>\$194</u>
5. <u>Organic Chemicals of Wastewater</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Volatile Organics for Pharmaceuticals</u>	<u>D3</u>	<u>524.2 (4.1)</u>	<u>\$152</u>
<u>Purgeable Hydrocarbons</u>	<u>E</u>	<u>601</u>	<u>\$76</u>
<u>Purgeable Aromatics</u>	<u>E</u>	<u>602</u>	<u>\$76</u>
<u>Acrolein and Acrylonitrile</u>	<u>E</u>	<u>603</u>	<u>\$76</u>
		<u>624</u>	<u>\$152</u>
<u>Phenols</u>	<u>E</u>	<u>604</u>	<u>\$116</u>
<u>Benzidines</u>	<u>E</u>	<u>605</u>	<u>\$116</u>
<u>Phthalate ester</u>	<u>E</u>	<u>606</u>	<u>\$116</u>
<u>Nitrosamines</u>	<u>E</u>	<u>607</u>	<u>\$116</u>
<u>Organochlorine Pesticides and PCBs</u>	<u>E</u>	<u>608</u>	<u>\$152</u>
		<u>608.1</u>	<u>\$152</u>
	<u>E2</u>	<u>608.2</u>	<u>\$152</u>
	<u>E4</u>	<u>608 (3M)</u>	<u>\$152</u>
<u>Nitroaromatics and Isophorone</u>	<u>E</u>	<u>609</u>	<u>\$116</u>
<u>PAHs</u>	<u>E</u>	<u>610</u>	<u>\$116</u>
<u>Haloethers</u>	<u>E</u>	<u>611</u>	<u>\$116</u>
<u>Chlorinated Hydrocarbons</u>	<u>E</u>	<u>612</u>	<u>\$116</u>
<u>2, 3, 7, 8-Tetrachlorodibenzo-p-Dioxin</u>	<u>E</u>	<u>613</u>	<u>\$457</u>
<u>Chlorinated Herbicides</u>	<u>E2</u>	<u>615</u>	<u>\$116</u>
<u>Organohalide Pesticides and PCB</u>	<u>E2</u>	<u>617</u>	<u>\$116</u>
<u>Triazine Pesticides</u>	<u>E2</u>	<u>619</u>	<u>\$116</u>
<u>Thiophosphate Pesticides</u>	<u>E2</u>	<u>622.1</u>	<u>\$116</u>
<u>Purgeables</u>	<u>E</u>	<u>624</u>	<u>\$152</u>
<u>Base/Neutrals and Acids (all analytes excluding pesticides)</u>	<u>E</u>	<u>625</u>	<u>\$152</u>
<u>Base/Neutrals and Acids (pesticides only)</u>	<u>E</u>	<u>625</u>	<u>\$152</u>
<u>Carbamate and Urea Compounds</u>	<u>E2</u>	<u>632</u>	<u>\$116</u>
<u>Tetra- through Octa-Chlorinated Dioxins and Furans</u>	<u>A4.22</u>	<u>1613 Rev B (10/94)</u>	<u>\$258</u>
<u>VOCs by Isotope Dilution GC/MS</u>	<u>E</u>	<u>1624B</u>	<u>\$152</u>
<u>Semivolatile Organic Compounds by Isotope Dilution GC/MS</u>	<u>E</u>	<u>1625B</u>	<u>\$152</u>
<u>Organophosphorus Pesticides</u>	<u>E1</u>	<u>1657</u>	<u>\$116</u>
		<u>614</u>	<u>\$116</u>
	<u>E2</u>	<u>614.1</u>	<u>\$116</u>



		<u>622</u>	<u>\$116</u>
<u>VOCs Specific to the Pharmaceutical Manufacturing Industry by Isotope Dilution GC/MS</u>	<u>K1</u>	<u>1666 (A)</u>	<u>\$152</u>
<u>Herbicides</u>	<u>C</u>	<u>6640B (2006)</u>	<u>\$116</u>
<u>Ethylene Glycol</u>	<u>K</u>	<u>BLS-188</u>	<u>\$152</u>
6. <u>Radiochemistry of Wastewater</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Alpha-Total pCi per liter</u>	<u>C</u>	<u>7110B (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>900.0</u>	<u>\$206</u>
<u>Alpha Counting Error, pCi per liter</u>	<u>C</u>	<u>7110B (2011)</u>	<u>\$206</u>
<u>Beta-Total pCi per liter</u>	<u>C</u>	<u>7110B (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>900.0</u>	<u>\$206</u>
<u>Beta Counting Error, pCi</u>	<u>C</u>	<u>7110B (2011)</u>	<u>\$206</u>
<u>Radium, Total pCi per liter</u>	<u>C</u>	<u>7500-Ra B (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>903.0</u>	<u>\$206</u>
<u>Radium</u>	<u>C</u>	<u>7500-Ra C (2011)</u>	<u>\$206</u>
	<u>L</u>	<u>903.1</u>	<u>\$206</u>

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

1. <u>Microbiology of Waste</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Coliforms, Total, by Membrane Filter</u>	<u>F</u>	<u>9132</u>	<u>\$228</u>
<u>Coliforms, Total, by Multiple Tube Fermentation</u>	<u>F</u>	<u>9131</u>	<u>\$228</u>
2. <u>Sample Preparation for Waste</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Acid Digestion of Water</u>	<u>F</u>	<u>3005A</u>	<u>\$7</u>
<u>Alkaline Digestion for Hex Chome</u>	<u>F</u>	<u>3060A</u>	<u>\$7</u>
<u>Bomb Preparation Method for Solid Waste</u>	<u>F</u>	<u>5050</u>	<u>\$7</u>
<u>EP for Oily Wastes</u>	<u>F</u>	<u>1330A</u>	<u>\$76</u>
<u>EP Toxicity</u>	<u>F</u>	<u>1310B</u>	<u>\$76</u>
<u>Microwave Assisted Digestions</u>	<u>F</u>	<u>3015A</u>	<u>\$7</u>

		<u>3051A</u>	<u>\$7</u>
		<u>3052</u>	<u>\$7</u>
		<u>3546</u>	<u>\$7</u>
<u>Multiple EP</u>	<u>F</u>	<u>1320</u>	<u>\$152</u>
<u>Oils, Greases, and Waxes</u>	<u>F</u>	<u>3040A</u>	<u>\$7</u>
<u>Oils</u>	<u>F</u>	<u>3031</u>	<u>\$7</u>
<u>Sediments, Sludges, and Soils</u>	<u>F</u>	<u>3050B</u>	<u>\$7</u>
<u>SPLP</u>	<u>F</u>	<u>1312</u>	<u>\$303</u>
<u>TCLP</u>	<u>F</u>	<u>1311</u>	<u>\$303</u>
<u>Total Metals</u>	<u>F</u>	<u>3010A</u>	<u>\$7</u>
		<u>3020A</u>	<u>\$7</u>
<u>Total Recoverable in Water</u>	<u>F</u>	<u>3005A</u>	<u>\$7</u>

3. Inorganic Chemistry and Metals of Solid Waste

<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Aluminum</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Ammonia</u>	<u>A</u>	<u>350.3</u>	<u>\$39</u>
<u>Antimony</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7062</u>	<u>\$76</u>
		<u>7000B</u>	<u>\$26</u>



		<u>7010</u>	<u>\$26</u>	
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>	
		<u>6020B</u>	<u>\$26</u>	
<u>Arsenic</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>	
		<u>6020A</u>	<u>\$26</u>	
		<u>7010</u>	<u>\$26</u>	
		<u>7061A</u>	<u>\$76</u>	
		<u>7062</u>	<u>\$76</u>	
		<u>7063</u>	<u>\$76</u>	
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>	
		<u>6020B</u>	<u>\$26</u>	
	<u>Barium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
			<u>6020A</u>	<u>\$26</u>
<u>7000B</u>			<u>\$26</u>	
<u>7010</u>			<u>\$26</u>	
<u>F and F13</u>		<u>6010D</u>	<u>\$10</u>	
		<u>6020B</u>	<u>\$26</u>	
<u>Beryllium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>	
		<u>6020A</u>	<u>\$26</u>	
		<u>7000B</u>	<u>\$26</u>	
		<u>7010</u>	<u>\$26</u>	
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>	
		<u>6020B</u>	<u>\$26</u>	
<u>Boron</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>	

	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
<u>Bromide</u>	<u>F</u>	<u>9056A</u>	<u>\$26</u>
		<u>9211</u>	<u>\$39</u>
<u>Cadmium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Calcium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Cation-Exchange Capacity of Soils</u>	<u>F</u>	<u>9080</u>	<u>\$34</u>
		<u>9081</u>	<u>\$34</u>
<u>Chloride</u>	<u>F</u>	<u>9056A</u>	<u>\$26</u>
		<u>9057</u>	<u>\$76</u>
		<u>9212</u>	<u>\$39</u>
		<u>9250</u>	<u>\$76</u>
		<u>9251</u>	<u>\$76</u>
		<u>9253</u>	<u>\$39</u>
<u>Chlorine, Total, in New and Used Petroleum Products</u>	<u>F</u>	<u>9075</u>	<u>\$76</u>
		<u>9076</u>	<u>\$39</u>



		<u>9077</u>	<u>\$39</u>
<u>Chromium, Hexavalent</u>	F	<u>7195</u>	<u>\$26</u>
		<u>7196A</u>	<u>\$76</u>
		<u>7197</u>	<u>\$26</u>
		<u>7198</u>	<u>\$40</u>
		<u>7199</u>	<u>\$76</u>
<u>Chromium, Total</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	F and F13	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Cobalt</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	F and F13	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Compatibility Test for Wastes and Membrane Liners</u>	F	<u>9090A</u>	<u>\$152</u>
<u>Copper</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	F and F13	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Corrosive to Steel</u>	F	<u>1110A</u>	<u>\$63</u>
<u>Corrosivity pH Determination</u>	F	<u>9040C</u>	<u>\$63</u>
<u>Cyanide</u>	F	<u>9010C</u>	<u>\$13</u>
		<u>9012B</u>	<u>\$76</u>
		<u>9213</u>	<u>\$76</u>
		<u>9014</u>	<u>\$76</u>
	F9	<u>9015</u>	<u>\$76</u>
<u>Cyanide Extraction for Solids and Oils</u>	F10	<u>9013A</u>	<u>\$39</u>
<u>Dermal Corrosion</u>	F	<u>1120</u>	<u>\$63</u>
<u>Ignitability of Solids</u>	F	<u>1030</u>	<u>\$32</u>
<u>Flash Point by Pensky Martens Cup</u>	F	<u>1010A</u>	<u>\$32</u>

<u>Flash Point by Set-a Flash</u>	F	<u>1020B</u>	<u>\$32</u>
<u>Fluoride</u>	F	<u>9056A</u>	<u>\$26</u>
		<u>9214</u>	<u>\$39</u>
<u>Iron</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Kjeldahl Total, Nitrogen</u>	A	<u>351.4</u>	<u>\$76</u>
<u>Lead</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Liquid Release Test Procedure</u>	F	<u>9096</u>	<u>\$39</u>
<u>Lithium</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>7000B</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
<u>Magnesium</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Manganese</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Mercury</u>	F	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7470A</u>	<u>\$52</u>
		<u>7471B</u>	<u>\$52</u>
		<u>7472</u>	<u>\$152</u>
		<u>7473</u>	<u>\$152</u>



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

		<u>6020A</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
		<u>7741A</u>	<u>\$26</u>
		<u>7742</u>	<u>\$76</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Silica</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
<u>Silver</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Sodium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Sodium Azide</u>	<u>C</u>	<u>4110C (2011)</u>	<u>\$76</u>
<u>Specific Conductance</u>	<u>F</u>	<u>9050A</u>	<u>\$39</u>
<u>Strontium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>7000B</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
<u>Sulfate</u>	<u>F</u>	<u>9035</u>	<u>\$76</u>
		<u>9036</u>	<u>\$76</u>
		<u>9038</u>	<u>\$76</u>
		<u>9056A</u>	<u>\$26</u>
		<u>9030B</u>	<u>\$76</u>
<u>Sulfides</u>	<u>F</u>	<u>9031</u>	<u>\$76</u>
		<u>9034</u>	<u>\$76</u>
		<u>9215</u>	<u>\$76</u>
		<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
<u>Thallium</u>	<u>F</u>	<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
		<u>6010D</u>	<u>\$10</u>
		<u>F and F13</u>	<u>6010D</u>



		<u>6020B</u>	<u>\$26</u>
<u>Tin</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>7000B</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
<u>Titanium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
<u>Vanadium</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>
<u>Water</u>	<u>F</u>	<u>9000</u>	<u>\$32</u>
		<u>9001</u>	<u>\$32</u>
<u>White Phosphorus by GC</u>	<u>F</u>	<u>7580</u>	<u>\$116</u>
<u>Zinc</u>	<u>F</u>	<u>6010C</u>	<u>\$10</u>
		<u>6020A</u>	<u>\$26</u>
		<u>7000B</u>	<u>\$26</u>
		<u>7010</u>	<u>\$26</u>
	<u>F and F13</u>	<u>6010D</u>	<u>\$10</u>
		<u>6020B</u>	<u>\$26</u>

4. Organics Procedures in Waste

<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Separatory Funnel Liquid-Liquid Extraction</u>	<u>F</u>	<u>3510C</u>	<u>\$13</u>
<u>Organic Compounds in Water by Microextraction</u>	<u>F5</u>	<u>3511</u>	<u>\$13</u>
<u>Continuous Liquid-Liquid Extraction</u>	<u>F</u>	<u>3520C</u>	<u>\$13</u>
<u>SPE</u>	<u>F</u>	<u>3535A</u>	<u>\$13</u>
<u>Soxhlet Extraction</u>	<u>F</u>	<u>3540C</u>	<u>\$13</u>
<u>Automated Soxhlet Extraction</u>	<u>F</u>	<u>3541</u>	<u>\$13</u>
<u>Pressurized Fluid Extraction</u>	<u>F</u>	<u>3545A</u>	<u>\$13</u>
<u>Ultrasonic Extraction</u>	<u>F</u>	<u>3550C</u>	<u>\$13</u>
<u>Supercritical Fluid Extraction of Total Recoverable Petroleum Hydrocarbons</u>	<u>F</u>	<u>3560</u>	<u>\$13</u>
<u>Supercritical Fluid Extraction of PAHs</u>	<u>F</u>	<u>3561</u>	<u>\$13</u>
<u>SFE of PCBs and Organochlorine Pesticides</u>	<u>F</u>	<u>3562</u>	<u>\$13</u>
<u>MSE</u>	<u>F4</u>	<u>3570</u>	<u>\$13</u>
<u>Waste Dilution</u>	<u>F</u>	<u>3580A</u>	<u>\$13</u>

<u>Waste Dilution for Volatile Organics</u>	F	<u>3585</u>	<u>\$13</u>
<u>Alumina Cleanup</u>	F	<u>3610B</u>	<u>\$13</u>
<u>Alumina Column Cleanup and Separation of Petroleum Wastes</u>	F	<u>3611B</u>	<u>\$13</u>
<u>Florisil Cleanup</u>	F	<u>3620C</u>	<u>\$13</u>
<u>Silica Gel Cleanup</u>	F	<u>3630C</u>	<u>\$13</u>
<u>Gel-Permeation Cleanup</u>	F	<u>3640A</u>	<u>\$13</u>
<u>Acid-Base Partition Cleanup</u>	F	<u>3650B</u>	<u>\$13</u>
<u>Sulfur Cleanup</u>	F	<u>3660B</u>	<u>\$13</u>
<u>Sulfuric Acid/Permanganate Cleanup</u>	F	<u>3665A</u>	<u>\$13</u>
<u>Screening Solids for VOCs</u>	F	<u>3815</u>	<u>\$76</u>
<u>Hexadecane Extraction and Screening for Purgeable Organics</u>	F	<u>3820</u>	<u>\$76</u>
<u>Screening for Pentachlorophenol by Immunoassay</u>	F	<u>4010A</u>	<u>\$76</u>
<u>Screening for 2,4-Dichlorophenoxyacetic Acid by Immunoassay</u>	F	<u>4015</u>	<u>\$76</u>
<u>Screening for PCBs by Immunoassay</u>	F	<u>4020</u>	<u>\$76</u>
<u>Screening for PCDDs and PCDFs by Immunoassay</u>	F3	<u>4025</u>	<u>\$76</u>
<u>Soil Screening for Petroleum Hydrocarbons by Immunoassay</u>	F	<u>4030</u>	<u>\$76</u>
<u>Soil Screening for PAHs by Immunoassay</u>	F	<u>4035</u>	<u>\$76</u>
<u>Soil Screening for Toxaphene by Immunoassay</u>	F	<u>4040</u>	<u>\$76</u>
<u>Soil Screening for Chlordane by Immunoassay</u>	F	<u>4041</u>	<u>\$76</u>
<u>Soil Screening for DDT by Immunoassay</u>	F	<u>4042</u>	<u>\$76</u>
<u>TNT Explosives in Soil by Immunoassay</u>	F	<u>4050</u>	<u>\$76</u>
<u>RDX in Soil by Immunoassay</u>	F	<u>4051</u>	<u>\$76</u>
<u>Screening Environmental Samples for Planar Organic Compounds</u>	F	<u>4425</u>	<u>\$76</u>
<u>Triazine Herbicides by Quantitative Immunoassay</u>	F	<u>4670</u>	<u>\$76</u>
<u>VOCs in Various Sample Matrices Using Equilibrium Headspace Analysis</u>	F8	<u>5021A</u>	<u>\$13</u>
<u>Purge-and-Trap for Aqueous Samples</u>	F6	<u>5030C</u>	<u>\$13</u>
<u>Volatile, Nonpurgeable, Water-Soluble Compounds by Azeotropic Distillation</u>	F	<u>5031</u>	<u>\$13</u>
<u>VOCs by Vacuum Distillation</u>	F	<u>5032</u>	<u>\$13</u>
<u>Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples</u>	F2	<u>5035A</u>	<u>\$13</u>



<u>Analysis for Desorption of Sorbent Cartridges from VOST</u>	<u>F</u>	<u>5041A</u>	<u>\$13</u>
<u>EDB and DBCP by Microextraction and GC</u>	<u>F</u>	<u>8011</u>	<u>\$116</u>
<u>C₁₀ – C₃₂ Hydrocarbons</u>	<u>K</u>	<u>8015AZ.1</u>	<u>\$116</u>
<u>Nonhalogenated Organics Using GC/FID</u>	<u>F7</u>	<u>8015D</u>	<u>\$116</u>
<u>Aromatic and Halogenated Volatiles by GC Using Photoionization and/or Electrolytic Conductivity Detectors</u>	<u>F</u>	<u>8021B</u>	<u>\$152</u>
<u>Acrylonitrile by GC</u>	<u>F</u>	<u>8031</u>	<u>\$76</u>
<u>Acrylamide by GC</u>	<u>F</u>	<u>8032A</u>	<u>\$76</u>
<u>Acetonitrile by GC with Nitrogen-Phosphorus Detection</u>	<u>F</u>	<u>8033</u>	<u>\$76</u>
<u>Phenols by GC</u>	<u>F</u>	<u>8041A</u>	<u>\$116</u>
<u>Phthalate Esters by GC/ECD</u>	<u>F</u>	<u>8061A</u>	<u>\$116</u>
<u>Nitrosamines by GC</u>	<u>F</u>	<u>8070A</u>	<u>\$116</u>
<u>Organochlorine Pesticides by GC</u>	<u>F</u>	<u>8081B</u>	<u>\$152</u>
<u>Elemental Quantitation by GC/AED</u>	<u>F</u>	<u>8085</u>	<u>\$116</u>
<u>PCBs by GC</u>	<u>F</u>	<u>8082A</u>	<u>\$152</u>
<u>Nitroaromatics and Cyclic Ketones by GC</u>	<u>F</u>	<u>8091</u>	<u>\$116</u>
<u>Explosives by GC</u>	<u>F</u>	<u>8095</u>	<u>\$116</u>
<u>PAHs</u>	<u>F</u>	<u>8100</u>	<u>\$116</u>
<u>Haloethers by GC</u>	<u>F</u>	<u>8111</u>	<u>\$116</u>
<u>Chlorinated Hydrocarbons by GC: Capillary Column Technique</u>	<u>F</u>	<u>8121</u>	<u>\$116</u>
<u>Aniline and Selected Derivatives by GC</u>	<u>F</u>	<u>8131</u>	<u>\$116</u>
<u>Organophosphorus Compounds by GC</u>	<u>F</u>	<u>8141B</u>	<u>\$152</u>
<u>Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzoylation Derivatization</u>	<u>F</u>	<u>8151A</u>	<u>\$152</u>

<u>VOCs by GC/MS, including n-Hexane</u>	F	<u>8260B</u>	<u>\$152</u>
	<u>F12 and F13</u>	<u>8260C/8000D</u>	<u>\$152</u>
<u>VOCs by VD/GC/MS</u>	F	<u>8261</u>	<u>\$152</u>
<u>Semivolatile Organic Compounds by GC/MS</u>	F	<u>8270C</u>	<u>\$152</u>
	<u>F and F13</u>	<u>8270D/8000D</u>	<u>\$152</u>
<u>Semivolatile Organic Compounds (PAHs and PCBs) in Soils/Sludges and Solid Wastes Using TE/GC/MS</u>	F	<u>8275A</u>	<u>\$152</u>
<u>8280A: Polychlorinated Dibenzo-<i>p</i>-Dioxins and PCDFs by HRGC/LRMS</u>	F	<u>8280B</u>	<u>\$258</u>
<u>PCDDs and PCDFs by HRGC/HRMS</u>	F	<u>8290A</u>	<u>\$258</u>
<u>PAHs</u>	F	<u>8310</u>	<u>\$116</u>
<u>Determination of Carbonyl Compounds by HPLC</u>	F	<u>8315A</u>	<u>\$116</u>
<u>Acrylamide, Acrylonitrile, and Acrolein by HPLC</u>	F	<u>8316</u>	<u>\$116</u>
<u>N-Methylcarbamates by HPLC</u>	F	<u>8318A</u>	<u>\$116</u>
<u>Solvent-Extractable Nonvolatile Compounds by HPLC/TS/MS or UV Detection</u>	F	<u>8321B</u>	<u>\$152</u>
<u>Solvent Extractable Nonvolatile Compounds by HPLC/PB/MS</u>	F	<u>8325</u>	<u>\$152</u>
<u>Nitroaromatics and Nitramines by HPLC</u>	F	<u>8330A</u>	<u>\$116</u>
<u>Nitroaromatics, Nitramines, and Nitrate Esters</u>	<u>F11</u>	<u>8330B</u>	<u>\$116</u>
<u>Tetrazenes by Reverse Phase HPLC</u>	F	<u>8331</u>	<u>\$116</u>
<u>Nitroglycerine by HPLC</u>	F	<u>8332</u>	<u>\$116</u>
<u>GC/FT-IR Spectrometry for Semivolatile Organics: Capillary Column</u>	F	<u>8410</u>	<u>\$116</u>
<u>Analysis of Bis (2-chloroethyl) Ether and Hydrolysis Products by Direct Aqueous Injection GC/FT-IR</u>	F	<u>8430</u>	<u>\$116</u>
<u>Total Recoverable Petroleum Hydrocarbons by Infrared Spectrophotometry</u>	F	<u>8440</u>	<u>\$116</u>
<u>Screening for RDX/MDX in Soil</u>	F	<u>8510</u>	<u>\$76</u>
<u>Colorimetric Screening Method for TNT in Soil</u>	F	<u>8515</u>	<u>\$76</u>
<u>Screening for Total VOH in Water</u>	F	<u>8535</u>	<u>\$76</u>
<u>PCP by UV Colorimetry</u>	F	<u>8540</u>	<u>\$108</u>
<u>TOX</u>	F	<u>9020B</u>	<u>\$76</u>
<u>POX</u>	F	<u>9021</u>	<u>\$76</u>
<u>TOX by Neutron Activation Analysis</u>	F	<u>9022</u>	<u>\$114</u>
<u>EOX in Solids</u>	F	<u>9023</u>	<u>\$114</u>
<u>TOCs</u>	F	<u>9060A</u>	<u>\$76</u>
<u>Phenolics</u>	F	<u>9065</u>	<u>\$152</u>



		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

<u>2. Stationary and Stack Sources</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Carbon Dioxide, Oxygen, and Excess Air</u>	Q	<u>Method 3C</u>	<u>\$393</u>
<u>Carbon Monoxide</u>	Q	<u>Method 10</u>	<u>\$393</u>
		<u>Method 10A</u>	<u>\$393</u>
		<u>Method 10B</u>	<u>\$393</u>
<u>Carbonyl Sulfide, Hydrogen Sulfide, and Carbon Disulfide</u>	Q	<u>Method 15</u>	<u>\$393</u>
<u>Fluoride</u>	Q	<u>Method 13A</u>	<u>\$393</u>
		<u>Method 13B</u>	<u>\$393</u>
		<u>Method 14</u>	<u>\$393</u>
<u>Fugitive Emissions</u>	Q	<u>Method 22</u>	<u>\$393</u>
<u>Gaseous Organic Compounds</u>	Q	<u>Method 18</u>	<u>\$393</u>
		<u>Method 25</u>	<u>\$393</u>
		<u>Method 25A</u>	<u>\$393</u>
		<u>Method 25B</u>	<u>\$393</u>
<u>Hydrogen Sulfide</u>	Q	<u>Method 11</u>	<u>\$393</u>
<u>Inorganic Lead</u>	Q	<u>Method 12</u>	<u>\$393</u>
<u>Mercury, Total Vapor Phase</u>	Q1	<u>PS-12B</u>	<u>\$393</u>
<u>Moisture Content</u>	Q	<u>Method 4</u>	<u>\$393</u>
<u>Nitrogen Oxide</u>	Q	<u>Method 7</u>	<u>\$393</u>
		<u>Method 7A</u>	<u>\$393</u>
		<u>Method 7B</u>	<u>\$393</u>
		<u>Method 7C</u>	<u>\$393</u>
		<u>Method 7D</u>	<u>\$393</u>
		<u>Method 7E</u>	<u>\$393</u>
		<u>Method 20</u>	<u>\$393</u>
<u>Non-methane Organic Compounds</u>	Q	<u>Method 25C</u>	<u>\$393</u>
<u>Particulate Emissions by Asphalt Processing and Roofing</u>	Q	<u>Method 5A</u>	<u>\$152</u>
<u>Particulate Emissions by Fiberglass Insulation Plants</u>	Q	<u>Method 5E</u>	<u>\$152</u>
<u>Particulate Emissions of Nonsulfates</u>	Q	<u>Method 5F</u>	<u>\$152</u>
<u>Particulate Emissions by Nonsulfuric Acid</u>	Q	<u>Method 5B</u>	<u>\$152</u>
<u>Particulate Emissions by Pressure Filters</u>	Q	<u>Method 5D</u>	<u>\$152</u>
<u>Particulate Emissions by Stationary Sources</u>	Q	<u>Method 5</u>	<u>\$152</u>
		<u>Method 17</u>	<u>\$152</u>
<u>Particulate Emissions by Wood Heaters</u>	Q	<u>Method 5G</u>	<u>\$152</u>
		<u>Method 5H</u>	<u>\$152</u>



<u>Petroleum Products, Heat of Combustion</u>	I	<u>D240-92</u>	<u>\$76</u>
		<u>D240-87</u>	<u>\$76</u>
<u>Petroleum Products, Hydrometer Method</u>	I	<u>D287-92</u>	<u>\$76</u>
<u>Petroleum Products, Sulfur</u>	I	<u>D4294-90</u>	<u>\$152</u>
<u>Sulfur and Total Reduced Sulfur</u>	Q	<u>Method 15A</u>	<u>\$393</u>
		<u>Method 16</u>	<u>\$393</u>
		<u>Method 16A</u>	<u>\$393</u>
		<u>Method 16B</u>	<u>\$393</u>
<u>Sulfur Dioxide</u>	Q	<u>Method 6</u>	<u>\$393</u>
		<u>Method 6A</u>	<u>\$393</u>
		<u>Method 6B</u>	<u>\$393</u>
		<u>Method 6C</u>	<u>\$393</u>
		<u>Method 8</u>	<u>\$393</u>
		<u>Method 19</u>	<u>\$393</u>
<u>Method 20</u>	<u>\$393</u>		
<u>Sulfur Dioxide Removal and SO2/NO Emission Rates</u>	Q	<u>Method 19</u>	<u>\$152</u>
<u>Sulfuric Acid Mist</u>	Q	<u>Method 8</u>	<u>\$393</u>
<u>Vapor Tightness, Gasoline Delivery Tank</u>	Q	<u>Method 27</u>	<u>\$393</u>
<u>Volatile Matter Density, Solids and Water from Surface Coatings</u>	Q	<u>Method 24</u>	<u>\$393</u>
		<u>Method 24A</u>	<u>\$393</u>
<u>Volatile Matter and Density of Printing Inks</u>	Q	<u>Method 24A</u>	<u>\$393</u>
<u>VOCs</u>	Q	<u>Method 21</u>	<u>\$393</u>
	S1	<u>TO-3</u>	<u>\$152</u>
		<u>TO-14A</u>	<u>\$152</u>
<u>TO-15</u>	<u>\$152</u>		
<u>VOCs in Vapor</u>	F1	<u>8260B AZ (Vapor) (0.0)</u>	<u>\$152</u>
<u>Wood Heaters, Certification and Burn Rates</u>	Q	<u>Method 28</u>	<u>\$393</u>
		<u>Method 28A</u>	<u>\$393</u>
3. <u>ADEQ Emission Test</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Particulate Emissions in the Presence of Sulfuric Acid Mist/Sulfur Oxides</u>	R	<u>Method A1</u>	<u>\$393</u>
4. <u>National Emission Standards for Hazardous Air Pollutants</u>			
<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>

<u>Arsenic</u>	<u>S</u>	<u>Method 108</u>	<u>\$393</u>
		<u>Method 108A</u>	<u>\$393</u>
		<u>Method 108B</u>	<u>\$393</u>
		<u>Method 108C</u>	<u>\$393</u>
<u>Beryllium</u>	<u>S</u>	<u>Method 103</u>	<u>\$393</u>
		<u>Method 104</u>	<u>\$393</u>
<u>Mercury</u>	<u>S</u>	<u>Method 101</u>	<u>\$393</u>
		<u>Method 101A</u>	<u>\$393</u>
		<u>Method 102</u>	<u>\$393</u>
		<u>Method 105</u>	<u>\$393</u>
<u>Polonium 210</u>	<u>S</u>	<u>Method 111</u>	<u>\$393</u>
<u>Vinyl Chloride</u>	<u>S</u>	<u>Method 106</u>	<u>\$393</u>
		<u>Method 107</u>	<u>\$393</u>
		<u>Method 107A</u>	<u>\$393</u>

5. Determination of Metals in Ambient Particulate Matter

<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Digestion of Ambient Matter</u>	<u>O3</u>	<u>IO-3.1</u>	<u>\$7</u>
<u>Aluminum</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
<u>Antimony</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
<u>Arsenic</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Barium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Beryllium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>



		Method 29 – ICPMS	\$26
<u>Bismuth</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Cadmium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Calcium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Cesium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Chromium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Cobalt</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Copper</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Germanium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Gold</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Indium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Iron</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Lanthanum</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Lead</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>O4</u>	<u>EQL-0510-191</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Lithium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Magnesium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Manganese</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>

<u>Mercury</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>Q</u>	<u>Method 29 – CVAA</u>	<u>\$52</u>
<u>Molybdenum</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
<u>Nickel</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Niobium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Palladium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Phosphorus</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
<u>Platinum</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Potassium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Rhenium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Rhodium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Ruthenium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Samarium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Selenium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Silicon</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Silver</u>	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Sodium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Strontium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Tantalum</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Tellurium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Thallium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Thorium</u>	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
<u>Tin</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>



<u>Titanium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Tungsten</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Uranium</u>	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
<u>Vanadium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
<u>Yttrium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
<u>Zinc</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>
	<u>O2</u>	<u>IO-3.5</u>	<u>\$26</u>
	<u>Q</u>	<u>Method 29 – ICP</u>	<u>\$10</u>
		<u>Method 29 – ICPMS</u>	<u>\$26</u>
<u>Zirconium</u>	<u>O1</u>	<u>IO-3.4</u>	<u>\$10</u>

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

<u>Description</u>	<u>Reference</u>	<u>Method/s</u>	<u>Fee Per Method</u>
<u>Chromatographic Method</u>	=	<u>Any</u>	<u>\$116</u>
<u>Mass Spectrometric Method</u>	=	<u>Any</u>	<u>\$152</u>
<u>Toxicity Method</u>	=	<u>Any</u>	<u>\$194</u>
<u>Other Method</u>	=	<u>Any</u>	<u>\$75</u>

Table 6.3. Instrumentation Fees

<u>Description</u>	<u>Subtype, if any</u>	<u>Fee Per Instrument</u>
<u>Atomic Absorption</u>	<u>Cold Vapor</u>	<u>\$76</u>
	<u>Flame Burner</u>	<u>\$76</u>
	<u>Graphite Furnace</u>	<u>\$76</u>
	<u>Hydride Generator</u>	<u>\$76</u>
	<u>Other</u>	<u>\$76</u>
<u>Counters for Radioactivity</u>	=	<u>\$76</u>
<u>Gas Chromatograph</u>	<u>Electron Capture</u>	<u>\$76</u>
	<u>Flame Ionization</u>	<u>\$76</u>
	<u>Flame Photometric</u>	<u>\$76</u>
	<u>Halide Specific</u>	<u>\$76</u>
	<u>Nitrogen/Phosphorus</u>	<u>\$76</u>

	<u>Photoionization</u>	<u>\$76</u>
	<u>Other</u>	<u>\$76</u>
<u>Gas Chromatograph/Mass Spectrometer</u>	<u>High Resolution</u>	<u>\$194</u>
	<u>Other than High Resolution</u>	<u>\$152</u>
<u>High Pressure Liquid Chromatograph</u>	<u>Ultraviolet</u>	<u>\$76</u>
	<u>Fluorescence</u>	<u>\$76</u>
	<u>Other</u>	<u>\$76</u>
<u>High Pressure Liquid Chromatograph/Mass Spectrometer</u>	=	<u>\$152</u>
<u>Inductively Coupled Plasma</u>	=	<u>\$76</u>
<u>Inductively Coupled Plasma/Mass Spectrometer</u>	=	<u>\$152</u>
<u>Ion Chromatograph</u>	=	<u>\$76</u>
<u>Automated Autoanalyzer</u>	=	<u>\$76</u>
<u>Mercury Analyzer</u>	=	<u>\$76</u>
<u>Organic Halide, Total</u>	=	<u>\$76</u>
<u>Transmission Electron Microscope</u>	=	<u>\$396</u>
<u>X-Ray Diffraction Unit</u>	=	<u>\$76</u>

Table 6.4. Alternate Default Limits

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



<u>ICV/CCV</u>	<u>± 10%</u>
<u>500, 600, 1600, and 8000 series methods that do not specify surrogates or acceptance limits for surrogates</u>	<u>70-130%.</u>
<u>500, 600, 1600, and 8000 series methods that do not specify internal standards or acceptance limits for internal standards</u>	<u>70-130%.</u>
<u>Methods that do not list a precision measurement</u>	<u>20% RPD</u>



NOTICES OF PROPOSED DELEGATION AGREEMENTS

This section of the Arizona Administrative Register contains Notices of Proposed Delegation Agreements.

The Administrative Procedure Act requires the publication of notices of proposed delegation agreements in the Register. A delegation agreement is an agreement between an agency and a political subdivision that authorizes the political subdivision to exercise functions, powers, or duties conferred on the delegating agency by a provision of law.

Delegation agreements are not intergovernmental agreements pursuant to A.R.S. Title 11, Chapter 7, Article 3. For at least 30 days after publication of the Notice of Proposed Delegation Agreement in the Register, the agency shall provide persons the opportunity to submit in writing statements, arguments, data, and views on the proposed delegation agreement and shall provide an opportunity for a public hearing if there is sufficient interest. The delegating agency shall follow the procedures for delegation agreements specified in A.R.S. Title 41, Chapter 6, Article 8.

NOTICE OF PROPOSED DELEGATION AGREEMENT

[M16-141]

1. Name of the agency proposing the delegation agreement:

Department of Environmental Quality

2. The name of the political subdivision to which functions, powers and duties of the agency are proposed to be delegated:

Pima County

3. The name, address, and telephone number of agency personnel to whom persons may direct questions or comments:

Drinking Water

Name: Daniel L. Czecholinski
Title: Manager, Drinking Water Section
Address: Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007
Phone: (602) 771-4617
E-mail: dc5@azdeq.gov

Solid Waste

Name: Pamela Nicola, Manager
Inspections & Compliance Section Waste Programs Division
Address: Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007
Phone: (602) 771-4849
E-mail: pn2@azdeq.gov

4. A summary of the delegation agreement and the subjects and issues involved:

Under A.R.S. § 49-107, the Arizona Department of Environmental Quality proposes to amend the delegation agreement with Pima County, the Local Agency (LA), to conform to an updated 2016 template that replaces the reference to A.R.S. §11-952 with §49-107; includes e-verify requirements pursuant to A.R.S. §§41-4401(A) and 23-214(A); replaces the word "intent" with "request" in Paragraph G.6; clarifies in Paragraph H.1 that ADEQ will pay for the Office of Administrative Hearing's costs on behalf of the County, not County costs; updates Appendix B at Paragraph C.4. to change the job title to "Environmental Program Manager"; and adds to the signature page language to memorialize the date of approval by the County Board of Supervisors.

The proposed delegation agreement makes the following changes to Appendix A, Water Quality Management:

- Grants LA authority for R18-4-217 over blended water
• Grants LA authority for the Revised Total Coliform Rule R18-4-102, -210 and -126

The proposed delegation agreement makes the following changes to Appendix B, Solid Waste Management:

- Clarifies authority for refuse collection frequency variances in the City of Tucson
• Clarifies that list of septic tank inspections includes inspection dates

The proposed delegation agreement would eliminate Appendix C Air Quality Management because the LA now



has primacy over the formerly delegated facility instead of ADEQ, due to a retrofit that prevents the use of coal. All other delegated program elements remain the same as the current delegation agreement.

5. Copies of the proposed delegation agreement may be obtained from the agency as follows:

An electronic copy of the existing Agreement may be downloaded from the following web site address: <http://azdeq.gov/function/permits/delegated.html>

Or contact: Sherri L. Zendri, Administrative Counsel
Department of Environmental Quality

Address: Office of Administrative Counsel
1110 W. Washington
Phoenix, AZ 85007

Telephone: (602) 771-2242

E-mail: slz@azdeq.gov

6. The schedule of public hearings on the proposed delegation agreement:

Where there is sufficient public interest, ADEQ will hold a public hearing to receive public comments, in accordance with A.R.S. § 41-1081. The time, place, and location of the hearings will be provided in the corresponding Notice of Public Hearing pursuant to A.A.C. R18-1-401 and R18-1-402.

ADEQ accepts written statements, arguments, data, and views on the proposed delegation agreement that are received within 30 days after the date of the publication of this notice in the *Register* by 5:00 p.m. or postmarked not later than that date.

After the conclusion of the public comment period and hearing, if any, the agency shall prepare a written summary responding to the comments received, whether oral or written. The agency shall consider the comments received from the public in determining whether to enter into the proposed delegation agreement. The agency shall give written notice to those persons who submitted comments of the agency's decision on whether to enter into the proposed delegation agreement.



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



GOVERNOR PROCLAMATIONS

The Administrative Procedure Act (APA) requires the publication of Governor proclamations of general applicability, and ceremonial dedications issued by the Governor.

AMERICAN EAGLE DAY

[M16-147]

WHEREAS, the Bald Eagle was designated as America’s national emblem on June 20, 1782 by our country’s founding fathers at the second continental congress; and

WHEREAS, the Bald Eagle is unique to North America and represents such American values and attributes as Freedom, Courage, Strength, Spirit, Justice, Quality and Excellence; and

WHEREAS, the Bald Eagle is the central image used in the Great Seal of the United States and in the logos of many branches of the United States Government, including the Presidency, Congress, Defense Department, Treasury Department, Justice Department, State Department, Department of Commerce and the United States Postal Service; and

WHEREAS, the Bald Eagle’s image, meaning and symbolism have played a significant role in American art, music, literature, architecture, commerce, education, culture; and on United States stamps, currency and coinage and also in the beliefs, traditions, religions, lifestyles and heritage of Americans from all walks of life, including United States military service men and women, American Indians, Christians, and members of various civic, fraternal, patriotic, veterans, youth, conservation, educational, outdoors, nature, sportsman, wildlife, political and sports organizations; and

WHEREAS, the Bald Eagle was federally classified as an “endangered species” in the lower 48 states under the Endangered Species Act in 1973, and was upgraded to a less imperiled “threatened” status under that Act in 1995; and

WHEREAS, the Department of Interior and the United States Fish and Wildlife Service delisted the Bald Eagle from the Endangered Species Act protection in 2007, but will continue to be protected under the Bald and Golden Eagle Protection Act of 1940 and the Migratory Bird Treaty Act of 1918; and

WHEREAS, the recovery of America’s Bald Eagle population was largely accomplished due to the vigilant efforts of numerous caring agencies, corporations, organizations and citizens.

NOW, THEREFORE, I, Douglas A. Ducey, Governor of the State of Arizona, do hereby proclaim June 20, 2016 as

AMERICAN EAGLE DAY

and I further encourage citizens to join in support of the majestic Bald Eagle’s continuing recovery and the protection of its precious natural habitat, and in commemorating the living and symbolic presence of our National Bird.

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 twenty-eighth day of April in the year Two Thousand and Sixteen and of the Independence of the United States of America the Two Hundred and Fortieth.

ATTEST:
Michele Reagan
SECRETARY OF STATE

ARIZONA POLLINATOR WEEK

[M16-148]

WHEREAS, pollinator species such as birds and insects are essential partners of farmers and ranchers in producing much of our food supply; and

WHEREAS, pollination plays a vital role in the health of our national forests and grasslands, which provide forage, fish and wildlife, timber, water, mineral resources, and recreational opportunities as well as enhanced economic development opportunities for communities; and

WHEREAS, pollinator species provide significant environmental benefits that are necessary for maintaining healthy, bio-diverse ecosystems; and

WHEREAS, the State of Arizona has managed wildlife habitats and public lands such as State forests and grasslands for decades; and



WHEREAS, the State of Arizona provides producers with conservation assistance to promote wise conservation stewardship, including the protection and maintenance of pollinators and their habitats on working lands and wild lands.

NOW, THEREFORE, I, Douglas A. Ducey, Governor of the State of Arizona, do hereby proclaim June 20 – 26, 2016 as

ARIZONA POLLINATOR WEEK

throughout Arizona and urge all citizens to recognize this observance.

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 twenty-eighth day of April in the year Two Thousand and Sixteen and of the Independence of the United States of America the Two Hundred and Fortieth.

ATTEST:
Michele Reagan
SECRETARY OF STATE

ARIZONA YOUTH LEADERSHIP CONFERENCE WEEK

[M16-149]

WHEREAS, it is important that we prepare our youth to be informed citizens who understand and respect the principles that have sustained this Nation for over 240 years; and

WHEREAS, it is most appropriate to set aside a period of time to devote preparing our youth for leadership roles in our State and Nation; and

WHEREAS, it is essential that our youth are given the opportunities to prepare themselves to meet our Nation’s challenges through studies that emphasize individual responsibility, patriotism, leadership, American history, the United States Constitution, the free enterprise system and good citizenship; and

WHEREAS, the 26th Annual Arizona Youth Leadership Conference is made possible by Arizona Youth Leadership, Inc. and the members of the Military Order of World Wars.

NOW, THEREFORE, I, Douglas A. Ducey, Governor of the State of Arizona, do hereby proclaim June 14 – 18, 2016 as

ARIZONA YOUTH LEADERSHIP CONFERENCE WEEK

and I further urge all Arizonans to honor those preparing the youth and the youth who are committed to preparing themselves to understand and respect the principles that have sustained this Nation.

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 twenty-eighth day of April in the year Two Thousand and Sixteen and of the Independence of the United States of America the Two Hundred and Fortieth.

ATTEST:
Michele Reagan
SECRETARY OF STATE



POST-TRAUMATIC STRESS INJURY AWARENESS MONTH

and June 27, 2016 as

POST-TRAUMATIC STRESS INJURY AWARENESS DAY

[M16-150]

WHEREAS, the brave men and women of the United States Armed Forces and first responders – who proudly serve the United States and risk their lives to protect our freedom; deserve the investment of every possible resource to ensure their lasting physical, mental, and emotional well-being; and

WHEREAS, combat operational stress has historically been viewed as a mental illness cause by pre-existing flaw of character and/or ability; and the term “Post-Traumatic Stress Disorder (PTSD)” carries a stigma that perpetuates this misconception; and

WHEREAS, post-traumatic stress can occur not only after a traumatic event experienced in combat, but also rape, sexual assault, battery, torture, confinement, child abuse, car accidents, train wrecks, plane crashes, bombings, and/or natural disaster; and

WHEREAS, referring to the complications from post-traumatic stress as a disorder perpetuates the stigma of and bias against mental illness, and the stigma discourages those suffering from post-traumatic stress from seeking proper and timely medical treatment; and

WHEREAS, making the condition less stigmatizing and more honorable can favorably influence those affected and encourage them to seek timely treatment without fear of retribution or shame helping to diminish suicide rates; and

WHEREAS, all citizens suffering from post-traumatic stress injury deserve our consideration, those who have received these wounds in service to our nation further deserve our respect and recognition.

NOW, THEREFORE, I, Douglas A. Ducey, Governor of the State of Arizona, do hereby proclaim June 2016 as

POST-TRAUMATIC STRESS INJURY AWARENESS MONTH

and June 27, 2016 as

POST-TRAUMATIC STRESS INJURY AWARENESS DAY

and encourage our Department of Veterans’ Services, the Department of Health Services and The Adjutant General to continue to educate service members, veterans, the families of service members and veterans, victims of abuse, crime and natural disaster, and the general public about the causes, symptoms, and treatment of post-traumatic stress injury.

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 twenty-eighth day of April in the year Two Thousand and Sixteen and of the Independence of the United States of America the Two Hundred and Fortieth.

ATTEST:

Michele Reagan
SECRETARY OF STATE



COUNTY NOTICES ACCORDING TO A.R.S. § 49-112

This section of the *Arizona Administrative Register* contains County Notices (according to A.R.S. § 49-112).

Each county writes rules and regulations in its own unique style. Although these notices are published in the *Register*, they do not conform to the standards specified in

the *Arizona Rulemaking Manual*. With the exception of minor formatting changes, County Notices (including subsection labeling, spelling, grammar, and punctuation) are reproduced as submitted.

**NOTICE OF SUPPLEMENTAL PROPOSED RULEMAKING
MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS
REGULATION III – CONTROL OF AIR CONTAMINANTS
AQ-2013-002-RULE 345**

[M16-142]

PREAMBLE

1. Citations to the department’s Notice of Rulemaking Docket Opening, the Notice of Proposed Rulemaking, and any other Notices of Supplemental Proposed Rulemaking (if applicable) as published in the Register.

Notice of Proposed Rulemaking: 20 A.A.R. 2687, October 3, 2014

2. Rules affected

Rule 345: Vehicle and Mobile Equipment Coating

Rulemaking action

Amend

3. Citations to the department’s statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):

Authorizing statutes: A.R.S. §§ 49-474, 49-479, and 49-480

Implementing statute: A.R.S. § 49-112

4. The department’s contact person who can answer questions about the rulemaking:

Name: Kathleen Sommer or Hether Krause
Maricopa County Air Quality Department
Planning and Analysis Division

Address: 1001 N. Central Ave., Suite 125
Phoenix, AZ 85004

Telephone: (602) 506-6010

Fax: (602) 506-6179

E-Mail: aqplanning@mail.maricopa.gov

5. The department’s justification and reason why a rule should be made, amended, repealed, or renumbered, to include an explanation about the rulemaking:

This supplemental revision to Rule 345 (Vehicle and Mobile Equipment Coating) clarifies and updates rule requirements so it will be a more effective tool in controlling VOC emissions from commercial vehicle coating operations in Maricopa County. The changes proposed in this supplement complete this rule with the addition of current technology and terms adopted for this regional area. The revisions are proposed after the department received comments during two phases of workshops held over the last several years. Three workshops were held in 2013 and 2014. A Stakeholder meeting was held January 16, 2014 to review terms in the Rule 345 tables and a Notice of Proposed Rulemaking was published in the Arizona Administrative Register on October 3, 2014 (20 A.A.R. 2687). The fourth and fifth workshops were held December 16, 2015 and February 22, 2016, respectively. This supplement reflects Stakeholder requested amendments to the rule from these most recent workshops and responds to requests received from the national and local regulated communities. In addition to reformatting rule text and correcting punctuation, a list of the changes found in this supplemental rulemaking are outlined in Item 7 below.

Rule 345 proposed revisions from the 2013 and 2014 workshops include clarifying standards and work practices and deleting obsolete rule requirements. For example, requirements applicable to suppliers and manufacturers of vehicle paints and coatings are proposed to be deleted and work practices are proposed to be amended to allow for use of new technology spray guns as they become available. Other proposed changes in the rule include establishing VOC coating limits on vehicle weight instead of on the vehicle part where paint is applied. The revised rule also proposes to eliminate the unnecessary reference to the classification of the vehicle to be coated with the North American Industrial Classification System (NAICS).

Control of VOC emissions from paints or coatings used by this industry are important because VOC pollutants react in the presence of sunlight to form ground-level ozone, a major component of “smog” which is hazardous to human health and the environment. Maricopa County has been reclassified to the higher pollutant nonattainment classification “moderate” for ground level ozone as determined by violations of the National Ambient Air Quality Standards (NAAQS). The VOC emissions from the automotive coating industry have been determined by a U.S. Environmental Protection Agency (EPA) study authorized by the Clean Air Act Section 183(e) to be in the category accounting for at least 80 percent of the VOC emissions in areas that violate the NAAQS for ozone.

6. Documents and/or studies referenced and/or reviewed for this rulemaking:



- Clean Air Act Section 183(e) study of VOC emissions from the use of consumer and commercial products to assess their potential to contribute to levels of ozone that violate the National Ambient Air Quality Standards (NAAQS) for ozone [60 FR 15264 (March 23, 1995); 64 FR 13422 (March 18, 1999); 70 FR 69759 (November 17, 2005); 71 FR 28320 (May 16, 2006)]
- “Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings” U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Sector Policies and Programs Division Research Triangle Park, NC, September 2008
- National VOC Rule 1999

7. An explanation of the substantial change which resulted in the supplemental notice:

Since the Notice of Proposed Rulemaking was published on October 3, 2014 (20 A.A.R. 2687), the department is proposing the following additional amendments:

- Section 102.1 (Applicability): To clarify that the provisions of this rule do not apply to Control Techniques Guidelines (CTGs) for Automobile and Light-Duty Truck Assembly Coating Operations, September 2008
- Section 102.2 (Applicability): To clarify that facilities may be subject to federal requirements (NSPS and NESHAP)
- Section 102.3 (Applicability): To clarify that replacement for a defective/missing vehicle body part installed in the course of refinishing or repairing the vehicle body is subject to Rule 345, otherwise manufacture of new parts are subject to Rule 336 (Surface Coating Operations)
- Section 103.1 (Exemptions): To clarify use of Low VOC Materials as per the threshold for low VOC materials consistent with other Maricopa County rules. Low VOC material is defined as VOC content, minus exempt compounds resulting in less than 0.15 lbs. VOC per gallon (18 g VOC/liter)
- Section 103.2 (Exemptions): To delete “coating individual parts” from exemptions and move this section to Applicability Section 102.3
- Section 103.3 (Exemptions): To renumber to Section 103.2 and clarify “coating with an aerosol spray can coating” exemption
- Section 204 (Definition of “Basecoat”): To delete this term and replace it with the term “Single stage process” or “Color Coating”
- Section 216 (Definition of “Group I Motor Vehicles and Mobile Equipment”): To delete this definition
- Section 217 (Definition of “Group II Motor Vehicles”): To delete this definition
- Section 217 (Definition of “Heavy Duty Vehicle”): To add this term to replace “Group II Motor Vehicles”
- Section 218 (Definition of “High-Volume, Low Pressure Spray Gun (HVLP)”): To correct this definition and to delete “at the center of the air cap”
- Section 219 (Definition of “In-Use”): To add this definition for clarity
- Section 221 (Definition of “Light Duty Vehicle”): To add this term to replace “Group I Motor Vehicles”
- Section 222 (Definition of “Mixing Instructions”): To clarify this definition with new text
- Section 227 (Definition of “Multi-Colored Process”): To clarify this definition to exclude reference to “cargo beds”, a term that is used interchangeably with “truck bed liner coatings”
- Section 230 (Definition of “Primer”): To change the definition of “Primer (Heavy Duty Vehicles)”
- Section 231 (Definition of “Primer-Sealer”): To clarify definition of “Primer-Sealer (Light Duty Vehicles)”
- Section 232 (Definition of “Primer-Surfacer”): To clarify definition of “Primer-Surfacer (Light Duty Vehicles)”
- Section 236 (Definition of “Solvent Cleaner”): To delete this term
- Section 237.8 (Definition of “Truck Bed Liner Coating”): To add definition of “Truck Bed Liner Coating” as a subset of “Specialty Coatings”
- Section 238 (Definition of “Spot Repair”): To clarify that the term spot repair can be applied to either light duty or heavy duty vehicles
- Section 242 (Definition of “Surface Preparations”): To change this term to “Surface Preparation Fluids” and to use the current definition used for the term “Surface Preparation and Surface Cleaning Fluids”
- Section 244 (Definition of “Three-Stage Process”): To retain this definition and clarify that it applies to both light duty and heavy duty vehicles
- Section 235 (Definition of “Topcoat”): To delete this definition
- Section 250 (Definition of “Van”): To delete this definition
- Section 248 (Definition of “VOC Actual”): To delete definition of “VOC Content” and replace it with the definition of “VOC Actual”
- Section 249 (Definition of “VOC Content”): To add definition of “VOC Content”; it is a term used throughout the rule which includes “VOC actual” and “VOC regulatory”
- Section 249 (Definition of “VOC Regulatory”): To add definition of “VOC Regulatory” and specify where it is applied in the rule
- Section 301 (Standards): To add the following organization for clarity:
 - 301.1 Vehicle Coating
 - 301.2 Light Duty Vehicle and Mobile Equipment Coating
 - 301.3 Heavy Duty Vehicle Coating
- Table 345-1 (Spot Repair Coating Threshold): To add the spot repair VOC limit to Table 345-1
- Tables 345-1, 345-2, and 345-3: To clarify in the title that VOC coating category thresholds are calculated as “VOC regulatory”
- Tables 345-1 and 345-2: To remove “Surface Preparation” thresholds from these tables because they are not a coating
- Table 345-1 (Two-Stage Process or More): To correct the VOC limits to read 600 g/l and 5.0 lbs. VOC/gal
- Table 345-1 (Three-Stage Process or More): To add VOC limits for “three-stage process or more”
- Table 345-2 (Clear Coating): To add VOC limits for “clear coating”



- Table 345-2 (Three-Stage Process or More): To add VOC limits for “three-stage process or more”
- Table 345-2 (Three-Stage Process or More): To add VOC limits for “three-stage process or more”
- Section 301.1(c): To clarify definition of “Spot Repair” that is consistent with Tables 345-1, 345-2, and 345-3
- Section 302.1 (Operating Requirements): To clarify operating requirements for surface preparation fluids; similar to text in current Section 305.1
- Section 302.2 (Operating Requirements): To add paint stripping requirements
- Section 303.1 (Application Requirements): To change that application requirements are subject to rule requirements when using coatings greater than 2.0 lbs. VOC/gal instead of 3.0 lbs. VOC/gal to be consistent with other Maricopa County Rules
- Section 303.1(a) (Application Requirements): To clarify methods to determine compliance for an HVLP spray gun
- Section 303.1(d) (Application Requirements): To clarify methods to determine compliance for an alternative application method; the EPA commented that, when describing an alternative application method, do not use the phrase “any method which achieves a transfer efficiency of greater than or equal to 65%”. The EPA recommended that the phrase “any specific system which is approved by the Administrator as HVLP-equivalent” be used instead.
- Section 303.3 (Spray Gun Cleaning Requirements): To clarify the requirements to clean spray guns with either a spray gun cleaning machine or manually
- Section 501.5 (Sufficient Documentation): To add “usage” documentation to the type of documents that can be used for VOC coating records
- Section 501.7 (Monitoring and Records): To add “aerosol spray-can” recordkeeping
- Section 502.3 (Spray Gun Transfer Efficiency): To clarify methods to demonstrate spray gun transfer efficiency
- Section 502.3(a): To correct the instructions for measuring air pressure of an air atomized spray gun
- Section 503.1 (VOC Content Calculations-VOC Multi-Stage Calculation): To retain the VOC-multi calculation as is in current Rule 345
- Section 505 (Compliance Determination-Test Methods Incorporated by Reference): To clarify the criteria for using test methods for determining compliance with Rule 345

8. Showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision:

Not applicable

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

The following discussion addresses each of the elements required for an economic, small business and consumer impact statement under A.R.S. § 41-1055.

An identification of the rulemaking.

This rulemaking is proposing to revise Rule 345 (Vehicle and Mobile Equipment Coating).

An identification of the persons who will be directly affected by, bear the costs of or directly benefit from the rulemaking.

The persons who will be directly affected by and bear the costs of this rulemaking will be commercial vehicle and mobile equipment coating operations in Maricopa County. The department has issued permits to more than 300 such sources.

A cost benefit analysis of the following:

(a) The probable costs and benefits to the implementing agency and other agencies directly affected by the implementation and enforcement of the rulemaking.

Because this rulemaking does not impose any new compliance burdens on regulated entities or introduce additional regulatory requirements, the department deemed that none of the revisions have potentially significant economic impacts. It is expected that the department will benefit from the increased clarity of the rule with decreased time to inspect a facility or prepare a permit. In addition, the rulemaking will not impose increased monetary or regulatory costs on other state agencies, political subdivisions of this state, persons, or individuals so regulated. The assumptions of savings with the rule revisions will be reviewed after rule implementation to confirm their effectiveness. However, the benefits of the rule revision are anticipated to be a result of the following changes:

- Restructuring the rule to clarify VOC coating limits required for use, providing greater certainty and saving time for both the regulated community and regulators;
- Clarifying an exemption for coating with a non-refillable aerosol can;
- Defining spray gun requirements;
- Eliminating obsolete reporting requirement for large users;
- Eliminating regulation of suppliers or manufacturers;
- Updating formula calculations of VOC content of coatings.

(b) The probable costs and benefits to a political subdivision of this state directly affected by the implementation and enforcement of the rulemaking.

The rule revisions will not impose increased monetary or regulatory costs on other state agencies, political subdivisions of this state, persons, or individuals so regulated.

(c) The probable costs and benefits to businesses directly affected by the rulemaking, including any anticipated effect on the revenues or payroll expenditures of employers who are subject to the rulemaking.

The department anticipates that increased clarity provided by the Rule 345 revisions will provide a benefit to the regulated community; it will take less time for sources subject to the rule to understand and comply with the rule, which leads to increased compliance, which leads to decreased costs of compliance to the regulated community. The department does not anticipate these



rule revisions to have a significant impact on a person's income, revenue, or employment in this state related to this activity. The rule revision will not impose increased monetary or regulatory costs on individuals so regulated.

A general description of the probable impact on private and public employment in businesses, agencies and political subdivisions of this state directly affected by the rulemaking.

The rule revisions will not impose increased monetary or regulatory costs on other state agencies, political subdivisions of this state, persons, or individuals so regulated.

A statement of the probable impact of the rulemaking on small businesses.

The rule revisions will not impose increased monetary or regulatory costs on any business, persons, or individuals so regulated.

(d) An identification of the small businesses subject to the rulemaking.

Small businesses subject to this rulemaking are commercial vehicle and mobile equipment coating operations in Maricopa County.

(e) The administrative and other costs required for compliance with the rulemaking.

This rulemaking corrects and clarifies existing rule provisions and definitions to reduce confusion and improve understanding and readability. The department considered the implications of the proposed amendments to the regulated entities and the implementing agency and deemed that none of the rule revisions have potentially significant economic impacts.

(f) A description of the methods that the agency may use to reduce the impact on small businesses.

(i) Establishing less costly compliance requirements in the rulemaking for small businesses.

By correcting and clarifying existing rule provisions and definitions, this rulemaking lessens or eases the regulatory burden for small businesses.

(ii) Establishing less costly schedules or less stringent deadlines for compliance in the rulemaking.

This rulemaking corrects or clarifies existing rule provisions and definitions to reduce confusion and improve understanding and readability. Existing schedules and deadlines for compliance with Rule 345 remain unchanged.

(iii) Exempting small businesses from any or all requirements of the rulemaking.

This rulemaking corrects or clarifies existing rule provisions and definitions to reduce confusion and improve understanding and readability. In addition, this rulemaking clarifies an exemption for coating with a non-refillable aerosol can.

(g) The probable cost and benefit to private persons and consumers who are directly affected by the rulemaking.

This rulemaking does not impose any new compliance burdens on regulated entities or introduce additional regulatory requirements and will not impose increased monetary or regulatory costs on any business, persons, or individuals so regulated.

A statement of the probable effect on state revenues.

The rule revisions will not impose increased monetary or regulatory costs on other state agencies, political subdivisions of this state, persons, or individuals so regulated.

A description of any less intrusive or less costly alternative methods of achieving the purpose of the rulemaking.

This rulemaking corrects or clarifies existing rule provisions and definitions to reduce confusion and improve understanding and readability. The rule revisions provide flexibility for the use of different models of spray guns for the application of paints or coatings used by commercial vehicle coating operations.

10. The department's contact person who can answer questions about the economic, small business, and consumer impact statement:

Name: Kathleen Sommer or Hether Krause
Maricopa County Air Quality Department
Planning and Analysis Division
Address: 1001 N. Central Ave., Suite 125
Phoenix, AZ 85004
Telephone: (602) 506-6010
Fax: (602) 506-6179
E-Mail: aqplanning@mail.maricopa.gov

11. The time, place, and nature of the proceedings to make, amend, renumber, or repeal the rule or, if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the supplemental proposed rule:

Written oral proceeding requests or written comments or both will be accepted until the comment period is closed on July 11, 2016, 5:00 p.m. Written oral proceeding requests or written comments or both may be mailed, e-mailed, or hand delivered to the department (see Item 4 of this Notice of Supplemental Proposed Rulemaking). An oral proceeding will be scheduled only upon receipt of a written request before the comment period is closed on July 11, 2016, 5:00 p.m. Written comments received during the comment period will be considered formal comments to the Notice of Supplemental Proposed Rulemaking and will be responded to in the Notice of Final Rulemaking.

12. Other matters prescribed by statute that are applicable to the specific department or to any specific rule or class of rules

Not applicable

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

ASTM Method D1613-06(2012)	Rule 345, Section 502.5
	Rule 345, Section 505.3
<u>40 CFR 60</u>	
EPA Reference Method 2	Rule 345, Section 505.2(a)(1)
EPA Reference Method 2A	Rule 345, Section 505.2(a)(2)
EPA Reference Method 2C	Rule 345, Section 505.2(a)(3)
EPA Reference Method 2D	Rule 345, Section 505.2(a)(4)



EPA Reference Method 18	Rule 345, Section 502.6(a)
	Rule 345, Section 505.2(b)
EPA Reference Method 24	Rule 345, Section 502.2(a)
	Rule 345, Section 505.2(c)
EPA Reference Method 25	Rule 345, Section 502.6(a)
	Rule 345, Section 505.2(d)
<u>40 CFR 51</u>	
EPA Reference Method 204	Rule 345, Section 502.6(b)
	Rule 345, Section 505.2(e)
EPA Reference Method 204a	Rule 345, Section 505.2(e)
EPA Reference Method 204b	Rule 345, Section 505.2(e)
EPA Reference Method 204c	Rule 345, Section 505.2(e)
EPA Reference Method 204d	Rule 345, Section 505.2(e)
EPA Reference Method 204e	Rule 345, Section 505.2(e)
EPA Reference Method 204f	Rule 345, Section 505.2(e)
EPA Reference Method 2	Rule 345, Section 505.2(f)
EPA Reference Method 3	Rule 345, Section 505.2(f)
California's Bay Area Air Quality Management District Method 31	Rule 345, Section 502.3(a)(2)
	Rule 345, Section 505.3(a)
California's South Coast Air Quality Management District (SCAQMD) Method 313-91	Rule 345 Section 505.3(b)
	Rule 345 Section 502.3(a)(1)

14. Full text of the rule follows:

MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION III – CONTROL OF AIR CONTAMINANTS
RULE 345
MOTOR VEHICLE AND MOBILE EQUIPMENT COATING
INDEX

SECTION 100 – GENERAL

- 101 PURPOSE
- 102 APPLICABILITY
- 103 EXEMPTIONS

SECTION 200 – DEFINITIONS

- 201 AEROSOL-SPRAY COATING
- 202 AIRLESS AND AIR-ASSISTED AIRLESS SPRAY
- ~~201~~ 203 AUTOMATIC SPRAY GUN-CLEANING MACHINE (GUN CLEANER)
- ~~202~~ 202 AUTOMOBILE/LIGHT DUTY VEHICLE
- 204 BUS
- 205 CLEAR COATING (LIGHT & HEAVY DUTY VEHICLES)
- 206 COLOR COATING (LIGHT & HEAVY DUTY VEHICLES)
- ~~203~~ 207 COATING AS APPLIED
- 208 COATING COMPONENT
- ~~204~~ 204 CONVENTIONAL AIR ATOMIZED SPRAY (SYSTEM)
- ~~205~~ 209 DAY
- ~~206~~ 206 DEPARTMENT
- ~~207~~ 210 DETAILING GUNS AND TOUCH-UP GUNS
- ~~208~~ 211 DILUENT
- ~~209~~ 212 ELECTROSTATIC APPLICATION
- ~~210~~ 213 EMISSION CONTROL SYSTEM (ECS)
- ~~211~~ 214 ENAMEL
- ~~212~~ 215 FLEXIBLE PLASTIC
- ~~213~~ 216 HARDENER
- ~~214~~ 214 HEAVY TRUCK
- ~~215~~ 217 HEAVY DUTY VEHICLE
- ~~216~~ 216 HIGH VOLUME LOW PRESSURE (HVLP) APPLICATION
- 218 HIGH-VOLUME, LOW PRESSURE SPRAY GUN (HVLP)
- 219 IN-USE
- ~~217~~ 220 LACQUER
- ~~218~~ 218 LOW PRESSURE GUN
- 221 LIGHT DUTY VEHICLE



- 219 222 MIXING INSTRUCTIONS
- 220 223 MOBILE EQUIPMENT
- 224 MOTOR VEHICLE
- 225 MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATION
- 226 MOTORCYCLE
- 221 227 MULTI-COLORED TOPCOAT PROCESS
- 228 PAINT STRIPPING
- 229 PRETREATMENT COATING
- 222 PRETREATMENT WASH PRIMER
- 223 230 PRIMER (HEAVY DUTY VEHICLES)
- 224 231 PRIMER-SEALER (LIGHT DUTY VEHICLES)
- 225 232 PRIMER-SURFACER (LIGHT DUTY VEHICLES)
- 226 233 REDUCER
- 227 234 REFINISH, REFINISHING
- 228 235 SINGLE-STAGE TOPCOAT PROCESS (LIGHT & HEAVY DUTY VEHICLES)
- 229 236 SPECIALTY COATING
- 230 237 SPOT REPAIR ON A HEAVY TRUCK (HEAVY DUTY VEHICLES)
- 231 SURFACE PREPARATION AND SURFACE CLEANING FLUIDS
- 238 SPRAY-APPLIED COATING OPERATIONS
- 239 STRIPPABLE BOOTH COATING (LIGHT & HEAVY DUTY VEHICLES)
- 232 240 STRIPPERS
- 241 SURFACE PREPARATION FLUIDS
- 233 242 THINNER
- 234 243 THREE-STAGE TOPCOAT PROCESS
- 235 TOPCOAT
- 236 244 TOUCHUP COATING
- 245 TRANSFER EFFICIENCY
- 237 246 TWO-STAGE TOPCOAT PROCESS (LIGHT & HEAVY DUTY VEHICLES)
- 238 VEHICLE REFINISHING COATING COMPONENT
- 239 VEHICLE REFINISHING OPERATION
- 240 247 VOC CONTENT ACTUAL
- 248 VOC CONTENT
- 249 VOC REGULATORY
- SECTION 300 – STANDARDS**
- 301 LIMITATIONS: VOC CONTENT OF REFINISH COATINGS FOR LIGHT DUTY VEHICLES VOC LIMITS, AS APPLIED
- 302 OPERATING REQUIREMENTS
- 303 APPLICATION REQUIREMENTS
- 304 STORAGE AND DISPOSAL OF VOC AND VOC-CONTAINING MATERIAL
- 302 REFINISHING HEAVY DUTY TRUCKS AND TRUCK TRAILERS
- 303 COATING NEW SURFACES & REFINISHING HEAVY VEHICLES
- 304 MIXING REQUIREMENTS
- 305 PREPARATION AND SURFACE CLEANING FLUIDS
- 306 MAINTENANCE
- 307 PAINT GUN REQUIREMENTS AND LIMITS
- 308 EMISSION CONTROL SYSTEM
- 309 CLEANUP AND CLEANING SUPPLY AND APPLICATION EQUIPMENT
- 310 GUN CLEANING MACHINES
- 311 STORAGE AND DISPOSAL OF VOC AND VOC-CONTAINING MATERIAL
- 312 EXEMPTIONS
- SECTION 400 – ADMINISTRATIVE REQUIREMENTS**
- 401 EMISSION CONTROL SYSTEM (ECS) SCHEDULE
- 402 THE RESPONSIBILITIES OF LARGE USERS COMPLIANCE SCHEDULE
- 403 JOBBER/SUPPLIERS RECORDKEEPING RESPONSIBILITY FOR REFINISHES
- 404 WEIGHT EXCLUSION
- SECTION 500 – MONITORING AND RECORDS**
- 501 RECORDKEEPING AND REPORTING
- 502 COMPLIANCE DETERMINATION
- 503 FORMULAS VOC CONTENT CALCULATIONS
- 504 EMISSION CONTROL SYSTEM (ECS) AND RELATED SYSTEM OPERATING REQUIREMENTS
- 505 TEST METHODS ADOPTED BY REFERENCE COMPLIANCE DETERMINATION–TEST METHODS INCORPORATED BY REFERENCE



Adopted 02/15/95
 Revised 11/20/96
 Revised 04/21/99
 Revised 09/25/13

Adopted 02/15/95; Revised 11/20/96; Revised 04/21/99; Revised 09/25/13; **Revised XX/XX/XXXX**

**MARICOPA COUNTY
 AIR POLLUTION CONTROL REGULATIONS
 REGULATION III CONTROL OF AIR CONTAMINANTS
 RULE 345**

MOTOR VEHICLE AND MOBILE EQUIPMENT COATING

SECTION 100 – GENERAL

101 PURPOSE: To limit emissions of volatile organic compounds (VOCs) from ~~the surface preparation and coating of highway vehicles and mobile equipment, motor vehicle and mobile equipment coating and surface preparation operations, which contribute to the formation of ground level ozone.~~

102 APPLICABILITY:

102.1 The provisions of this rule apply to ~~the coating of any vehicle or mobile equipment able to travel or be drawn upon a highway, except for Original Equipment coatings at light duty vehicle manufacturing plants. A summary is provided by the following directory: any owner or operator, who leases, operates and/or controls a motor vehicle coating operation that applies coatings to motor vehicles or mobile equipment. The provisions of this rule do not apply to automobile and light-duty truck assembly coating operations.~~

DIRECTORY OF THE REGULATIONS THAT APPLY TO NEW FINISHES & TO REFINISHES

Type of Vehicle ⚡	Applicable Regulation for Original Equipment Coating and Coating on Never-Coated Surface ⚡	Applicable Regulation for Refinishing ⚡
Car, pickup, minivan, & light duty utility vehicle, or their chassis, produced on large assembly lines; i.e., included by code #33611 in NAICS, as incorporated by reference in subsection 505.3.	New Source Performance Standard for cars & light duty vehicles made on assembly lines, subpart MM, 40 CFR 60, as incorporated by reference in Rule 360.	Table 1 (of this rule) (vehicle bodies, cabs, and chassis only)
Car, pickup, minivan, or light duty utility vehicle NOT produced on large assembly lines; all motorcycles and golf carts.	Table 3 (of this rule)	Table 1 (vehicle bodies, cabs, and chassis only)
All vehicles that qualify as “heavy trucks”, as defined by §215 of this rule, (buses, large trucks, tractor/trailers, etc.)	Table 3	Table 2 (of this rule) (vehicle bodies, cabs, chassis & their trailers)
All heavy duty vehicles that do not qualify as “heavy trucks”, and all mobile equipment	Table 3	Table 3 except for pretreatment wash

*Small never coated surfaces on a coated vehicle being refinished are subject to Table 2 or §302.3.

102.2 NSPS & NESHAP: In addition to this rule, facilities may be subject to New Source Performance Standards (NSPS) in Rule 360 of these rules and/or to National Emission Standards for Hazardous Air Pollutants (NESHAP) [40 CFR Part 63, Subpart 6-H] in Rule 370 of these rules.

102.3 Coating Individual Parts: An owner or operator who exclusively coats separate motor vehicle parts or mobile equipment parts that have never been installed since manufacture or remanufacture are subject to Rule 336 (Surface Coating Operations) of these rules. Replacement for a defective/missing vehicle body part installed in the course of refinishing the vehicle body is subject to Rule 345.

102.2 103 Non-Applicability: This rule does not apply to: **EXEMPTIONS:**

a. 103.1 Use of Low VOC Materials: This rule does not apply to an owner or operator who uses a coating or solvent that materials that contain 2.0% or less VOC by either weight or volume, or have less than 0.17 lbs VOC per gallon (20 g/liter) material VOC content, as determined by the formula in subsection 503.3, has a VOC content, minus exempt compounds, less than 0.15 lbs VOC per gallon (18 g VOC/liter).

b. This rule does not apply to the coating of separate vehicle parts or mobile equipment parts that have never been installed since manufacture or remanufacture, unless they are current replacements for a defective/missing body part and are being coated in the course of refinishing the vehicle body they will become part of.

103.2 Coating with an Aerosol Spray Can Coating: An owner or operator who uses an aerosol spray can coating is not subject VOC limits (Section 301 of this rule) and application methods (Section 303 of this rule). Records of aerosol spray can coating use shall be kept according to Section 501.7 of this rule.

102.3 NSPS & NESHAP: In addition to this rule, facilities may be subject to New Source Performance Standards (NSPS) in Rule 360 and/or to National Emission Standards for Hazardous Air Pollutants (NESHAP) in Rule 370 of these Rules and Regulations.



SECTION 200 – DEFINITIONS: For the purpose of this rule, the following definitions shall apply, in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

- 201 **201** **AEROSOL SPRAY CAN COATING:** A coating sold in a hand-held, pressurized, non-refillable container of less than 22 fluid ounces (0.66 liter) capacity and that is expelled from the container in a finely divided form when a valve on the container is depressed.
- 202 **202** **AIRLESS AND AIR-ASSISTED AIRLESS SPRAY:** Any paint spray technology that relies solely on the fluid pressure of the paint to create an atomized paint spray pattern and does not apply any atomizing compressed air to the paint before it leaves the paint nozzle. Air assisted airless spray uses compressed air to shape and distribute the fan of atomized paint, but still uses fluid pressure to create the atomized paint.
- 204 **203** **AUTOMATIC SPRAY GUN-CLEANING MACHINE (GUN CLEANER):** A machine which, after being loaded, cleans paint spray guns without the assistance of a person.
- 202 **202** **AUTOMOBILE/LIGHT DUTY VEHICLE:** A vehicle manufactured by a facility that is designated by code 33611 of the 1997 North American Industrial Classification System (NAICS), as incorporated by reference in subsection 505.3. This comprises only vehicles manufactured by a large production line facility that makes the following complete vehicles or chassis [for such vehicles]: automobile, light duty van, light duty motor home, pick up truck, and/or utility vehicle.
- 204 **204** **BUS:** Motor vehicle designed primarily for the transportation of persons with a manufacturer's gross vehicle weight of greater than 8600 pounds and a design capacity of over 12 persons.
- 205 **205** **CLEAR COATING (LIGHT & HEAVY DUTY VEHICLES):** Any coating without pigments that is labeled and formulated for application over a color coating or another clear coating.
- 206 **206** **COLOR COATING (LIGHT & HEAVY DUTY VEHICLES):** Any pigmented automotive coating which contains the visual properties of color and effects and is usually the coating referred to as the paint or "Single-stage process" for purposes of this rule.
- 203 **207** **COATING AS APPLIED:** Refers to A coating at the time immediately prior to its application, including any final addition of solvent to the coating before such coating is applied.
- 208 **208** **COATING COMPONENT:** Any portion of a coating, such as a reducer, thinner, hardener, diluent or additive recommended (by the manufacturer or importer) to distributors or end-users for motor vehicle refinishing. The raw materials, such as polyurethane resin, used to produce the coating component which are mixed by the end user to prepare a coating for application are not considered coating components.
- 204 **204** **CONVENTIONAL AIR ATOMIZED SPRAY (SYSTEM):** A spray which is atomized with air in a system designed to exceed 25 psig (1.7 bar) at the center of the spray gun tip and which is not used with an electrostatic transfer system.
- 205 **209** **DAY:** A period of 24 consecutive hours beginning at midnight.
- 206 **206** **DEPARTMENT:** The Maricopa County Air Quality Department.
- 207 **210** **DETAILING GUNS AND TOUCH-UP GUNS:** Small air spray devices, including air brushes, that operate at no greater than 6 cfm (170 liters per minute) air flow and no greater than 50 psig (3.4 bar) air pressure and are used to coat small areas.
- 208 **211** **DILUENT:** For the purposes of this rule, anyAny fluid in or added to a coating such as thinner, retarder, reducer, solvent, or drying accelerator which solubilizes, adjusts concentration, viscosity, flow, or drying rates and which evaporates as the coating film solidifies and cures.
- 209 **212** **ELECTROSTATIC APPLICATION:** A method of applying coating by electrically charging coating droplets or particles with an electrical device, causing their deposition onto a substrate by electrostatic attraction.
- 210 **213** **EMISSION CONTROL SYSTEM (ECS):** A system, approved in writing by the Control Officer, designed and operated in accordance with good engineering practice to reduce emissions of volatile organic compounds. VOC. Such system consists of an emissions collection subsystem and an emissions processing subsystem.
- 211 **214** **ENAMEL:** Any non-lacquer topcoat coating.
- 212 **215** **FLEXIBLE PLASTIC:** A surface or part made of solid (non-rubber) polymer designed to withstand significant deformation without damaging it for its intended use.
- 213 **216** **HARDENER:** A coating component specifically designed to promote a faster cure of an enamel finish.
- 214 **214** **HEAVY TRUCK:** Any cab/tractor, truck, van, bus, or motorhome with a manufacturer's gross vehicle weight rating of 8600 lbs or more that is licensable for highway travel; this includes any trailer or semi-trailer that is equipped to be pulled by any such cab/tractor, truck, or van.
- 215 **217** **HEAVY DUTY VEHICLE:** Any highway vehicle, except for an automobile/light duty vehicle as defined in Section 202. This includes, but is not limited to, all vehicular products manufactured under NAICS code 3362, such as trailers, buses, canopies, and the following: trucks, construction equipment, and recreational vehicles. A vehicle with a manufacturer's gross vehicle weight rating of more than 8600 lbs that is licensable for highway travel and consists of the following categories:
 - 217.1** Large trucks;
 - 217.2** Buses;
 - 217.3** Construction equipment, such as earthmovers, tractors, diggers, mobile cranes, bulldozers, and concrete mixers;
 - 217.4** Motor homes;
 - 217.5** Farm machinery, such as forklifts, tractors, and plows; and
 - 217.6** Miscellaneous equipment, such as street cleaners and recreational vehicles.
- 216 **216** **HIGH VOLUME LOW PRESSURE (HVLP) APPLICATION:** A type of coating spray system in which the final air pressure does not exceed 10 psig (67 kilopascals) and which depends on relatively large volumes of air to atomize the coating.



- 218 **HIGH-VOLUME, LOW PRESSURE SPRAY GUN (HVLP):** Spray equipment that is used to apply coating by means of a spray gun that operates at 10 psig of atomizing air pressure or less at the center of the air cap. A permanently affixed manufacturer's gun identification or manufacturer's gun literature shall identify and be proof of an HVLP gun.
- 219 **IN-USE:** Actively engaging the materials with activities such as mixing, depositing, brushing, rolling, padding, wiping or removing or transferring material into or out of the container.
- 217 220 **LACQUER:** A coating which becomes or remains soft when subjected to heat (thermoplastic), which dries primarily by solvent evaporation, and which is resoluble in its original solvent.
- 218 **LOW PRESSURE GUN:** An air atomized spray gun which by design functions best at tip pressures below 10 psig (0.7 bar), measured according to subsection 502.4, and for which the manufacturer makes no written claims that the gun can be used effectively above 12 psig (0.8 bar).
- 221 **LIGHT DUTY VEHICLE:** A vehicle with a manufacturer's gross vehicle weight rating less than or equal to 8600 lbs that is licensable for highway travel and consists of the following categories:
 - 221.1 Automobiles (transport and capacity less than 12 persons);
 - 221.2 Small and medium-sized trucks and vans;
 - 221.3 Motorcycles; and
 - 221.4 Mobile equipment.
- 219 222 **MIXING INSTRUCTIONS:** The coating or coating component manufacturer's or importer's specification of the quantities of coating components for mixing a coating. The manufacturer's specification of the quantities of coating components for mixing a coating, to combine (two or more coating components) to make one coating that is the same throughout or to combine (two or more substances) to make a different substance
- 220 223 **MOBILE EQUIPMENT:** Any equipment that is physically capable of being driven or drawn upon a highway including, but not limited to, the following types of equipment: construction vehicles (such as mobile cranes, bulldozers, concrete mixers); farming equipment (such as wheel tractor, plow, pesticide sprayer); hauling equipment (such as trucks, truck trailers, utility bodies, camper shells); and miscellaneous equipment (such as street cleaners, golf carts, all-terrain vehicles (ATVs), mopeds) etc. A light duty vehicle that is physically capable of being driven or drawn upon a highway and that is not eligible as or considered an automobile used for transportation on roads or highways, even if such mobile equipment is self-propelled. Mobile equipment includes, but is not limited to, the following types of equipment:
 - 223.1 Hauling equipment, such as truck trailers, utility bodies, and camper shells;
 - 223.2 Miscellaneous equipment, such golf carts, all-terrain vehicles (ATVs), and mopeds; and
 - 223.3 Equipment used at airport, on docks, in depots, and industrial and commercial plants.
- 224 **MOTOR VEHICLE:** A self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform Motor Vehicle Act. Motor vehicles included but not limited to both light and heavy duty vehicles including any non-motorized attachments.
- 225 **MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATION:** The spray application of coatings for refinishing of assembled motor vehicles or mobile equipment. It does not include the surface coating of motor vehicle or mobile equipment parts or subassemblies at a vehicle assembly plant or parts manufacturing plant.
- 226 **MOTORCYCLE:** A motor vehicle, other than a tractor, having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground and weighing less than 1500 pounds, except that four wheels may be in contact with the ground when two of the wheels are a functional part of a sidecar.
- 221 227 **MULTI-COLORED TOPCOAT PROCESS (LIGHT & HEAVY DUTY VEHICLES):** A topcoat process that exhibits more than one color when applied, is packaged in a single container, and camouflages surface defects on areas of heavy use, such as cargo beds and other surfaces of trucks and other utility vehicles and is applied over a primer or adhesion promoter.
- 228 **PAINT STRIPPING:** The removal of dried coatings from wood, metal, plastic, and other substrates. A single source may have multiple paint stripping operations.
- 229 **PRETREATMENT COATING:** Any coating that contains a minimum of one-half (0.5) percent acid by weight and not more than 16 percent solids by weight necessary to provide surface etching and is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.
- 222 **PRETREATMENT WASH PRIMER:** A primer that contains a minimum of 0.5 percent acid by weight that is applied directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent coatings.
- 223 230 **PRIMER (HEAVY DUTY VEHICLES):** Any coating applied prior to the application of a topcoat for the purpose of corrosion resistance and/or adhesion. Any coating, including both sealers and surfacers, which is labeled and formulated for application to a substrate to provide:
 - 230.1 A bond between the substrate and subsequent coats;
 - 230.2 Corrosion resistance;
 - 230.3 A smooth substrate surface; or
 - 230.4 Resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.
- 224 231 **PRIMER-SEALER (LIGHT DUTY VEHICLES):** Any coating applied prior to the application of a topcoat final coating for the purpose of corrosion resistance, adhesion of the topcoat coating, and/or color uniformity and to promote the ability of an undercoat to resist penetration by the topcoat coating.
- 225 232 **PRIMER-SURFACER (LIGHT DUTY VEHICLES):** Any coating applied prior to the application of a topcoat final coating for the purpose of filling surface imperfections in the substrate, corrosion resistance, and/or adhesion of the topcoat coating.
- 226 233 **REDUCER:** Any solvent used to thin enamel coatings.



- 227 **234** **REFINISH, REFINISHING:** Recoating of previously paint-finished parts of a motor vehicle, motorcycle or of the body of an automobile/light duty vehicle. ~~The body does not include mechanical parts or chassis, except as they are incorporated into the surface of the body, such as a motor driven mirror assembly and coated underbody.~~
- 228 **235** **SINGLE-STAGE TOPCOAT PROCESS (LIGHT & HEAVY DUTY VEHICLES):** A topcoat consisting of only a single coating formulation applied in one or more coats. Any pigmented automotive coating, excluding automotive adhesion promoters, primers and multi-color coatings, specifically labeled and formulated for application without a subsequent clear coating and that is applied over an adhesion promoter, a primer.
- 229 **236** **SPECIALTY COATING:** Any coating that is specifically designated by the coating manufacturer as being one or more of the following:
 - 229.1 **236.1** **Adhesion Promoter:** A coating designed to facilitate the bonding of a primer or ~~topcoat coating~~ on surfaces such as trim moldings, door locks, and door sills, where sanding is impracticable, and on plastic parts and the edges of sanded areas.
 - 229.2 **236.2** **Bright Metal Trim Repair Coating:** A coating applied directly to chrome plated or other bright metal surface(s) to attain a desired appearance.
 - 229.3 **236.3** **Cut-In, or Jambing, Clearcoat:** A fast-drying, ready-to-spray clearcoat applied to surfaces such as door jambs and trunk and hood edges to allow for quick closure.
 - 229.4 **236.4** **Elastomeric Coating:** A coating designed for application over flexible parts, such as elastomeric bumpers.
 - 229.5 **236.5** **Impact-Resistant Coating:** A specialty coating used on the lower 12 inches (31.6 cm) of a quarter-panel, door, or fender to resist chipping caused by road debris.
 - 229.6 **236.6** **Low-Gloss Coating:** A coating which exhibits a gloss reading less than or equal to 25 on a 60° glossmeter.
 - 229.7 **236.7** **Radar Dispersing Coating:** A coating designed to disperse radar signals, applied to any part of a military vehicle or military mobile equipment.
 - 236.8** **Truck Bed Liner Coating:** Any coating, excluding clear, color, multi-color, and single stage coatings, labeled and formulated for application to a truck bed to protect it from surface abrasion.
 - 229.8 **236.9** **Underbody Coating:** A coating designed for protection and sound deadening that is typically applied to the wheel wells and underbody of an automobile.
 - 229.9 **236.10** **Uniform Finish Blenders:** Any coating that is applied in a spot repair for the purpose of blending a paint overspray (“feathered”) area of a repaired ~~topcoat coating~~ to match the appearance of an adjacent existing topcoat.
 - 229.10 **236.11** **Water Hold-Out Coating:** A coating applied to the interior cavity areas of doors, quarter panels and rocker panels for the purpose of corrosion resistance to prolonged water exposure.
 - 229.11 **236.12** **Weld-Through Primer:** A primer that is applied to an area before welding is performed, and that provides corrosion resistance to the surface after welding has been performed.
- 230 **237** **SPOT REPAIR ON A HEAVY TRUCK:** A repair of a damaged or uncoated area of ~~heavy truck a vehicle~~ in which not more than a total of 1 liter (1.1 quart) of ~~topcoat(s) coating~~ and a total of 1 liter of ~~primer is primers are~~ used and such coatings are applied from a reservoir that can hold no more than 1.2 liters when completely full.
- 231 **SURFACE PREPARATION AND SURFACE CLEANING FLUIDS:** ~~Fluids that are used to prepare a surface for further operations by aiding the removal of grime, greases, waxes, unwanted deposits and embedded particles from the surface.~~
- 238 **SPRAY-APPLIED COATING OPERATIONS:** Operations in which coatings are applied using a hand-held device that creates an atomized mist of coating and deposits the coating on a substrate. For the purposes of this rule, spray-applied coating operations do not include the following materials or activities:
 - 238.1** Surface coating applications using powder coating, hand-held, non-refillable aerosol containers, or non-atomizing application technology including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electro-deposition coating, web coating, coil coating, touch-up markers, or marking pens;
 - 238.2** Thermal spray operations (also known as metallizing, flame spray, plasma arc spray, and electric arc spray) in which solid metallic or non-metallic material is heated to a molten or semi-molten state and propelled to the work piece or substrate by compressed air or other gas, where a bond is produced upon impact.
- 239 **STRIPPABLE BOOTH COATING (LIGHT & HEAVY DUTY VEHICLES):** A temporary coating that is applied to a paint booth wall to provide a protective film to receive overspray during finishing operations and that is subsequently peeled off and disposed of.
- 232 **240** **STRIPPERS:** Powerful solvents used to dissolve permanent, cured coatings, usually to attain a bare substrate.
- 241 **SURFACE PREPARATION FLUIDS:** Fluids that are used to prepare a surface for further operations by aiding the removal of grime, greases, waxes, unwanted deposits and embedded particles from the surface.
- 233 **242** **THINNER:** Any solvent used to reduce the viscosity or solids content of a coating.
- 234 **243** **THREE-STAGE TOPCOAT PROCESS (LIGHT & HEAVY DUTY VEHICLES):** A topcoat process composed of a pigmented basecoat color coating, a midcoat, and a transparent clearcoat.
- 235 **TOPCOAT:** Any coating or series of coatings applied over a primer or an existing finish for the purpose of protection or beautification.
- 236 **244** **TOUCH-UP COATING:** A coating applied by brush, air-brush, or non-refillable aerosol can to cover minor surface damage.
- 245** **TRANSFER EFFICIENCY:** The ratio of the weight or volume of coating solids adhering to the part being coated to the weight or volume of coating solids as applied in the application process, expressed as a percentage.
- 237 **246** **TWO-STAGE TOPCOAT PROCESS (LIGHT & HEAVY DUTY VEHICLES):** A topcoat process consisting of a pigmented basecoat color coating and a transparent clear coating.
- 238 **VEHICLE REFINISHING COATING COMPONENT:** Any portion of a coating, such as a reducer or thinner, hardener, additive, etc., recommended (by its manufacturer or importer) to distributors or end users for vehicle refinishing. ~~The raw materials (such as~~



polyurethane resin, etc.) used to produce the components that are mixed by the end user to prepare a coating for application are not considered vehicle refinish coating components.

239 **VEHICLE REFINISHING OPERATION:** For the purposes of this rule, any coating of vehicles or mobile equipment, their parts and components, including partial body collision repairs, for the purpose of protection, restoration or beautification, and which is subsequent to the original coating applied at a coating assembly line at an Original Equipment Manufacturing (OEM) plant.

240 247 **VOC CONTENT ACTUAL:** VOC actual includes the VOC content minus the weight of water and minus the weight of exempt compounds divided by the total volume of all the materials. See subsections 503.2 and 503.3. Units of VOC actual are in pounds of VOC per gallon (or grams per liter) of material and shall be calculated using the following equation:

$$\text{VOC actual} = \frac{W_s - W_w - W_{es}}{V_m}$$

W_s = weight of all volatile material in pounds (or grams) including VOC, water, non-precursor organic compounds and dissolved vapors

W_w = weight of water in pounds (or grams)

W_{es} = weight of all non-precursor organic compounds in pounds (or grams)

V_m = volume of total material in gallons (or liters)

248 **VOC CONTENT:** VOC content is the organic chemicals in a material that have a high vapor pressure at ordinary room temperature. The high vapor pressure results from a low boiling point, which causes large numbers of molecules to evaporate or sublimate from the liquid or solid form of the compound and enter the surrounding air. The term VOC content is a general term used throughout the rule and includes VOC actual and VOC regulatory.

249 **VOC REGULATORY:** VOC regulatory includes the VOC content minus the weight of water and minus the weight of exempt compounds divided by the volume of material minus the volume of water and minus the volume of exempt compound. Units of VOC regulatory are in pounds of VOC per gallon (or grams per liter) of material and shall be calculated using the following equation:

$$\text{VOC regulatory} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

W_s = weight of all volatile material in pounds (or grams) including VOC, water, non-precursor organic compounds and dissolved vapors

W_w = weight of water in pounds (or grams)

W_{es} = weight of all non-precursor organic compounds in pounds (or grams)

V_m = volume of total material in gallons (or liters)

V_w = volume of water in gallons (or liters)

V_{es} = volume of exempt compounds in gallons (or liters)

SECTION 300 – STANDARDS

301 **LIMITATIONS: VOC CONTENT OF REFINISH COATINGS FOR LIGHT DUTY VEHICLES: VOC LIMITS, AS APPLIED:**

301.1 Vehicle Coating:

- a. VOC content calculations are in Section 503 of this rule.
- b. Compliance will be determined based on the VOC content limit expressed in either metric units (grams VOC /l) or English units (lbs VOC/gal).
- c. **Spot Repair:** Spot repair shall be applied within the volume limits:
 - (1) The coating shall be applied from a reservoir having a gross volume not exceeding 1.2 liters (5 cups) and containing no more than 1 liter (1.1 qt.) of coating.
 - (2) The complete process of a single-stage process shall not use more than 1 liter.
 - (3) The complete process of a multi-stage process shall not exceed 2 liters.
- d. **Uncoated Vehicle Surfaces:** New or never coated surfaces shall comply with the VOC limits of Table 345-3 of this rule, except that pretreatment acid etchant wash shall conform to the VOC limits of pretreatment coating as listed in Tables 345-1 and 345-2 of this rule.
- e. **Mixing Requirements:** An owner or operator who adds VOC containing thinner, reducer, or diluent to any refinish coating regulated by Tables 345-1, 345-2, or 345-3 of this rule shall meet the applicable VOC limits found in such tables.

301.2 Light Duty Vehicle and Mobile Equipment Coating: ~~No person shall~~ An owner or operator shall not sell for use, supply for use, or apply, coating on a previously finished automobile/light duty vehicle or mobile equipment in Maricopa County unless the coating's VOC content complies with the applicable limits in Table 345-1 of this rule, except as provided in Section 302.3 of this rule.

- a. VOC content is determined according to Sections 502, 503.2, and 505
- b. Compliance will be determined based on the VOC content limit, expressed in metric units. (English units {lbs VOC/gal} are provided for information only.)

TABLE 345-1

VOC LIMITS (REGULATORY) FOR REFINISHES APPLIED TO THE BODIES OF AUTOMOBILE/LIGHT DUTY VEHICLES OR MOTORCYCLES AND MOBILE EQUIPMENT

VOC LIMITS FOR REFINISH COATINGS AS APPLIED, MINUS EXEMPT COMPOUNDS

Coating Category	Grams VOC per liter	Pounds VOC per gal
Pretreatment wash-primers coating	780	6.5



Coating Category	Grams VOC per liter	Pounds VOC per gal
Primers/primer Primer surfacers	580	4.8
Primer sealers	550	4.6
Clear coating	600	5.0
Single-stage process	600	5.0
Single two-stage topcoats	600	5.0
Two-stage process or more	600	5.0
Topcoats of more than two stages Three-stage process or more	630	5.2
Multi-colored topcoats process	680	5.7
Specialty coatings	840	7.0
Strippable booth coatings	420	3.5
Spot repair	546	4.6

301.2 Refinishing Surfaces that are Not Part of Body/Chassis: The recoating of a section of a light duty vehicle that is not part of its body/chassis, its body's appurtenances, nor its wheels, shall comply with the VOC limits of Table 3. This includes drive train, steering gear, suspension, etc.

301.3 Refinishing Replacement Appurtenances on the Vehicle Body: Vehicle body appurtenances such as mirrors, trim strips, license plate frames, etc., used to replace or supplement existing appurtenances on an automobile/light duty vehicle bodies may be coated with coatings that meet the applicable VOC limits in Table 1, even if the item has never been coated or used.

302 301.3 REFINISHING Heavy Duty TRUCKS AND TRUCK TRAILERS Vehicle Coating:

302.1 Refinish VOC Limits: No person shall An owner or operator shall not apply refinish coating to any section or appurtenance of the body or chassis of a heavy truck a heavy duty vehicle unless that coating complies with the VOC limits in Table 2 345-2 of this rule.

a. VOC content is determined according to Sections 502, 503.2, and 505

b. Compliance will be determined based on the VOC content limit, as expressed in metric units. (English units {lbs VOC/gal} are provided for information only.)

302.2 Refinishing Replacement Appurtenances on A Heavy Truck: At the time of (re)placement, a person may coat heavy truck body appurtenances such as mirrors, trim strips, license plate frames, wheel covers, etc., with coatings that meet the applicable VOC limits in Table 2 or the requirements of subsection 302.3, if the item is about to be used to replace or supplement existing appurtenances, even if the item has never been coated or used.

TABLE 2 345-2

VOC LIMITS (REGULATORY) FOR REFINISH COATING AS REFINISHES APPLIED TO HEAVY TRUCK BODIES DUTY VEHICLES

VOC LIMIT and Effective Date	Current	November 1, 1999	November 1, 2000	November 1, 2001	ROW	Grams VOC per liter	Pounds VOC per gal
Coating Category							
Pretreatment wash primer coating	780 g/L 6.5 lb/gal				1	780	6.5
Primers/primer surfacers	580 g/L 4.8 lb/gal	same	same	420 g/L 3.5 lb/gal	2	-	-
Primer sealers	550 g/L 4.6 lb/gal	same	same	420 g/L 3.5 lb/gal	3	-	-
Clear coating						420	3.5
Three-stage process or more						480	4.0
Multi-colored process						680	5.7
Primer						480	4.0
Single-stage process, solid color	600 g/L 5.0 lb/gal	same	same	420 g/L 3.5 lb/gal	4	420	3.5
Single stage, metallic/iridescent	550 g/L 4.6 lb/gal	same	same	420 g/L 3.5 lb/gal	5	-	-
2-Stage topcoat basecoat & clearcoat Two-stage process	600 g/L 5.0 lb/gal per formula**	same	same	480 g/L 4.0 lb/gal per formula**	6	420	3.5
Topcoats of more than two stages	630 g/L 5.2 lb/gal per formula**	same	same	480 g/L 4.0 lb/gal for trailers**	7	-	-
Spot coats repair, 1-liter limit each stage	600 g/L 5.0 lb/gal			546g/L (11/2/02)	8	546	4.6



Specialty coatings as defined by §231	840 g/L 7.0 lb/gal			9	840	7.0
Strippable booth coatings	2.0 lb/gal				240	2.0

**Formula for computing the VOC content of a multi-stage coating is in subsection 503.1

302.3 Spot Refinishing of Heavy Trucks: A person may coat a heavy truck panel, a juncture of panels, or a body appurtenance using a coating with a VOC content that does not exceed the VOC limits set forth in subsection a below, provided that the coatings as applied meet the requirements as set forth in subsection b:

a. VOC Limits for Spot Refinishing of Heavy Trucks:

- (1) Through November 1, 2002 – 600 g VOC/L (5.0 lb VOC/gal).
- (2) After November 1, 2002 546 g VOC/L (4.55 lb VOC/gal).

b. Volume Limits:

- (1) The coating shall be applied from a reservoir having a gross volume not exceeding 1.2 liters (5 cups) and containing no more than 1 liter (1.1 qt.) of coating.
- (2) The complete topcoat of a single stage finish shall not use more than 1 liter.
- (3) The complete topcoat of a multi-stage finish shall not exceed 2 liters.
- (4) The total of all non-topcoat process coatings, including wash and primers shall not exceed 1 liter.

e. Wash Primers may have up to 780 g/L (6.5 lb/gal).

303 COATING NEW SURFACES & REFINISHING HEAVY VEHICLES

303.1 Coating New or Never Coated Surfaces: New or never coated surfaces of mobile equipment and of a vehicle, including a heavy truck, that is not manufactured under NAICS code 33611, are subject to a VOC limit of 3.5 lb VOC/gal (420 g/L) for all unbaked coatings over metal or plastic. The VOC content of coating applied on or over surfaces included in Table 3 shall comply with the VOC limits of Table 3.

303.2 Refinishing Surfaces that are Not Part of Body/Chassis: The recoating of a section of mobile equipment or a heavy-duty vehicle, including a heavy truck, that is not part of its body/chassis, its wheels, nor appurtenances, shall comply with the VOC limits of Table 3. This includes drive train, steering gear, suspension, etc.

303.3 Refinishing Mobile Equipment and Heavy Duty Vehicles: No person shall refinish mobile equipment or any heavy-duty vehicle that is not a heavy truck unless the coating as applied conforms to the VOC limits in Table 3, except that pre-treatment acid etchant wash shall conform to the VOC limits of row 1 in Table 2.

TABLE 3

VOC Limits for Coating As Applied To Uncoated Vehicle Surfaces COATING

COATING ON METAL SURFACES	Lbs. per gallon	Grams per liter
The following includes Coating, Adhesive, & Adhesive Primer		
Air-Dried Coating	3.5	420
Baked Coating [above 200°F (93°C)]	3.0	360
COATING ON VINYL SURFACES	3.8	450
COATING ON FABRIC SURFACES	2.9	350
COATING PLASTIC SURFACES not defined as flexible	3.5	420
COATING FLEXIBLE PLASTIC SURFACES (not Vinyl)		
Primer	4.1	490
Color Topcoat	3.8	450
Basecoat/Clear Coat (Combined System)	4.5	540

TABLE 345-3

VOC LIMITS (REGULATORY) FOR COATING AS APPLIED TO NEW OR NEVER COATED VEHICLE SURFACES

COATING ON METAL SURFACES

The following includes Coating, Adhesive, & Adhesive Primer	Grams VOC per liter	Pounds VOC per gal
Air-Dried Coating	420	3.5
Baked Coating [above 200°F (93°C)]	360	3.0
COATING ON VINYL SURFACES	450	3.8
COATING ON FABRIC SURFACES	350	2.9
COATING PLASTIC SURFACES not defined as flexible	420	3.5
COATING FLEXIBLE PLASTIC SURFACES (not Vinyl)		
- Primer	490	4.1
- Color Coating	450	3.8
- Color Coating/Clear Coat (Combined System)	540	4.5

304 Mixing Requirements:

304.1 Suppliers Provide Mixing Instructions: No person shall supply vehicle refinishes regulated by Table 1 or Table 2 of this rule unless instructions for proper mixing/diluting are provided.

304.2 Vehicle Appropriate VOC Content and Instructions: If a supplier of a refinish coating represents that such coating is appropriate to coat a particular type of vehicle listed in Table 1 or Table 2:



- a. The coating as mixed and applied must meet the applicable VOC limit in Table 1 or Table 2; and,
 - b. The supplier must provide only those mixing/blending instructions that meet the VOC limit; except,
 - e. Instructions that included both compliant and non-compliant formulation directions are acceptable if they have a line, mark, or totally obscuring coating through/over each word of all non-compliant mixing instructions.
- 304.3 Mixing Requirements for the Coating User: No person adding VOC-containing thinner, reducer, or other diluent to any refinish coating regulated by either Table 1 or Table 2 add such diluents in proportions higher than those specified or recommended by the instructions provided by the supplier of the coating.

302 OPERATING REQUIREMENTS:

- 305 **302.1** SURFACE PREPARATION AND SURFACE-CLEANING FLUIDS**Surface Preparation Fluids:** An owner or operator shall use surface preparation fluids with a VOC content as applied of no more than 1.4 lbs. VOC per gallon as calculated according to Section 503.3 of this rule.
- 305.1 A person cleaning or preparing a surface of a vehicle or mobile equipment for coating using a wipe method or other non-dip method shall use a material with a VOC content as applied of no more than 1.4 lb. of VOC per gallon as determined by methods set forth subsections 502.1d or 502.3 305.2
- 305.2 **a.** Neither surface cleaning nor surface preparation material that contains VOC Surface preparations fluids containing VOC shall not be applied by means of motor compressed air if applied in a mist or (finely atomized) spray.
- 305.3 **b.** Dip cleaning requirements for motor vehicle or mobile equipment surfaces are described in Rule 331 (Solvent Cleaning) of these rules, applies to the dip cleaning of vehicle or mobile equipment surfaces.
- 302.2** Paint Stripping: An owner or operator using a tank for stripping off coatings or for cleaning objects shall:
- a.** Cover tanks when not in-use; and
 - b.** Minimize solvent dragout by tilting or rotating the object to drain off any pools of solvent before removing the object from the tank.
- 302.3** Emission Control System (ECS): As an alternative to meeting the VOC regulatory limits, as applied, pursuant to Tables 345-1, 345-2, and 345-3 of this rule, an owner or operator is allowed to operate an ECS that reduces VOC emissions by at least 85% pursuant to Section 504 of this rule.
- 306 **302.4** Maintenance: Any person An owner or operator subject to this rule shall operate and maintain in proper working order all production and cleaning equipment in which VOC-containing materials are used or stored.
- 302.5** Storage and Disposal of VOC and VOC-Containing Material: An owner or operator subject to this rule shall:
- a.** Store all VOC-containing materials including, but not limited to, waste coatings, waste solvents and their residues, and rags in closed containers.
 - b.** Post a legible label identifying all VOC container's contents (greater than one gallon) in clear view on the container.
 - c.** Keep all VOC containers closed except when contents are added or removed.
 - d.** Dispose of waste or surplus VOC-containing materials in a manner that minimizes VOC evaporation including, but not limited to, disposing of them in covered containers.
 - e.** Collect all VOC solvent used to manually clean spray guns in a container and close the container immediately after all of the solvent has been collected.

303 APPLICATION REQUIREMENTS:

- 303.1** Spray-applied coating operations that use coatings greater than 2.0 lb VOC/gal (240 g/l) shall be performed using one of the following:
- a.** An HVLP spray gun;
 - b.** An electrostatic application;
 - c.** A system that atomizes principally by hydraulic pressure, including "airless", "air-assisted airless"; or
 - d.** Any specific system which is approved by the Administrator as HVLP-equivalent.
- 303.2** An owner or operator subject to this rule is allowed to use a device or system other than that described in Section 303.1 of this rule under any one of the following conditions:
- a.** When conducting a spray-applied coating operation that uses a coating that is less than 2.0 lb VOC/gal (240 g/l);
 - b.** If spray guns are designed and used solely for detailing, spot repair, and/or touch-up, and have a maximum reservoir capacity of 250 cc (8.8 fluid ounces); or
 - c.** When spray applying adhesives.
- 303.3** Spray Gun Cleaning Requirements:
- a.** An owner or operator subject to this rule shall minimize VOC emission from cleaning spray guns by ensuring that equipment cleaning is performed without atomizing the solvent and all spent solvent is captured in closed containers.
 - b.** Spray Gun Cleaning Machine: An owner or operator subject to this rule shall use a spray gun cleaning machine that complies with the following requirements unless the owner or operator complies with the manual spray gun cleaning requirements in Section 303.3(c) of this rule.
 - (1) General Requirements for Spray Gun Cleaning Machine:** The spray gun cleaning machine shall meet all of the following requirements:
 - (a)** Be designed to clean spray guns; and
 - (b)** Have at least one pump which drives solvent through and over the spray gun; and
 - (c)** Have a basin which permits containment of the solvent; and
 - (d)** Be kept in proper repair and free from liquid leaks; and
 - (e)** Be fitted with a cover; and



- (f) Be located on-site where the spray application occurs.
- (2) **Automatic Spray Gun Cleaning Machine:** An automatic spray gun cleaning machine shall meet all of the following requirements:
- (a) Have a self-closing cover or other self-enclosing feature for use when not loading or unloading. The cover's closed position allows no gaps exceeding 1/8 inch (3 mm) between the cover and the cabinet; and
- (b) Be designed and maintained to prevent operation of its mechanical cleaning feature(s) unless it is completely covered or enclosed to the gap limits specified in Section 303.3(b)(2)(a) of this rule.
- (3) **Non-Automatic Remote Reservoir Spray Gun Cleaning Machine:** A non-automatic remote reservoir spray gun cleaning machine shall meet all of the following requirements:
- (a) Drain solvent from the sink/work-space quickly into a remote reservoir when work-space is not in-use; and
- (b) Have the machine reservoir ability to contain VOC vapors and not have a cumulative total opening, including the drain opening(s), allowing VOC-escape to the atmosphere exceeding two square inches; and
- (c) Allow a machine design in which the base of the sink/work-space functions as the reservoir's top surface, as long as the fit/seal between sink base and reservoir container allows the reservoir to meet the opening limits specified in Section 303.3(b)(3)(b) of this rule.
- c. **Manual Spray Gun Cleaning Requirements:** Manual cleaning of spray guns shall comply with all of the following requirements:
- (1) Disassembled spray guns shall be cleaned by hand or by non-mechanical, hand-held equipment including, but not limited to, paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges. For the purposes of this rule, brushes shall not be composed of porous materials such as wood or leather; and
- (2) All solvent used to manually clean spray guns shall be collected into a container which shall be immediately closed after all the solvent has been collected; and
- (3) Disassembled spray guns shall be cleaned with water or a solvent that is more than ½ water by weight or volume and calculated according to Section 503.3 of this rule.
- 303.4 Line Cleaning:** All solvent used for line cleaning shall be pumped or drained into a container and kept closed when not in-use. Line cleaning shall not be conducted by spraying or atomizing a solvent with a gun.
- 307 **PAINT GUN REQUIREMENTS AND LIMITS**
- 307.1 No person shall apply any coating with a VOC content exceeding 3.0 lb VOC/gal (360 g/l) using a spray gun, unless such spraying employs one of the following devices or systems:
- a. A low pressure spray gun or system (such as HVLP)
- b. An electrostatic system;
- e. A system that atomizes principally by hydraulic pressure, including "airless", "air assisted airless";
- 307.2 A person is allowed to use a spray gun other than one allowed by subsection 307.1 under the following conditions:
- a. For applying materials that have a VOC content not exceeding 3.0 lb VOC/gal (360 g/l) as applied, less water and non-precursor compounds.
- b. If such guns are designed and used solely for detailing and/or touch up, and have a maximum reservoir capacity of 250 cc (8.8 fluid ounces).
- e. If such guns are used to apply adhesives.
- 308 **EMISSION CONTROL SYSTEM:** As an alternative to meeting an applicable coating VOC limit and/or work practice pursuant to Sections 302, 304, 305, or 307, an operator is allowed to operate an Emission Control System (ECS) that reduces VOC emissions by at least 85%, pursuant to Section 504.
- 309 **CLEANUP AND CLEANING SUPPLY AND APPLICATION EQUIPMENT:**
- 309.1 All solvent used to manually clean spray guns shall be collected into a container which shall be immediately closed after all the solvent has been collected.
- 309.2 All solvent used for line cleaning shall be pumped or drained into a container kept closed when not in use.
- 309.3 Tanks used for stripping off coating or for cleaning objects shall be covered when not in use. Solvent dragout shall be minimized by tilting or rotating the object to drain off any pools of solvent before removing the object from above the tank.
- 310 **GUN CLEANING MACHINES:** Any person subject to this rule shall use a paint gun cleaning machine to clean paint guns if the vehicle refinishing operation is required to have an Air Pollution Control Permit by Rule 200 of these Rules.
- 310.1 **Manual Pre-Cleaning and Water Cleanup:**
- a. Manual cleaning outside of the cleaning machine is allowed if the cleaning machine is used immediately after manual cleaning, and if done without spraying cleaning solvent with the gun.
- b. A cleaning machine is not required to clean a paint gun if the gun is cleaned with water or a cleaning mixture that is more than 1/2 water by weight or volume.
- 310.2 **General Requirements for Gun Cleaning Machines:** The gun cleaning machine shall:
- a. Be designed to clean paint guns and be kept in proper repair and free from liquid leaks.
- b. Have at least one pump which drives cleaning solvent through and over the gun, and a basin which permits containment of the cleaning solvent.
- e. Have all covers and other surfaces that are exposed to gaseous or liquid VOC solvent be impervious to both gaseous and liquid VOC solvent.
- 310.3 **Specific Requirements for 2 Types of Cleaning Machines:**
- a. **Automatic Gun Cleaning Machine:**



- (1) Shall be self-covering or enclosing when not loading or unloading.
- (2) The machine shall have a self-closing cover or other self-enclosing feature which in the cover's closed position allows no gaps exceeding 1/8 inch (3 mm) between the cover and the cabinet.
- (3) The machine shall be designed and maintained to prevent operation of its mechanical cleaning feature(s) unless it is completely covered or enclosed to the gap limits specified in the preceding subsection 310.3a.(2).
- b. Non-Automatic Remote Reservoir Gun-Cleaning Machine:
 - (1) The cleaning machine shall be designed such that cleaning solvent drains from the sink/work space quickly and completely into a remote reservoir when the work space is not in use.
 - (2) The reservoir shall have the ability to contain VOC vapors and shall not have a cumulative total opening, including the drain opening(s), allowing VOC escape to the atmosphere exceeding two square inches in area.
 - (3) Machine designs are allowed in which the base of the sink/work space functions as the reservoir's top surface, as long as the fit/seal between sink base and reservoir container allows the reservoir to meet the opening limits specified in the preceding subsection 310.3b.(2).

311 304 STORAGE AND DISPOSAL OF VOC AND VOC-CONTAINING MATERIAL:

- ~~311.1~~ **304.1** Any person ~~An owner or operator~~ subject to this rule shall store all VOC-containing materials including, but not limited to, waste coatings, waste solvents and their residues, and rags in closed containers at all times except ~~when contents are added or removed, such materials are in-use.~~
- ~~311.2~~ **304.2** A container must have a legible label identifying the container's contents.
- ~~311.3~~ **304.3** Convey VOC-containing coating and cleaning materials from one location to another in closed containers.
- ~~311.4~~ **304.4** ~~Disposal~~ Disposed of waste or surplus VOC-containing materials (used for both coating and cleaning) shall be ~~done in a manner that inhibits VOC evaporation, kept in closed containers at all times except when depositing or removing these materials, such as having these~~ These materials shall be hauled off removed from the site in sealed containers.

312 EXEMPTIONS:

- 312.1 Exemptions from other Rules: Maricopa County Air Pollution Rules and Regulations Rules 330 and 336 do not apply to any vehicle or mobile equipment coating or refinishing operation to which this Rule 345 is applicable.
- 312.2 Formal Vehicle Refinishing Training: A student in classes at an accredited school which teaches vehicle refinishing is exempt from the recordkeeping provisions of this rule.
- 312.3 Coating with a non-refillable aerosol can is exempt from this Rule 345.
- 312.4 Out-of-Date Coatings: Coating otherwise subject to Table 1 limits but manufactured before January 15, 1999, is exempt from Table 1 VOC limits until November 1, 1999.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

401 ECS EMISSIONS CONTROL SYSTEM (ECS) SCHEDULE: Any owner or operator intending to install an ECS in a facility to comply with requirements of this rule shall complete the requirements of ~~subsection 504.3~~ Section 504 of this rule.

402 THE RESPONSIBILITIES OF LARGE USERS:

- 402.1 The owner or operator of a facility which emits 10,000 pounds or more of VOC in any calendar year must submit a report of such emissions on a form supplied by the Department after the end of that calendar year.
- 402.2 An owner or operator of a facility which in a calendar year meets or exceeds any of the following quantities must notify the Control Officer of this fact in writing by February 28 (within two months) after the end of that calendar year:
 - a. Used a total of 1000 gallons (3785 l) of coating (with reducer and hardener); or
 - b. Received a total of 1300 gallons (4920 l) of cleaning solvent, lacquer thinner and wash thinner; or
 - c. Disposed of more than 1000 gallons or 6000 pounds (2722 kg) to hazardous waste collection; or
 - d. Submitted a total exceeding 9000 pounds (4082 kg) of VOC in the facility's most recently completed Maricopa County annual air emission inventory form.
- 402.3 The Control Officer may require in writing a report of annual emissions from a facility which has given notification as required by the preceding subsection 402.2, or from any other facility which in the Control Officer's determination can have annually emitted 5 tons (4536 kg) or more of VOC.

403 JOBBERS/SUPPLIERS RECORDKEEPING RESPONSIBILITY FOR REFINISHES:

- 403.1 An owner or operator selling or supplying vehicle refinishing coatings, coating components, or refinishing supplies directly to facilities that refinish automobiles, light duty vehicles, or heavy trucks in Maricopa County shall maintain records of the VOC content of such materials; and
 - a. Records shall be sufficient to calculate the total VOC annually sold to facilities described in the preceding subsection 403.1.
 - b. Records shall include sales of cleanup and surface preparation materials that contain more than 2% VOC by weight or volume, or more than 0.17 lb VOC/gal (20 g/L).
- 403.2 An owner or operator shall total cumulative vehicle refinishing VOC sold during a current calendar year (pursuant to 403.1) in a quarterly manner, by the end of the month following each quarter.
- 403.3 Jobbers or suppliers annually supplying less than 100 pounds of vehicle refinishes and supplying less than 100 pounds of cleaning/surface prep materials to vehicle refinishers are exempt from the requirement of subsections 403.1 and 403.2.

404 WEIGHT EXCLUSION: Vehicles having a manufacturer's gross vehicle weight rating of 8600 lbs or more are excluded from NAICS code 33611, unless clearly identified as being included by the NAICS, as incorporated by reference in Section 505.

SECTION 500 – MONITORING AND RECORDS



- 501 RECORDKEEPING AND REPORTING:** ~~Any person~~ An owner or operator ~~subject to this rule~~ shall keep the following records required under this Section 501 in a consistent and complete manner and shall make them available to the Control Officer upon request without delay during normal business hours. ~~Records shall be kept in either written or electronic format and retained for five years. (The Control Officer may account as VOC emissions to the atmosphere, any VOC that is not accounted for by adequate records of disposal or of reuse within a facility.) Records shall express VOC content in either English units (pounds of VOC per gallon) or metric units (grams of VOC per liter), less water, non-precursor organic compounds, and exempt compounds.~~
- 501.1 Responsibility for Products In-Use:** ~~An owner or operator shall maintain written records in the facility which give the name or code number of each VOC-containing product and its VOC content as received. VOC content shall be expressed in pounds of VOC per gallon (or grams/liter), less water and non-precursors, excepting waterborne cleaners which shall include the water:~~
- ~~a. Examples of What to Include: All coating components as received from the supplier, before any in-house blending, such as coating base and tint base for topcoats, midcoats, primers, specialty coatings, sealers, and strippable booth coating; other coating components such as hardeners, catalysts, reducers, promoters, inhibitors and other coating additives; and stripper, wash thinner, lacquer thinner, gun cleaning solvent, surface prep cleaners and other cleaners, including waterborne cleaners which contain some VOC. An owner or operator shall keep the quantity of the VOC coatings and solvents used in the following form:~~
 - ~~a. Material name and manufacturer.~~
 - ~~b. Coating type (as listed in Tables 345-1, 345-2, and 345-3 of this rule) and mix ratio specific to the coating.~~
 - ~~c. VOC regulatory for coatings as applied.~~
 - ~~d. VOC content for cleaners.~~
- 501.2 Alternative Application Method Transfer Efficiency Documentation:** Retain records of any specific system which is approved by the Administrator as HVLP-equivalent.
- 501.3 HVLP Spray Gun Transfer Efficiency Documentation:** Retain records of the HVLP spray gun transfer efficiency and/or demonstration of transfer efficiency.
- 501.4 Hazardous wastes manifests.**
- b. **501.5 Sufficient Documentation:** Any one of the following may be used to meet the requirements of subsection 501.1, as long as all VOC-containing refinishing products are accounted for pursuant to subsection 501.1, (first paragraph) Sufficient documentation includes any of the following:
- ~~(1) An up-to-date hardcopy (in writing) list prepared for that facility.~~
 - ~~(2) Current material safety data sheets (MSDS) or product data sheets showing the VOC content.~~
 - ~~(3) a. Purchase or usage documentation that gives VOC content, such as invoices and/or receipts showing VOC content identifying the coating type (as listed in Section 501.1 of this rule) including name and volume of coatings and solvents.~~
 - ~~(4) b. Current, dated manufacturers publications such as charts or lists which show VOC content, with the products used in the facility highlighted or otherwise clearly marked.~~
- ~~501.2 501.6 Documentation of Purchases: Purchase records showing the volume of each VOC-containing refinishing related product material purchased shall be kept available for the current and the previous year. Actual invoices and receipts showing the volume of the material purchased will suffice in place of ledger-style records.~~
- ~~501.3 Record Retention: Records shall be retained for five years.~~
- ~~501.4 Records: The Control Officer may account as VOC emissions to the atmosphere any VOC that is not accounted for by adequate records of disposal or of reuse within a facility.~~
- 501.7 Aerosol Spray Cans:** Maintain purchase records for aerosol spray cans, including VOC content.
- 502 COMPLIANCE DETERMINATION:**
- ~~502.1 For routine purposes, the Control Officer may determine VOC content from a manufacturer's product data document such as a current manufacturer's safety data sheet (MSDS) that provides exact product contents.~~
- ~~502.2 502.1 Measurement of VOC content of coating materials subject to this rule, including the requirements of Section 301, shall be conducted and reported in accordance with EPA Test Method 24 (as incorporated by reference in Section 505), with the following restrictions for multi-component, polymerizing coatings: Method 24 shall be modified to eliminate the post-mixing dilution step (that employs toluene or other solvent). The mixture shall be spread instead by appropriate technique to form a thin layer, occupying the entire bottom of the foil pan. California's Bay Area Air Quality Management District Method 31 (amended 4/15/92) can be used as a guide for such spreading. Measurement of VOC Content of Coating Materials Subject to this Rule: EPA Test Method 24 (as incorporated by reference in Section 505 of this rule) shall be used to determine VOC content of coating materials with the following restrictions for multi-component, polymerizing coatings:~~
- ~~a. Method 24 shall be modified to eliminate the post-mixing dilution step (that employs toluene or other solvent) for the multi-component, polymerizing coatings.~~
 - ~~b. Method 31 (amended 5/18/2005) California's Bay Area Air Quality Management District shall be used as a guide for the multi-component, polymerizing coating measurement. The VOC measurement requires a specific technique of spreading a thin layer over the entire bottom of a foil pan used for the measurements. Refer to Section 505.3(a) of this rule as a guide for application of this method.~~
- ~~502.3 502.2 Low or No-Solids Materials:~~
- ~~a. The VOC content of solutions, dispersions, and emulsions that have no solids or less than 5% solids shall be determined by + either of the following methods: as incorporated by reference in Section 505 of this rule:~~
 - ~~(+) a. Method 313-91 - South Coast Air Quality Management District, Method 313-91, as incorporated by reference in Section 505.~~



- (2) **b.** Method 31 of California’s Bay Area Air Quality Management District, ~~as incorporated by reference in Section 505.~~
- b.** Measurement of the VOC content of cleaning fluids, including those cleaners limited by Section 305 of this rule, shall be according to the formula in subsection 503. and applicable test methods in Section 505.
- 502.4 **502.3** ~~With reference to subsection 307.1a, measurement of air pressure at the tip of an air atomized paint spray gun that atomizes shall be performed using a device supplied by the gun’s manufacturer for that purpose. The measurement shall be made dynamically at the center of the air cap and at the air horns, with the spray configured to a fan diameter of eight to ten inches on a flat surface being coated. The axis of the fan pattern shall be perpendicular to this surface.~~ **Spray Gun Transfer Efficiency Measurement:** The measurement of air pressure of an air atomized spray gun shall be demonstrated by any of the following methods:
 - a.** Dynamically at the center of the air cap.
 - b.** At the air horns, with the spray configured to a fan diameter of eight to ten inches on a flat surface being coated.
 - c.** The axis of the fan pattern shall be perpendicular to this surface.
 - a.** Operating the air atomized spray gun using an air pressure tip gauge supplied by the manufacturer of the spray gun. This gauge is an attachable device that is in proper working order and supplied by the gun’s manufacturer for performing such a measurement. The gauge, (psig) air atomizing pressure measurement is made dynamically at the center of the air cap. The measurement shall be performed upon request by the Control Officer; or
 - b.** Providing documentation with manufacturer’s technical literature on letterhead of the manufacturer of the spray gun confirming maximum air cap pressure; or
 - c.** In accordance with the provisions of Section 505.3(d) of this rule.
- 502.5 **502.4** ~~Pretreatment Wash Primers: The acid weight percent of pretreatment wash primers must be determined using the American Society for Testing and Materials (ASTM) Test Method D 1613-96, as incorporated by reference in Section 505. If the pigment in a pretreatment wash primer prevents the use of this test method for determining the acid weight percent of the coating, then the test method shall be used for the nonpigmented component of the coating, and the acid weight percent shall be calculated based on the acid content of the nonpigmented component and the mixing ratio of the nonpigmented component to the remaining components recommended by the regulated entity.~~ **Pretreatment Coatings:** ASTM D1613-06 as incorporated by reference in Section 505.3(c) of this rule shall be used determine the acid weight percent of a pretreatment coating, with the following exceptions:
 - a.** The pigment in a pretreatment coating prevents the use of this test method for determining the acid weight percent of the coating, then the test method shall be used for the non-pigmented component of the coating; and
 - b.** The acid weight percent shall be calculated based on the acid content and the mixing ratio of the non-pigmented component and compared to the remaining components recommended by the regulated entity.
- 502.6 **502.5** ~~ECS Testing:~~
 - a.** The VOC content of gaseous emissions entering and exiting an ECS shall be determined by either EPA Method 18 or EPA Method 25 and its submethod(s), as are incorporated by reference in Section 505. **EPA Method 18 or EPA Method 25 and its Submethod(s);** These methods, incorporated by reference in Section 505 of this rule, shall be used to determine VOC content of gaseous emissions entering and exiting an ECS.
 - b.** Capture efficiency of an ECS shall be determined either by EPA Method 204 and its submethods, or by using mass balance calculation methods in concert with EPA Methods 2, 2a, 2c, and 2d, as are incorporated by reference in Section 505 of this rule.
- 503 **FORMULAS VOC CONTENT CALCULATIONS:** For the purpose of determining compliance with the VOC regulatory limits in Table 345-1 of this rule, an owner or operator shall determine the VOC content of a coating using the procedures described in Section 503.2 of this rule for a single-stage process or as follows for the VOC content of a multi-stage process.
- 503.1 **VOC Multi-Stage Calculation:** For the purpose of determining compliance with the VOC content limits in Table 1 of this rule, each regulated entity shall determine the VOC content of a coating using the procedures described in subsection 503.2 for a single coating stage or as follows for the VOC content of a multi stage coating.

$$VOC\ multi = \frac{VOC_{bc} + \sum_{i=0}^m VOC_{mci} + (2VOC_{cc})}{M + 3}$$

Where:

- VOC_{multi} = VOC content regulatory of multi-stage ~~to repeat process~~, in grams VOC/liter (lbs./gal) of coating;
- VOC_{bc} = VOC content regulatory of the ~~basecoat color coating~~, as determined in ~~subsection 503.2~~ Section 503.2 of this rule;
- VOC_{mci} = VOC content regulatory of midcoat i, as determined in ~~subsection 503.2~~ Section 503.2 of this rule;
- VOC_{cc} = VOC content regulatory of the ~~clearcoat clear coating~~, as determined in ~~subsection 503.2~~ Section 503.2 of this rule; and
- M = Number of midcoats.

In a situation where a “ground coat” is used prior to a ~~basecoat color coating~~, use of the equation shall be adjusted as follows: The ground coat will be considered the ~~basecoat color coating~~ and the ~~basecoat color coating~~ will be considered one of the midcoats.

- 503.2 ~~Pounds of VOC per Gallon of Coating (Grams VOC/Liter)~~ **VOC Single-Stage Calculation:** The mass of VOC per combined volume of VOC plus coating solids before coating application, which can be calculated by the following equation: Each single-stage process shall be calculated as follows:



$$\text{Pounds of VOC per Gallon (Grams/liter) of Coating} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

- W_s = weight of all volatile material in pounds (or grams) including VOC, water, non-precursor organic compounds or dissolved vapors
- W_w = weight of water in pounds (or grams)
- W_{es} = weight of ~~non-precursors~~ all non-precursor organic compounds in pounds (or grams)
- V_m = volume of total material in gallons (or liters ~~if using grams~~)
- V_w = volume of water in gallons (or liters ~~if using grams~~)
- V_{es} = volume of non-precursor organic compounds in gallons (or liters)

503.3 VOC Content of Cleaners and Reducers (Material VOC-Content):

$$\text{VOC Content of ~~Material~~ Cleaners or Reducers} = \frac{W_s - W_w - W_{es}}{V_m}$$

~~Using consistently either English or metric measures in the calculations~~

~~Where:~~

- W_s = weight of all volatile material in pounds (or grams) including VOC, water, non-precursor organic compounds and dissolved vapors
- W_w = weight of water in pounds (or grams)
- W_{es} = weight of all non-precursor organic compounds in pounds (or grams)
- V_m = volume of total material in gallons (or liters)

504 EMISSION CONTROL SYSTEM (ECS) AND RELATED SYSTEM OPERATING REQUIREMENTS:

504.1 ECS Requirements: To meet the requirements pursuant to Section ~~308~~302.3 of this rule, an ECS shall be operated as follows:

- a. The emissions-processing subsystem of the ECS shall reduce the VOC entering it by at least 90 percent.
- b. Throughout the period when the VOC content exceeds the applicable VOC limits, the ECS shall be operated to control VOC emissions.
- c. Materials that exceed the applicable VOC-limits shall be clearly identified such that workers are informed an ECS must be used.

504.2 Recordkeeping for An ECS:

- a. On each day that an ECS is used to comply pursuant to Section ~~308~~302.3 of this rule, an owner or operator shall record the amount and VOC content of the material for which the ECS was used.
- b. **ECS Operation and Maintenance Records:**
 - (1) On each day an ECS is used, make a permanent record of the operating parameters of the key systems as required by the Operations & Maintenance (O&M) Plan.
 - (2) For each day or period in which the O&M Plan requires that maintenance be performed, a permanent record shall be made of the maintenance actions taken within 24 hours of maintenance completion.

504.3 ECS Schedule: Any owner or operator of a facility first intending to install and commence to use an ECS pursuant to ~~Section 308~~Section 302.3 of this rule, shall submit for the Control Officer's approval an emission control plan describing the following: the ECS by the first day of the 4th month after the month in which such facility becomes subject to the ECS requirement. The plan shall show how the ECS is to be used to achieve full compliance. The plan shall specify dates for completing increments of progress, such as the contractual arrival date of new control equipment. The Control Officer may require a person submitting such emission control plan to submit subsequent reports on progress in achieving compliance. Any and all ECS used to achieve such compliance shall be in operation by 15 months after the facility becomes subject to the ECS requirement.

- a. Within three months that such facility has become subject to the ECS requirement, the owner or operator shall submit the ECS plan to the Control Officer;
- b. The ECS plan shall show how the ECS is to be used to achieve full compliance;
- c. The plan shall specify dates for completing increments of progress, such as the contractual arrival date of new control equipment;
- d. The Control Officer may require a person submitting such ECS plan to submit subsequent reports on progress in achieving compliance; and
- e. Any and all ECS used to achieve such compliance shall be in operation within 15 months after the facility becomes subject to the ECS requirement.

504.4 Operation and Maintenance (O&M) Plan Required for ECS: For any ECS used to meet the requirements of this rule:

- a. An owner or operator shall provide and maintain (an) O&M Plan(s) for the ECS and any ECS monitoring device.
- b. The owner or operator shall submit to the Control Officer for approval the O&M Plans of each ECS and each ECS monitoring device.
- c. The owner or operator shall comply with all the identified actions and schedules provided in each O&M Plan.

504.5 Providing and Maintaining ECS Monitoring Devices: ~~Any person~~ Any owner or operator incinerating, adsorbing, or otherwise processing VOC emissions pursuant to this rule shall provide, properly install and maintain in calibration, in good working order and in operation, devices described in the facility's O&M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if air pollution control equipment is functioning properly and is properly maintained.



504.6 O&M Plan Responsibility: An owner or operator of a facility that is required to have an O&M Plan pursuant to ~~subsection~~ Section 504.4 of this rule must fully comply with all O&M Plans that the owner or operator has submitted for approval, but which have not yet been approved, unless notified otherwise by the Control Officer in writing.

505 TEST METHODS ADOPTED BY REFERENCE COMPLIANCE DETERMINATION-TEST METHODS INCORPORATED BY REFERENCE: The EPA test methods as they exist in the Code of Federal Regulations (CFR) (July 1, 1998), as listed below, are adopted by reference. The other test methods listed here are also adopted by reference, each having paired with it a specific date that identifies the particular version/revision of the method that is adopted by reference. These adoptions by reference include no future editions or amendments. Copies of test methods referenced in this section are available at the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004. The following test methods, as applicable, shall be used to determine compliance with this rule. Alternative test methods may be utilized upon written approval from the Control Officer. The EPA test methods as they exist in the Code of Federal Regulations (CFR), as listed below, are incorporated by reference in Appendix G of the Maricopa County Air Pollution Control Regulations. Copies of test methods referenced in this section are available at the Maricopa County Air Quality Department, 1001 N. Central Avenue, Suite 125, Phoenix, AZ 85004-1942. An exceedance of the limits established in this rule determined by any of the applicable test methods constitutes a violation of this rule.

505.1 EPA Test Methods:

- a. EPA Methods 2 (“Determination of Stack Gas Velocity and Volumetric Flow Rate”), 2a (“Direct Measurement of Gas Volume Through Pipes and Small Ducts”), 2c (“Determination of Stack Gas Velocity and Volumetric Flow rate in Small Stacks or Ducts”), and 2d (“Measurement of Gas volumetric Flow Rates in Small Pipes and Ducts”). All 4 of the foregoing methods are in 40 CFR 60, Appendix A.
- b. EPA Method 18 (“Measurement of Gaseous Organic Compound Emissions by Gas Chromatography”) and its submethods (40 CFR 60, Appendix A).
- c. EPA Test Method 24 (“Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings”) (40 CFR 60, Appendix A).
- d. EPA Method 25 (“Determination of Total Gaseous Nonmethane Organic Emissions as Carbon”) and its submethods (40 CFR 60, Appendix A).
- e. EPA Test Methods 204 (“Criteria For and Verification Of a Permanent or Temporary Total Enclosure”), 204a, 204b, 204c, 204d, 204e, and 204f (Appendix M, 40 CFR 51).

505.2 Other Test Methods (Not EPA):

- a. California’s Bay Area Air Quality Management District (BAAQMD) Method 31 (April 15, 1992), “Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings”.
- b. California’s South Coast Air Quality Management District (SCAQMD) Method 313-91 (April, 1997).
- c. American Society for Testing and Materials (ASTM) Test Method D 1613-96 (1996).

505.3 Other Reference Material: North American Industrial Classification System, Executive Office of the President, Office of Management and Budget, 1997, pp. 334-339, et. seq.

505.1 The EPA test methods, ASTM International (ASTM) standards and other documents as they exist in the Code of Federal Regulations (CFR) as listed below, are adopted and incorporated by reference in Appendix G of the Maricopa County Air Pollution Control Regulations. The ASTM test methods referenced in this section are available for review the Maricopa County Air Quality Department, 1001 N. Central Avenue, Suite 125, Phoenix, AZ 85004-1942.

- a. ASTM standards are also available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.
- b. Bay Area Air Quality Management District test methods are available from Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, CA 94109, or from its website at www.baaqmd.gov.
- c. South Coast Air Quality Management test methods are available from South Coast Air Quality Management, 21865 Copley Drive, Diamond Bar, CA 91765, or from its website at: www.aqmd.gov.

505.2 EPA Test Methods:

- a. CFR 60, APPENDIX A-1:
 - (1) Method 2—Determination of stack gas velocity and volumetric flow rate (Type S pitot tube);
 - (2) Method 2A—Direct measurement of gas volume through pipes and small ducts;
 - (3) Method 2C—Determination of stack gas velocity and volumetric flow rate in small stacks or ducts (standard pitot tube);
 - (4) Method 2D—Measurement of gas volume flow rates in small pipes and ducts;
- b. 40 CFR 60, APPENDIX A:
 - Method 18 - Measurement of Gaseous Organic Compound Emissions by Gas Chromatography and its submethods.
- c. 40 CFR 60, APPENDIX A-7:
 - Method 24 - Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings.
- d. 40 CFR 60, APPENDIX A:
 - Method 25 - Determination of Total Gaseous Nonmethane Organic Emissions as Carbon and its submethods.
- e. 40 CFR 51, APPENDIX M:
 - Methods 204, 204a, 204b, 204c, 204d, 204e and 204f - Criteria for and Verification of a Permanent or Temporary Total Enclosure.

505.3 Other Test Methods (Not EPA):



- a. California's Bay Area Air Quality Management District (BAAQMD) Method 31 (April 15, 1992; Amended May 18, 2005), "Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings".
- b. California's South Coast Air Quality Management District (SCAQMD) Method 313-91 (April, 1997).
- c. ASTM D1613-06(2012): Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products.
- d. California's South Coast Air Quality Management District (SCAQMD) "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray- Guns"(September 26, 2002).
- e. California's South Coast Air Quality Management District (SCAQMD) "Spray Equipment Transfer Efficiency Test Procedure for Equipment User" (May 24, 1989)

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

Issue 1, Jan. 1, 2016.....1-44	Issue 10, March 4, 2016.....407-544	Issue 19, May 6, 2016.....1017-1086
Issue 2, Jan. 8, 2016.....45-74	Issue 11, March 11, 2016.....545-598	Issue 20, May 13, 2016.....1087-1284
Issue 3, Jan. 15, 2016.....75-100	Issue 12, March 18, 2016.....599-662	Issue 21, May 20, 2016.....1285-1336
Issue 4, Jan. 22, 2016.....101-134	Issue 13, March 25, 2016.....663-692	Issue 22, May 27, 2016.....1337-1374
Issue 5, Jan. 29, 2016.....135-172	Issue 14, April 1, 2016.....693-726	Issue 23, June 3, 2016.....1375-1410
Issue 6, Feb. 5, 2016.....173-214	Issue 15, April 8, 2016.....727-800	
Issue 7, Feb. 12, 2016.....215-250	Issue 16, April 15, 2016.....801-846	
Issue 8, Feb. 19, 2016.....251-362	Issue 17, April 22, 2016.....847-916	
Issue 9, Feb. 26, 2016.....363-406	Issue 18, April 29, 2016.....917-1016	

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 23 OF VOLUME 22.

<p>Acupuncture Board of Examiners</p> <p>R4-8-101. PM-697</p> <p>Table 1. PM-697</p> <p>R4-8-203. PM-697</p> <p>R4-8-403. PM-697</p> <p>R4-8-407. PM-697</p> <p>R4-8-411. EXP-14</p> <p>R4-8-412. EXP-14</p> <p>R4-8-502. PM-697</p> <p>Agriculture, Department of - Animal Services Division</p> <p>R3-2-202. PM-1021</p> <p>R3-2-801. PM-1023</p> <p>R3-2-806. PM-1023</p> <p>Agriculture, Department of - Environmental Services Division</p> <p>R3-3-208. FM-367</p> <p>Agriculture, Department of - Agricultural Councils and Commissions</p> <p>R3-9-105. EXP-1393</p> <p>Arizona Health Care Cost Containment System - Administration</p> <p>R9-22-401. PN-1289</p> <p>R9-22-402. PN-1289</p> <p>R9-22-403. PN-1289</p> <p>R9-22-404. PN-1289</p> <p>R9-22-405. PN-1289</p> <p>R9-22-406. PN-1289</p> <p>R9-22-407. PN-1289</p> <p>R9-22-408. PN-1289</p> <p>R9-22-701. PM-761</p> <p>R9-22-712.15. PM-770</p> <p>R9-22-712.35. PM-761</p> <p>R9-22-712.61. PM-761</p> <p>R9-22-712.66. PM-761</p> <p>R9-22-712.67. PM-761</p> <p>R9-22-712.71. PM-761</p> <p>R9-22-712.75. PM-761</p> <p>Arizona Health Care Cost Containment System - Behavioral Health Services for Persons with Serious Mental Illness</p> <p>R9-21-101. PM-731</p>	<p>R9-21-102. PM-731</p> <p>R9-21-103. PM-731</p> <p>R9-21-104. PM-731</p> <p>R9-21-105. PM-731</p> <p>R9-21-106. PM-731</p> <p>R9-21-201. PM-731</p> <p>R9-21-203. PM-731</p> <p>R9-21-204. PM-731</p> <p>R9-21-205. PM-731</p> <p>R9-21-206. PM-731</p> <p>R9-21-206.01. PM-731</p> <p>R9-21-208. PM-731</p> <p>R9-21-209. PM-731</p> <p>Exhibit A. PM-731</p> <p>R9-21-301. PM-731</p> <p>R9-21-303. PM-731</p> <p>R9-21-307. PM-731</p> <p>R9-21-309. PM-731</p> <p>R9-21-310. PM-731</p> <p>R9-21-311. PM-731</p> <p>R9-21-401. PM-731</p> <p>R9-21-402. PM-731</p> <p>R9-21-403. PM-731</p> <p>R9-21-404. PM-731</p> <p>R9-21-405. PM-731</p> <p>R9-21-406. PM-731</p> <p>R9-21-407. PM-731</p> <p>R9-21-408. PM-731</p> <p>R9-21-409. PM-731</p> <p>R9-21-410. PM-731</p> <p>Arizona Health Care Cost Containment System - Medicare Part D Prescription Coverage Extra Help Subsidy Program</p> <p>R9-30-201. PM-805</p> <p>R9-30-202. PR-805</p> <p>R9-30-203. PM-805</p> <p>R9-30-204. PR-805; PN-805</p> <p>R9-30-205. PR-805</p> <p>R9-30-206. PR-805</p> <p>R9-30-207. PM-805</p> <p>R9-30-208. PR-805</p> <p>R9-30-209. PM-805</p> <p>R9-30-210. PR-805</p>	<p>R9-30-211. PR-805</p> <p>R9-30-212. PM-805</p> <p>R9-30-213. PM-805</p> <p>R9-30-214. PM-805</p> <p>R9-30-215. PM-805</p> <p>R9-30-216. PM-805</p> <p>R9-30-218. PR-805</p> <p>R9-30-401. PR-805</p> <p>R9-30-402. PR-805</p> <p>Corporation Commission - Transportation</p> <p>R14-2-802. PM-411</p> <p>Corporation Commission - Transportation</p> <p>R14-5-202. EM-5</p> <p>R14-5-203. EM-5</p> <p>R14-5-204. EM-5</p> <p>R14-5-205. EM-5</p> <p>R14-5-207. EM-5</p> <p>Deaf and the Hard of Hearing, Commission for</p> <p>R9-26-101. P#-177</p> <p>R9-26-201. P#-177; PM-177</p> <p>R9-26-202. P#-177; PM-177</p> <p>R9-26-203. P#-177; PM-177</p> <p>R9-26-204. P#-177; PM-177</p> <p>R9-26-205. P#-177; PM-177</p> <p>R9-26-206. P#-177</p> <p>R9-26-207. P#-177; PN-177</p> <p>R9-26-301. PR-177; P#-177; PM-177</p> <p>R9-26-302. PR-177; P#-177</p> <p>R9-26-303. PR-177; P#-177; PM-177</p> <p>R9-26-304. P#-177; PM-177</p> <p>R9-26-501. PM-177</p> <p>R9-26-502. PM-177</p> <p>R9-26-503. PM-177</p> <p>R9-26-504. PM-177</p> <p>R9-26-505. PM-177</p> <p>R9-26-506. PM-177</p> <p>R9-26-507. PM-177</p> <p>R9-26-508. PM-177</p>
--	---	---

R9-26-509.	PM-177	R18-2-713.	EXP-15	R9-15-208.	FXR-851;
R9-26-510.	PM-177	R18-2-717.	EXP-15		FXN-851
R9-26-511.	PR-177; PN-177	R18-2-732.	EXP-15	R9-15-209.	FXR-851;
R9-26-512.	PM-177	Environmental Quality, Department of			FXN-851
R9-26-515.	P#-177; PN-177	- Safe Drinking Water		R9-15-210.	FXR-851;
R9-26-516.	P#-177	R18-4-102.	FM-379		FXN-851
R9-26-517.	PM-177	R18-4-103.	FM-379	R9-15-211.	FXR-851;
R9-26-518.	PM-177	R18-4-105.	FM-379		FXN-851
Dental Examiners, State Board of		R18-4-121.	FM-379	R9-15-212.	FXR-851;
R4-11-201.	FM-371	R18-4-126.	FN-379		FXN-851
R4-11-202.	FM-371	R18-4-210.	FM-379	R9-15-213.	FXR-851;
R4-11-203.	FM-371	Environmental Quality, Department of			FXN-851
R4-11-204.	FM-371	- Water Quality Standards		R9-15-214.	FXR-851;
R4-11-301.	FM-371	R18-11-106.	TM-343;		FXN-851
R4-11-302.	FR-371		PM-255	R9-15-215.	FXR-851;
R4-11-303.	FM-371	R18-11-109.	TM-343;		FXN-851
R4-11-304.	FM-371		PM-255	R9-15-216.	FXR-851
R4-11-305.	FM-371	R18-11-110.	TM-343;	R9-15-217.	FXR-851
Economic Security, Department of -			PM-255	R9-15-218.	FXR-851
Developmental Disabilities		R18-11-112.	TM-343;	R9-15-301.	FXR-851
R6-6-1401.	EXP-14		PM-255	R9-15-302.	FXR-851
Economic Security, Department of -		R18-11-115.	TM-343;	R9-15-303.	FXR-851
Social Services			PM-255	R9-15-304.	FXR-851
R6-5-5201.	PM-1029	R18-11-121.	TM-343;	R9-15-305.	FXR-851
R6-5-5202.	PM-1029		PM-255	R9-15-306.	FXR-851
R6-5-5207.	PM-1029	Appendix A.	TM-343;	R9-15-307.	FXR-851
R6-5-5217.	PM-1029		PM-255	R9-15-308.	FXR-851
R6-5-5218.	PM-1029	Appendix B.	TM-343;	R9-15-309.	FXR-851
R6-5-5219.	PM-1029		PM-255	R9-15-310.	FXR-851
Economic Security, Department of -		Appendix C.	TM-343;	R9-15-311.	FXR-851
The JOBS Program			PM-255	R9-15-312.	FXR-851
R6-10-118.	EXP-1393	Game and Fish Commission		R9-15-313.	FXR-851
R6-10-125.	EXP-1393	R12-4-701.	PM-810	R9-15-314.	FXR-851
R6-10-126.	EXP-1393	R12-4-702.	PM-810	R9-15-315.	FXR-851
R6-10-304.	EXP-1393	R12-4-703.	PM-810	R9-15-316.	FXR-851
Education, State Board of		R12-4-704.	PM-810	R9-15-317.	FXR-851
R7-2-300.	FXN-143	R12-4-705.	PM-810	R9-15-318.	FXR-851
R7-2-301.	FXM-143	R12-4-706.	PM-810	R9-15-101.	FXR-851
R7-2-302.	FXM-143;	R12-4-707.	PM-810	R9-15-101.	FXR-851
	FNM-197	R12-4-708.	PM-810	R9-15-101.	FXR-851
R7-2-302.01.	FXR-143	R12-4-801.	FXM-951	Industrial Commission of Arizona	
R7-2-302.02.	FXR-143	R12-4-802.	FXM-951	R20-5-601.	FM-773;
R7-2-302.04.	FXR-143	R12-4-803.	FXM-951		FM-1391
R7-2-302.05.	FX#-111;	Health Services, Department of - Health		R20-5-602.	FM-773
	FXN-111	Care Institutions: Licensing		R20-5-629.	FM-775
R7-2-302.06.	FX#-111;	R9-10-101.	FXM-1035	R20-5-715.	PM-416
	FXR-143	R9-10-119.	PN-139;	Lottery Commission, Arizona State	
R7-2-302.07.	FX#-111;		EM-420;	R19-3-201.	FM-1379
	FXR-143		FN-1343	R19-3-202.	FM-1379
R7-2-302.08.	FX#-111;	R9-10-707.	FXM-1035	R19-3-202.01.	FM-1379
	FXR-143	R9-10-1002.	FXM-1035	R19-3-202.03.	FM-1379
R7-2-302.09.	FX#-111;	R9-10-1025.	FXM-1035	R19-3-202.04.	FM-1379
	FXR-143	R9-10-1030.	FXM-1035	R19-3-204.	FM-1379
R7-2-302.10.	FX#-111;	R9-10-1031.	FXN-1035	R19-3-204.02.	FM-1379
	FXN-111;	Health Services, Department of - Loan		R19-3-205.	FM-1379
	FXM-143;	Repayment Program		R19-3-210.	FM-1379
	FXR-197	R9-15-101.	FXM-851	R19-3-211.	FM-1379
R7-2-607.	FXM-648	R9-15-201.	FXR-851;	R19-3-214.	FM-1379
R7-2-614.	FXM-667		FXN-851	R19-3-217.	FM-1379
R7-2-615.	FXM-219;	R9-15-202.	FXR-851;	R19-3-501.	PM-1091
	FXM-227;		FXN-851	R19-3-505.	PM-1091
	FXM-233;	R9-15-203.	FXR-851;	R19-3-506.	PM-1091
	FXM-670		FXN-851	R19-3-508.	PM-1091
R7-2-616.	FXM-219	R9-15-204.	FXR-851;	R19-3-509.	PM-1091
R7-2-619.	FXM-648		FXN-851	R19-3-510.	PM-1091
R7-2-621.	FXM-219;	R9-15-205.	FXR-851;	R19-3-514.	PM-1091
	FXM-227		FXN-851	R19-3-517.	PM-1091
Environmental Quality, Department of		R9-15-205.01.	FXN-851	R19-3-518.	PM-1091
- Air Pollution Control		R9-15-206.	FXR-851;	R19-3-520.	PM-1091
R18-2-611.	FXM-987		FXN-851	R19-3-521.	PM-1091
R18-2-611.01.	FXM-987	Table 2.1.	FXN-851	R19-3-523.	PM-1091
R18-2-709.	EXP-15	R9-15-207.	FXR-851;	R19-3-524.	PM-1091
R18-2-711.	EXP-15		FXN-851		
R18-2-712.	EXP-15				

R19-3-525.	PM-1091	R13-4-205.	FM-555	R12-1-1953.	FN-603
R19-3-526.	PM-1091	R13-4-206.	FM-555	R12-1-1955.	FN-603
R19-3-527.	PM-1091	R13-4-208.	FM-555	R12-1-1957.	FN-603
R19-3-528.	PM-1091	Private Postsecondary Education, Board for		R12-1-1971.	FN-603
R19-3-531.	PM-1091	R4-39-101.	FM-921	R12-1-1973.	FN-603
R19-3-532.	PM-1091	R4-39-102.	FM-921	R12-1-1975.	FN-603
R19-3-533.	PR-1091	R4-39-103.	FM-921	R12-1-1977.	FN-603
R19-3-534.	PM-1091	R4-39-104.	FM-921	R12-1-1979.	FN-603
R19-3-535.	PM-1091	R4-39-105.	FM-921	R12-1-1981.	FN-603
R19-3-544.	PM-1091	R4-39-106.	FM-921	R12-1-19101.	FN-603
R19-3-545.	PM-1091	R4-39-107.	FM-921	R12-1-19103.	FN-603
R19-3-546.	PM-1091	R4-39-108.	FM-921	R12-1-19105.	FN-603
R19-3-547.	PM-1091	R4-39-109.	FM-921	R12-1-19107.	FN-603
R19-3-549.	PM-1091	R4-39-110.	FM-921	R12-1-19109.	FN-603
R19-3-553.	PM-1091	R4-39-111.	FM-921	Appendix A.	FN-603
R19-3-562.	PM-1091	R4-39-201.	FM-921	Respiratory Care Examiners, Board of	
R19-3-563.	P#-1091; PN-1091	R4-39-301.	FM-921	R4-45-101.	PM-549
R19-3-564.	P#-1091; PM-1091	R4-39-302.	FM-921	R4-45-102.	PM-549
R19-3-565.	P#-1091	R4-39-303.	FM-921	R4-45-105.	PM-549
R19-3-566.	P#-1091; PM-1091	R4-39-304.	FM-921	R4-45-201.	PM-549
R19-3-567.	P#-1091	R4-39-305.	FM-921	R4-45-203.	PM-549
R19-3-568.	P#-1091	R4-39-306.	FM-921	R4-45-205.	PR-549
R19-3-569.	P#-1091; PM-1091	R4-39-307.	FM-921	R4-45-213.	PM-549
		R4-39-308.	FM-921	R4-45-218.	PM-549
Medical Board, Arizona		R4-39-401.	FM-921	Retirement System, State Board	
R4-16-201.	FXM-778	R4-39-402.	FM-921	R2-8-115.	FM-79
R4-16-205.	FXM-778	R4-39-403.	FM-921	R2-8-116.	PN-107; FN-1341
Optometry, Board of		R4-39-404.	FM-921	R2-8-118.	FM-79
R4-21-101.	FM-328	R4-39-405.	FR-921	R2-8-122.	FM-79
R4-21-102.	FM-328	R4-39-406.	FM-921	R2-8-126.	FM-79
R4-21-103.	FM-328	R4-39-407.	FN-921	Revenue, Department of - General Administration	
R4-21-201.	FM-328	R4-39-408.	FN-921	R15-10-105.	FXM-116
R4-21-202.	FM-328	R4-39-501.	FM-921	R15-10-501.	FXM-116
R4-21-203.	FM-328	R4-39-502.	FM-921	R15-10-502.	FXM-116
R4-21-205.	FM-328	R4-39-503.	FM-921	R15-10-504.	FXM-116
R4-21-205.1.	FN-328	R4-39-504.	FN-921	R15-10-505.	FXN-116
R4-21-206.	FM-328	R4-39-601.	FM-921	Secretary of State, Office of	
R4-21-208.	FM-328	R4-39-602.	FM-921	R2-12-402.	PM-109
R4-21-209.	FM-328	R4-39-603.	FM-921	Secretary of State - Rules and Rulemak- ing	
R4-21-210.	FM-328	Radiation Regulatory Agency		R1-1-107.	PM-105
R4-21-211.	FM-328	R12-1-102.	FM-603	Transportation, Department of - Title, Registration, and Driver Licenses	
R4-21-213.	FR-328	R12-1-303.	FM-603	R17-4-407.	PXN-194; FXN-819;
R4-21-302.	FM-328	R12-1-306.	FM-603	R17-4-409.	PXM-194; FXN-819;
R4-21-305.	FM-328	R12-1-308.	FM-603		
R4-21-306.	FM-328	R12-1-311.	FM-603		
R4-21-308.	FM-328	R12-1-313.	FM-603		
Peace Officer Standards and Training Board, Arizona		R12-1-320.	FM-603		
R13-4-101.	FM-555	R12-1-323.	FM-603		
R13-4-102.	FM-555	R12-1-418.	FM-603		
R13-4-103.	FM-555	R12-1-452.	FM-603		
R13-4-104.	FM-555	R12-1-503.	FM-603		
R13-4-105.	FM-555	R12-1-703.	FM-603		
R13-4-106.	FM-555	R12-1-1302.	FM-603		
R13-4-107.	FM-555	R12-1-1512.	FM-603		
R13-4-108.	FM-555	R12-1-1901.	FN-603		
R13-4-109.	FM-555	R12-1-1903.	FN-603		
R13-4-109.01	FM-555	R12-1-1905.	FN-603		
R13-4-110.	FM-555	R12-1-1907.	FN-603		
R13-4-111.	FM-555	R12-1-1909.	FN-603		
R13-4-112.	FM-555	R12-1-1911.	FN-603		
R13-4-114.	FM-555	R12-1-1911.	FN-603		
R13-4-116.	FM-555	R12-1-1921.	FN-603		
R13-4-117.	FM-555	R12-1-1923.	FN-603		
R13-4-118.	FM-555	R12-1-1925.	FN-603		
R13-4-201.	FM-555	R12-1-1927.	FN-603		
R13-4-202.	FM-555	R12-1-1929.	FN-603		
R13-4-203.	FM-555	R12-1-1931.	FN-603		
R13-4-204.	FM-555	R12-1-1933.	FN-603		
		R12-1-1941.	FN-603		
		R12-1-1943.	FN-603		
		R12-1-1945.	FN-603		
		R12-1-1947.	FN-603		
		R12-1-1949.	FN-603		
		R12-1-1951.	FN-603		

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 23 OF VOLUME 22.

Agency Guidance Document, Notices of

Health Services, Department of; pp. 159, 705

Agency Ombudsman, Notices of

Early Childhood Development and Health Board/ First Things First; p. 353

Game and Fish Commission; pp. 62-63

Health Services, Department of; p. 353

Transportation, Department of; p. 62

County Notices Pursuant to A.R.S. § 49-112

Maricopa County; pp. 431-535, 1116-1273

Pima County; pp. 1305-1325

Governor's Office

Executive Order: pp. 19-20 (E.O. #2015-11); 20-21 (E.O. #2015-13); 21-22 (E.O. #2015-01); 84 (E.O. #2016-01); 85 (E.O. #2016-02); 86 (E.O. 2015-06); 87 (E.O. #2015-09); 88 (E.O. #2015-12); 426-27 (E.O. #2016-03)

Proclamations: pp. 23 (M15-350, M15-349); 24 (M15-348); 25 (M15-347); 64 (M15-354, M15-355); 65 (M15-356, M15-357); 66 (M15-358); 123 (M16-04, M16-05); 124 (M16-06, M16-07); 125 (M16-08); 126 (M16-09); 162 (M16-13); 202 (M16-23, M16-24); 203 (M16-25, M16-26); 204 (M16-27); 428 (M16-33, M16-34); 429 (M16-35, M16-36); 430 (M16-430); 585 (M16-38, M16-39); 586 (M16-40, M16-41); 587 (M16-42, M16-43); 588 (M16-44); 653 (M16-45); 678 (M16-50, M16-51); 679 (M16-52, M16-53); 680 (M16-54, M16-55); 681 (M16-57, M16-58); 682 (M16-59); 711 (M16-62, M16-63); 712 (M16-66, M16-56); 713 (M16-67, M16-68); 714 (M16-69, M16-70); 715 (M16-71, M16-72); 788 (M16-64, M16-60); 789 (M16-75); 832 (M16-

65, M16-83); 833 (M16-74, M16-84); 834 (M16-86, M16-87); 902 (M16-73, M16-89); 903 (M16-91, M16-85); 904 (M16-76, M16-77); 1002 (M16-88, M16-90); 1003 (M16-92, M16-93); 1004 (M16-94); 1070 (M16-110, M16-111); 1071 (M16-112, M16-113); 1072 (M16-114, M16-115); 1073 (M16-116, M16-117); 1074 (M16-118); 1299 (M16-125, M16-126); 1300 (M16-127, M16-128); 1301 (M16-129, M16-130); 1302 (M16-131, M16-132); 1303 (M16-133, M16-138); 1304 (M16-134); 1359 (M16-143, M16-136); 1360 (M16-144, M16-145); 1361 (M16-137, M16-139)

Governor's Regulatory Review Council

Notices of Action Taken at Monthly Meetings: pp. 96, 97-98, 402-403, 798, 1014, 1406

Proposed Delegation Agreement, Notices of

Environmental Quality, Department of; pp. 826, 827

Public Information, Notices of

Arizona Health Care Cost Containment System; pp. 49, 1067

Child Safety, Department of; p. 160

Environmental Quality, Department of; pp. 49, 1112

Environmental Quality, Department of - Pesticides and Water Pollution Control; pp. 1294-1296

Environmental Quality, Department of - Safe Drinking Water; pp. 1348-1349

Environmental Quality, Department of - Water Pollution Control; p. 1112

Game and Fish Department; pp. 1349-1354

Health Services, Department of; p. 394

Health Services, Department of - Loan Repayment; p. 346

Health Services, Department of - Vital Records and Statistics; p. 899

Rulemaking Docket Opening, Notices of

Acupuncture Board of Examiners; 4 A.A.C. 8; p. 703

Agriculture, Department of - Animal Services Division; 3 A.A.C. 2; p. 344

Arizona Health Care Cost Containment System - Administration; 9 A.A.C. 22; pp. 784-785, 1293

Arizona Health Care Cost Containment System - Behavioral Health Services for Persons with Serious Mental Illness; 9 A.A.C. 21; p. 782

Arizona Health Care Cost Containment System - Medicare Part D Prescription Coverage Extra Help Subsidy Program; 9 A.A.C. 30; p. 824

Board for Charter Schools, State; 7 A.A.C. 5; p. 823

Child Safety, Department of - Child Welfare Agency Licensing; 21 A.A.C. 7; p. 999

Corporation Commission - Fixed Utilities; 14 A.A.C. 2; pp. 424-425

Economic Security, Department of - Social Services; p. 1065

Environmental Quality, Department of - Air Pollution Control; 18 A.A.C. 2; p. 998

Environmental Quality, Department of - Water Pollution Control; 18 A.A.C. 9; pp. 16-17

Environmental Quality, Department of - Water Quality Standards; 18 A.A.C. 11; pp. 17-18, 345

Game and Fish Commission; 12 A.A.C. 4; p. 825

Health Services, Department of - Laboratories; 9 A.A.C. 14; p. 704

Health Services, Department of - Medical Marijuana Program; 9 A.A.C. 17; pp. 423-424

Industrial Commission of Arizona; 20 A.A.C. 5; p. 239

Psychologist Examiners, Board of; 4
A.A.C. 26; pp. 1109-1110

Retirement System, State; 2 A.A.C. 8;
pp. 822, 823, 1063-1064

Secretary of State, Office of; 2 A.A.C.
12; pp. 121-122; 239

**Secretary of State - Rules and
Rulemaking;** 1 A.A.C. 1; p.121

State Lottery Commission - 19
A.A.C. 3; p. 582

Technical Registration, Board of; 4
A.A.C. 30; pp. 1110-1111

**Transportation, Department of -
Commercial Programs;** p. 1347

Substantive Policy Statement, Notices of

**Behavioral Health Examiners, Board
of;** p. 706

**Environmental Quality, Department
of;** pp. 58-59; 161, 1356

**Peace Officers Standards and Train-
ing Board;** p. 348

Psychologist Examiners, Board of; p.
1355

Real Estate Department; p. 829

Registrar of Contractors; pp. 60-61,
706-707

Retirement System, State; pp. 707-
708

Technical Registration, Board of; pp.
348

**Water Infrastructure Finance
Authority;** p. 349-352



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.

Table with 12 columns: January (Date Filed, Effective Date), February (Date Filed, Effective Date), March (Date Filed, Effective Date), April (Date Filed, Effective Date), May (Date Filed, Effective Date), June (Date Filed, Effective Date). Rows list dates from 1/1 to 1/31 and corresponding effective dates.



July		August		September		October		November		December	
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.

Table with 3 columns: Deadline Date (paper only) Friday, 5:00 p.m., Register Publication Date, and Oral Proceeding may be scheduled on or after. Rows list dates from January 22, 2016 to August 5, 2016.



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.