

This document, concerning commercial pre-rinse spray valves is an action issued by the Department of Energy. Though it is not intended or expected, should any discrepancy occur between the document posted here and the document published in the Federal Register, the Federal Register publication controls. This document is being made available through the Internet solely as a means to facilitate the public's access to this document.

[6450-01-P]

**DEPARTMENT OF ENERGY**

**10 CFR Parts 429 and 431**

**[Docket No. EERE-2014-BT-TP-0055]**

**RIN 1904-AD41**

**Energy Conservation Program: Test Procedures for Commercial Prerinse Spray Valves**

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Notice of proposed rulemaking and announcement of public meeting.

**SUMMARY:** The U.S. Department of Energy (DOE) proposes to amend the test procedures for commercial prerinse spray valves to consider the latest version of the industry standard that is incorporated by reference and to consider a procedure for measuring the spray force. DOE also proposes to revise the definition of commercial prerinse spray valve and the current test procedure as they relate to various spray valves currently on the market, including those with multiple spray patterns. DOE does not believe the proposed changes will affect the measured water use. As part of this proposal, DOE is announcing a public meeting to collect comments and data on its proposal.

**DATES:** DOE will hold a public meeting on Tuesday, July 28, 2015, from 9:00 a.m. to 12:00 p.m., in Washington, DC. The meeting will also be broadcast as a webinar. See

section V, “Public Participation,” for instructions and information concerning meeting attendance and webinar participation.

DOE will accept comments, data, and information regarding this proposed rulemaking before and after the public meeting, but no later than **[INSERT DATE 75 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. See section V, “Public Participation,” for details.

**ADDRESSES:** The public meeting will be held at the U.S. Department of Energy, Forrestal Building, Room 8E-089 1000 Independence Avenue, SW., Washington, DC 20585

Any comments submitted must identify the NOPR for test procedures for commercial prerinse spray valves, and provide docket number EERE-2014–BT–TP–0055 and/or Regulation Identifier Number (RIN) number 1904-AD41. Comments may be submitted using any of the following methods:

1. Federal eRulemaking Portal: [www.regulations.gov](http://www.regulations.gov). Follow the instructions for submitting comments.
2. E-mail: [SprayValves2014TP0055@ee.doe.gov](mailto:SprayValves2014TP0055@ee.doe.gov). Include the docket number and/or RIN in the subject line of the message.
3. Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies office, Mailstop EE-5B, 1000 Independence Avenue, SW., Washington, DC,

20585-0121. If possible, please submit all items on a compact disk (CD), in which case it is not necessary to include printed copies.

4. Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza, SW., Suite 600, Washington, DC, 20024. Telephone: (202) 586-2945. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

For detailed instructions on submitting comments and additional information on the rulemaking process, see section V of this document (Public Participation).

**DOCKET:** The docket, which includes Federal Register notices, public meeting attendee lists and transcripts, comments, and other supporting documents/ materials, is available for review at [www.regulations.gov](http://www.regulations.gov). All documents in the docket are listed in the regulations.gov index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

A link to the docket web page can be found at:

[www1.eere.energy.gov/buildings/appliance\\_standards/product.aspx/productid/54](http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/54). This web page will contain a link to the docket for this notice on the [www.regulations.gov](http://www.regulations.gov) site. The [www.regulations.gov](http://www.regulations.gov) web page will contain simple instructions on how to access all documents, including public comments, in the docket. See section V for information on how to submit comments through regulations.gov.

**FOR FURTHER INFORMATION CONTACT:**

Mr. James Raba, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE-5B, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 586-8654. E-mail:

[Jim.Raba@ee.doe.gov](mailto:Jim.Raba@ee.doe.gov)

Ms. Johanna Hariharan, U.S. Department of Energy, Office of the General Counsel, GC-33, 1000 Independence Avenue, SW., Washington, DC, 20585-0121. Telephone: (202) 287-6307. E-mail: [Johanna.Hariharan@hq.doe.gov](mailto:Johanna.Hariharan@hq.doe.gov)

For further information about how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586-2945 or by email: [Brenda.Edwards@ee.doe.gov](mailto:Brenda.Edwards@ee.doe.gov).

**SUPPLEMENTARY INFORMATION:** DOE intends to incorporate by reference the following industry standards into 10 CFR part 431: ASTM Standard F2324–13, “Standard Test Method for Prerinse Spray Valves” (ASTM Standard F2324-13).

Copies of ASTM Standard F2324-13 can be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, or by going to <http://www.astm.org/Standard/standards-and-publications.html>.

## **Table of Contents**

- I. Authority and Background
- II. Summary of the Notice of Proposed Rulemaking
- III. Discussion
  - A. Definitions
    - 1. Commercial Prerinse Spray Valve
    - 2. Normally-Closed Valve
    - 3. Spray Force
  - B. Industry Standards Incorporated by Reference
  - C. Proposed Additional Test Methods
    - 1. Adding Test Method to Measure Spray Force
    - 2. Multiple Spray Patterns: Adding a Requirement to Measure Flow Rate and Spray Force of Each Spray Pattern
  - D. Rounding Requirements
    - 1. Flow Rate
    - 2. Spray Force
  - E. Certification, Compliance, and Enforcement
    - 1. Selection of Units to Test
    - 2. Representative Value Formula
  - F. Effective and Compliance Date
- IV. Procedural Issues and Regulatory Review
  - A. Review Under Executive Order 12866
  - B. Review under the Regulatory Flexibility Act
  - C. Review Under the Paperwork Reduction Act of 1995
  - D. Review Under the National Environmental Policy Act of 1969
  - E. Review Under Executive Order 13132
  - F. Review Under Executive Order 12988
  - G. Review Under the Unfunded Mandates Reform Act of 1995
  - H. Review Under the Treasury and General Government Appropriations Act, 1999
  - I. Review Under Executive Order 12630
  - J. Review Under Treasury and General Government Appropriations Act, 2001
  - K. Review Under Executive Order 13211
  - L. Review Under Section 32 of the Federal Energy Administration Act of 1974
  - M. Description of Materials Incorporated by Reference
- V. Public Participation
  - A. Attendance at Public Meeting
  - B. Procedure for Submitting Prepared General Statement for Distribution
  - C. Conduct of Public Meeting
  - D. Submission of Comments
  - E. Issues on Which DOE Seeks Comment
- VI. Approval of the Office of the Secretary

## **I. Authority and Background**

Title III of the Energy Policy and Conservation Act of 1975 (42 U.S.C. 6291, et seq.; “EPCA” or, “the Act”) sets forth a variety of provisions designed to improve energy efficiency.<sup>1</sup> Part B of title III, which for editorial reasons was redesignated as Part A upon incorporation into the U.S. Code (42 U.S.C. 6291–6309, as codified), establishes the “Energy Conservation Program for Consumer Products Other Than Automobiles.” The Energy Policy Act of 2005, Pub. L. 109–58 (August 8, 2005) amended EPCA to add “Energy Conservation Standards For Additional Products,” which includes commercial prerinse spray valves (CPSV), and provided the definitions under 42 U.S.C. 6291(33), test procedures under 42 U.S.C. 6293(b)(14), and energy conservation standards for flow rate under 42 U.S.C. 6295(dd).

Under EPCA, this program consists essentially of four parts: (1) testing, (2) labeling, (3) Federal energy and water conservation standards, and (4) compliance certification and enforcement procedures. The testing requirements consist of test procedures that manufacturers of covered products must use as the basis for (1) certifying to DOE that their products comply with the applicable energy conservation standards adopted under EPCA, and (2) making representations about the efficiency of those

---

<sup>1</sup> All references to EPCA refer to the statute as amended through the American Energy Manufacturing Technical Corrections Act (AEMTCA), Pub. L. 112-210 (December 18, 2012).

products. (42 U.S.C. 6293(c), 6295(s)) Similarly, DOE uses these test procedures to determine compliance with relevant standards established under EPCA.<sup>2</sup>

### General Test Procedure Rulemaking Process

Under 42 U.S.C. 6293, EPCA sets forth criteria and procedures that DOE is required to follow when prescribing or amending test procedures for covered products. EPCA provides in relevant part that any test procedures prescribed or amended under this section shall be reasonably designed to produce test results which measure energy efficiency, energy use, or estimated annual operating cost of a covered product during a representative average use cycle or period of use and shall not be unduly burdensome to conduct. (42 U.S.C. 6293(b)(3))

In addition, if DOE determines that a test procedure amendment is warranted, it must publish proposed test procedures and offer the public an opportunity to present oral and written comments. (42 U.S.C. 6293(b)(2)) Finally, in any rulemaking to amend a test procedure, EPCA requires DOE to determine to what extent, if any, the proposed test procedure would alter the measured energy efficiency of any covered product as determined under the existing test procedure. (42 U.S.C. 6293(e)(1)) If DOE determines that the amended test procedure would alter the measured efficiency of a covered

---

<sup>2</sup> Because Congress included CPSV in Part A of Title III of EPCA, the consumer product provisions of Part A (not the industrial equipment provisions of Part A-1) apply to commercial prerinse spray valves. However, because commercial prerinse spray valves are more commonly considered to be commercial equipment, as a matter of administrative convenience and to minimize confusion among interested parties, DOE adopted CPSV provisions into subpart O of 10 CFR part 431 [71 FR 71340, 71374 (Dec. 8, 2006)]. Part 431 contains DOE regulations for commercial and industrial equipment. The location of provisions within the CFR does not affect either their substance or applicable procedure, and DOE refers to CPSV as either “products” or “equipment.”

product, DOE must amend the applicable energy conservation standard accordingly.  
(42 U.S.C. 6293(e)(2))

EPCA, as amended, sets forth the current maximum flow rate of not more than 1.6 gallons per minute for commercial prerinse spray valves. (42 U.S.C. 6295(dd)) EPCA also requires DOE to use the American Society for Testing and Materials (ASTM) Standard F2324 as a basis for the test procedure for measuring flow rate. (42 U.S.C. 6293(b)(14))

In the December 8, 2006 final rule, DOE incorporated by reference ASTM Standard F2324–03 into regulatory text (10 CFR 431.263), and prescribed it as the uniform test method to measure flow rate of commercial prerinse spray valves under 10 CFR 431.264. 71 FR 71340, 71374. Later, on October 23, 2013, DOE incorporated by reference ASTM Standard F2324–03 (2009) for testing commercial prerinse spray valves, which updated the 2003 version. 78 FR 62970, 62980.

## **II. Summary of the Notice of Proposed Rulemaking**

In this notice of proposed rulemaking (NOPR), DOE proposes to update 10 CFR 431.264, “Uniform test method for the measurement of flow rate for commercial prerinse spray valves,” as follows:

- 1) Incorporate by reference certain provisions (sections: 6.1–6.9, 9.1–9.5.3.2, 10.1–10.2.5, 10.3.1–10.3.8, and 11.3.1) of the current revision to the applicable

industry standard—ASTM Standard F2324–13, “Standard Test Method for Prerinse Spray Valves”—pertaining to flow rate and spray force measurement;

- 2) Modify the current definition of the term “commercial prerinse spray valve,” and add definitions for the terms “normally-closed valve” and “spray force;”
- 3) Modify the current test method for measuring flow rate to reference sections 10.1–10.2.5 and 11.3.1 of ASTM Standard F2324–13;
- 4) Add a test method for measuring spray force that references sections 10.3.1–10.3.8 of ASTM Standard F2324–13;
- 5) Add a requirement for measuring flow rate and spray force of each spray pattern for commercial prerinse spray valves with multiple spray patterns;
- 6) Modify the rounding requirement for flow rate measurement and specify the rounding requirement for spray force measurement; and
- 7) Modify the current CPSV sampling requirements to remove the provisions related to determining represented values where consumers would favor higher values.

DOE’s proposed actions are addressed in detail in Section III of this notice.

### **III. Discussion**

The following sections focus on DOE’s proposed changes to the test procedure, including definitions, industry standards incorporated by reference, modifications to the test procedure, additional test measurements, rounding requirements, and certification and compliance requirements.

#### **A. Definitions**

In this document, DOE proposes to amend the existing definition for commercial prerinse spray valve and add definitions for the terms “normally closed valve” and “spray force.” A detailed discussion of these terms follows.

##### **1. Commercial Prerinse Spray Valve**

According to EPCA, a commercial prerinse spray valve is a handheld device designed and marketed for use with commercial dishwashing and ware washing equipment that sprays water on dishes, flatware, and other food service items for the purpose of removing food residue before cleaning the items. (42 U.S.C. 6291(33)(A), 10 CFR 431.262) EPCA allows DOE to modify the CPSV definition to include products: (1) that are used extensively in conjunction with commercial dishwashing and ware washing equipment; (2) to which the application of standards would result in significant energy savings; and (3) to which the application of standards would not be likely to result in the unavailability of any covered product type currently available on the market. 42 U.S.C. 6291(33)(B) EPCA also allows DOE to modify the CPSV definition to exclude products:

(1) that are used for special food service applications; (2) that are unlikely to be widely used in conjunction with commercial dishwashing and ware washing equipment; and (3) to which the application of standards would not result in significant energy savings.

As a companion to this test procedure rulemaking, on September 11, 2014, DOE published in the Federal Register a notice of public meeting and availability of the Framework document to initiate a rulemaking to consider amending the energy conservation standards for commercial prerinse spray valves. 79 FR 54213 (Sept. 11, 2014).<sup>3</sup> In the Framework document, DOE explained that it was considering modifying the CPSV definition to change the scope of the products subject to regulation. (Framework document, pp. 2–3) DOE received several comments in response to the Framework document about potential modifications to the current CPSV definition.

Alliance for Water Efficiency (AWE) commented that prerinse spray valves are used in non-prerinse activities (e.g., supermarket vegetable displays, pet grooming, etc.), and suggested that non-prerinse applications be considered separately from the current CPSV rulemaking. (Docket No. EERE-2014-BT-STD-0027, AWE, No. 8 at p. 2) Similarly, T&S Brass and Bronze Works, Inc. (T&S Brass) commented that the CPSV definition should remain specific to the commercial applications currently defined, noting that similar equipment used in non-CPSV applications may not satisfy CPSV

---

<sup>3</sup> See Notice of Public Meeting and Availability of Framework document, 79 FR 54213 (Sept. 11, 2014). See also Docket No. EERE-2014-BT-STD-0027, Framework document, No. 1, available at [www.regulations.gov/contentStreamer?objectId=0900006481864b06&disposition=attachment&contentType=pdf](http://www.regulations.gov/contentStreamer?objectId=0900006481864b06&disposition=attachment&contentType=pdf) (hereinafter “Framework document”).

performance requirements. (Docket No. EERE-2014-BT-STD-0027, T&S Brass, No. 12 at p. 2) As discussed in the following paragraphs, DOE is proposing to modify the CPSV definition to redefine the scope of coverage for equipment used in conjunction with commercial dishwashing and ware washing, as authorized under 42 U.S.C. 6291(33)(B).

EPCA's definition includes three key elements: "a handheld device," "sprays water," and "purpose of removing food residue." Consider a commercial dishwasher, which might spray water on items that are placed inside for the purpose of removing food residue. This would not be covered under this definition because it is not a handheld device. Only a handheld device that sprays water for the purpose of removing food residue before cleaning the items would be covered.

DOE has observed the existence of products distributed in U.S. commerce with brochures describing them as "prerinse spray" or "prerinse spray valve," and that are marketed (often by third parties) to rinse dishes before washing, to make a difference in washing dirty dishes, to pre-rinse items in a dish room in preparation for running them through a commercial dishwasher, or to be used with pre-rinse assemblies and/or as ware washing equipment. DOE has also observed products marketed as "pull-down kitchen faucet" or "commercial style prerinse," which generally speaking are handheld devices that can be used for commercial dishwashing or ware washing regardless of installation location. DOE proposes to modify the definition such that these categories of products would meet the definition of commercial prerinse spray valve and would be subject to the associated regulations. Installation location is not a factor in determining whether a given

model meets the definition of commercial prerinse spray valve. Although DOE understands that manufacturers may market different categories of prerinse spray valves for various uses such as cleaning floors or walls or filling glasses, DOE proposes that any such device that is suitable for use in conjunction with commercial dishwashing and ware washing equipment to spray water for the purpose of removing food residue, falls within the CPSV definition. This also includes commercial prerinse spray valves with multiple spray patterns.

However, spray valves used only for other purposes, such as spray valves designed and marketed for use only in cleaning custodial materials or washing walls and floors would not be covered under the definition of commercial prerinse spray valves, if they are not suitable for using in conjunction with dishwashing or ware washing equipment to remove food residue.

Therefore, after reviewing the current CPSV definition and products currently being distributed in the market as appropriate for dishwashing and ware washing applications, DOE is proposing to replace the phrase “designed and marketed for use” with the phrase “suitable for use.” DOE believes products that are intended for and/or actually are used to remove food residue in dishwashing and ware washing applications should be subject to DOE standards and certification requirements even if they are marketed without the term “commercial dishwashing and ware washing equipment.”

DOE also reviewed the prerinse spray valve definition in ASTM Standard F2324–13, which defines the term “prerinse spray valve” as “a handheld device containing a release to close mechanism [sic] that is used to spray water on dishes, flatware, etc.” DOE believes that the “release-to-close” mechanism included in the ASTM definition means a manually actuated, normally closed valve. DOE believes that this is a typical feature of commercial prerinse spray valves. DOE has considered whether to include this feature in the definition or whether this would then create a market-incentive to create commercial prerinse spray valves that do not normally, fully, close. If DOE were to include this feature in the definition, DOE prefers the term “normally closed,” because it refers to a physical characteristic of the internal valve within a CPSV, which is intrinsic to its operation; whereas, “release-to-close” refers to a manual action required to operate a CPSV, which could create ambiguity when considering a CPSV with an atypical design for manually activating the spray valve. Therefore, DOE, in the alternative, proposes to include the term “normally closed” in an amended CPSV definition.

In summary, DOE proposes to define “commercial prerinse spray valve” as “a handheld device suitable for use with commercial dishwashing and ware washing equipment for the purpose of removing food residue before cleaning the items.” In the alternative, DOE would consider defining “commercial prerinse spray valve” as “a handheld device containing a normally closed valve that is suitable for use with

commercial dishwashing and ware washing equipment for the purpose of removing food residue before cleaning the items.”

DOE preliminarily concludes that this proposed definition would satisfy the requirements at 42 U.S.C. 6291(33)(B) because (1) the products covered by this definition are used extensively in conjunction with commercial dishwashing and ware washing equipment; (2) the application of standards to such products would result in significant energy savings; and (3) the application of standards to such products would not be likely to result in the unavailability of any covered product type currently available on the market.<sup>4</sup> To the extent that the definition change would change the scope of products subject to standards, DOE proposes that any products that would be newly within the scope of coverage would be subject to standards concurrent with the compliance date of any standards established or revised in the companion standards rulemaking proceeding currently underway. DOE seeks comment on the potential for an expanded scope of coverage resulting from this proposed definition and, should DOE determine that additional products would be subject to standards, DOE would include regulatory text in a final rule in this proceeding making clear that expanded scope and the future compliance date.

DOE invites comments from interested parties about this proposed definition. See section V.E.1.a of this NOPR.

---

<sup>4</sup> The analyses of the energy savings potential of standards and the impact of standards on the availability of any covered product type currently on the market are being conducted as part of DOE’s concurrent energy conservation standards rulemaking for commercial prerinse spray valves.

## 2. Normally-Closed Valve

If DOE were to adopt a definition of commercial prerinse spray valve that included the term “normally-closed valve,” DOE would also add a definition of the term “normally-closed valve.” In the ASTM Standard F2324-13 definition of a commercial prerinse spray valve, the phrase “...containing a release to close mechanism...” is included. DOE believes that a release to close mechanism is a common feature of commercial prerinse spray valves that is better described by the term “normally-closed valve.” Unlike the term “release-to-close,” the term “normally-closed valve” is more commonly used in hydraulic engineering and characterizes the valve itself, rather than the actuation mechanism.

Therefore, DOE proposes to define “normally-closed valve” as “a valve that opens when an external force is exerted upon it and automatically closes when the external force is removed.”

DOE invites comments about the proposed definition. See section [V.E.1.b](#) of this NOPR.

## 3. Spray Force

In this NOPR, DOE also proposes to add a definition for the term “spray force.” Currently, all commercial prerinse spray valves belong to one product class and are subject to a single standard. (10 CFR 431.266) As part of the ongoing CPSV standards

rulemaking (Docket No. EERE-2014-BT-STD-0027), DOE is considering whether to retain the single product class or to establish separate product classes, in view of the statutory criteria in 42 U.S.C. 6295(o)(4) and (q). (Framework document, pp. 17–18)

In particular, DOE is considering using spray force to delineate potential product classes when proposing flow rate standards. As addressed earlier, DOE proposes to incorporate by reference ASTM Standard F2324–13, which prescribes a test method for measuring spray force.

ASTM Standard F2324–13 amends ASTM Standard F2324–03 (2009), in part, by replacing the cleanability test with a spray force test. As previously mentioned, DOE proposes in this NOPR to incorporate by reference ASTM Standard F2324–13 and to add spray force testing to the test procedure both to be consistent with current industry practice and support potential amended CPSV standards. The term “spray force” is defined in ASTM Standard F2324–13 as “the amount of force exerted onto the spray disc.” DOE proposes to adopt this definition. Water measurements for force typically use kilogram-force. However, kilograms are not a common unit of measurement in the United States and are too large for the spray force exerted by a CPSV. In addition, ASTM Standard F2324 uses ounce-force. Thus, DOE proposes to specify this measurement unit.

DOE invites comments about the proposed definition. See section V.E.1.c of this NOPR.

## B. Industry Standards Incorporated by Reference

EPCA prescribes that the test procedure for measuring flow rate for commercial pre-rinse spray valves be based on ASTM Standard F2324, “Standard Test Method for Pre-Rinse Spray Valves.” (42 U.S.C. 6293(14)) Pursuant to this statutory requirement, DOE incorporated by reference ASTM Standard F2324-03 in a final rule published on December 8, 2006. 71 FR 71340, 71374. DOE last updated its CPSV test procedure to reference the updated ASTM Standard F2324-03 (2009) in a final rule published on October 23, 2013. 78 FR 62970, 62980.

EPCA directs the Secretary of Energy to review test procedures for all covered products at least once every 7 years, and either to (1) amend a test procedure if the Secretary determines that the amended test procedure would more accurately or fully produce test results which measure energy efficiency, energy use, water use, or estimated annual operating cost during a representative average use cycle, and shall not be unduly burdensome to conduct; or (2) publish a notice in the Federal Register of any determination not to amend a test procedure. (42 U.S.C. 6293(b)(1)(A))

In 2013, ASTM amended Standard F2324–03 (2009) to replace the cleanability test with a spray force test, based on research conducted by the U.S. Environmental Protection Agency’s (EPA’s) WaterSense<sup>®</sup> program.<sup>5</sup> Where the cleanability test evaluated cleaning time of a standard dinner plate, the current ASTM Standard F2324–13

---

<sup>5</sup> EPA WaterSense program, September 19, 2013. WaterSense Specification for Commercial Pre-Rinse Spray Valves Supporting Statement, Version 1.0. (see: [www.epa.gov/watersense/partners/prsv\\_final.html](http://www.epa.gov/watersense/partners/prsv_final.html))

prescribes spray force, measured in ounce-force (ozf).<sup>6</sup> In addition, where ASTM Standard F2324–03 (2009) required measuring the prerinse spray valve flow rate at water pressures of both  $60 \pm 1$  pounds per square inch (psi) and  $60 \pm 2$  psi (in sections 4.2 and 10.2.2, respectively), ASTM Standard F2324–13 requires measuring commercial prerinse spray valve flow rate only at  $60 \pm 2$  psi.

In that rulemaking, DOE received a number of comments related to the test procedure in response to the September 2014 Framework document. A joint comment submitted by the Natural Resources Defense Council (NRDC), Appliance Standards Awareness Project (ASAP), and Alliance to Save Energy (ASE) (collectively referred to as “Advocates”) expressed concern that commercial prerinse spray valves designed “to the test” to meet efficiency standards at 60 psi may perform below user expectations at locations where only 40 or 35 psi is available. (Docket No. EERE-2014-BT-STD-0027, Advocates, No. 11 at p. 2)<sup>7</sup> Similarly, AWE suggested that 50 percent of all DOE testing of commercial prerinse spray valves be conducted on food service installations, to account for various supply pressures. (Docket No. EERE-2014-BT-STD-0027, AWE, No. 8 at p. 4). Nevertheless, AWE also supported use of the ASTM Standard F2324–13 test procedure and testing at a supply pressure of 60 psi. (Docket No. EERE-2014-BT-STD-0027, AWE, No. 8 at p. 2)

---

<sup>6</sup> The cleanability test and its results were not repeatable and reproducible. There also was low user satisfaction with valves that scored well on the cleanability test. Users indicated that spray force may be a better metric for assessing product effectiveness.

<sup>7</sup> A notation in this form provides a reference for information that is in the docket of DOE’s rulemaking to develop energy conservation standards for commercial prerinse spray valves (Docket No. EERE–2014–BT–STD–0027), which is maintained at [www.regulations.gov](http://www.regulations.gov). This notation indicates that the statement preceding the reference is document number 11 in the docket for the CPSV energy conservation standards rulemaking, and appears at page 2 of that document.

DOE understands that supply pressures vary across the country. Some pressures are lower and some are higher than the 60 psi test pressure prescribed in ASTM Standard F2324-13. Limited research by DOE suggests that supply pressures vary at the municipal level across the nation, and at the facility level within a building. Typical range of acceptable water pressure is between 35 psi to 80 psi.<sup>8,9</sup> DOE also notes that facilities in a field study conducted by WaterSense in support of their specification for commercial prerinse spray valves showed a pressure range between 38 psi and 83 psi.<sup>10</sup>

DOE understands that supply pressures affect the flow rate of a commercial prerinse spray valve once installed. Typically, lower pressures result in lower flow rates of the commercial prerinse spray valves, and higher pressures result in higher flow rates. Nevertheless, testing at a single specific supply pressure to demonstrate compliance with the maximum allowable flow rate would enable a user to compare different commercial prerinse spray valves at this pressure, thus reducing testing burden. DOE has also reviewed the American Society of Mechanical Engineers (ASME) Standard A112.18.1–2012, “Plumbing Supply Fittings,” which contains testing parameters for other plumbing products, such as faucets and showerheads, and found that it requires testing at lower supply pressures only when determining a minimum flow rate. In contrast, ASTM Standard F2324–13 prescribes the commercial prerinse spray valve flow rate to be

---

<sup>8</sup> Friedman et.al. 2010. Criteria for Optimized Distribution Systems. Water Research Foundation. Denver, CO.

<sup>9</sup> International Association of Plumbing and Mechanical Officials. Uniform Plumbing Code. 2012. Ontario, Canada.

<sup>10</sup> U.S. Environmental Protection Agency’s (EPA’s) WaterSense Program. Pre-Rinse Spray Valves Field Study Report, 2011. pp. 16-17.  
[http://www.epa.gov/watersense/docs/final\\_epa\\_prsv\\_study\\_report\\_033111v2\\_508.pdf](http://www.epa.gov/watersense/docs/final_epa_prsv_study_report_033111v2_508.pdf)

measured at a supply pressure of  $60 \pm 2$  psi to determine only the maximum flow rate. DOE proposes to test commercial prerinse spray valves at a flowing supply pressure of  $60 \pm 2$  psi, as required by ASTM Standard F2324-13.

DOE has also identified other differences between ASTM Standard F2324–03 (2009) and ASTM Standard F2324–13, which include: (1) minimum flow rate of flex tubing, (2) water temperature for testing, and (3) length of water pipe required to be insulated. Table III.1 summarizes changes between ASTM Standard F2324–03 (2009) and 2013 that apply to DOE’s test procedure.

**Table III.1 Changes to ASTM Standard F2324**

	<b>ASTM Standard F2324-2003 (2009)</b>	<b>ASTM Standard F2324-2013</b>
Flow rate of flex tubing	7 gpm	3.5 gpm
Water temperature for testing	$120 \pm 4$ °F	$60 \pm 10$ °F
Length of water pipe to be insulated	Any insulation to have a thermal resistance (R) of $4$ °F x $\text{ft}^2$ x h/Btu for the entire length of the water pipe, from the mixing valve to the inlet of the flex tubing	No requirement

Section 9.1 of ASTM Standard F2324–13 reduced the minimum required flow rate of the flex tubing when no commercial prerinse spray valve is connected from 7 gpm to 3.5 gpm . ASTM Standard F2324-13 includes a note (#3) that a minimum flow rate for the tubing is specified to prevent the flexible tubing from dictating the flow rate of the prerinse spray valve. The required flow rate for commercial prerinse spray valves under 10 CFR 431.266 is less than the flow rate of the flex tubing specified in the ASTM standards. Therefore, because the test procedure measures the flow rate of the commercial prerinse spray valve, which is connected after the tubing, the flow rate of the tubing should not affect the measurement of the flow rate of the commercial prerinse

spray valve. DOE believes that the flex tubing flow rate change from 7 gpm to 3.5 gpm (ATSM Standard F2324–2003 (2009) and 2013, respectively) will have no effect on the measured water consumption under the DOE test procedure. Accordingly, DOE proposes to adopt section 9.1 of ASTM Standard F2324-13 for a 3.5 gpm flow rate for flex tubing when not connected to the CPSV.

ASTM Standard F2324–03 (2009) required the water temperature for testing to be  $120 \pm 4$  °F. ASTM Standard F2324–13 reduces to 60 °F with an increased tolerance of  $\pm 10$  °F. DOE believes that this difference may reflect removal of the cleanability test because water temperature affects cleanability under the old approach/standard but not measuring force under the new approach/standard. DOE’s research indicates that measurements of flow rate and spray force will be the same under either water temperature. Because the temperature will not affect these measurements, DOE proposes to incorporate the temperature requirements from ASTM Standard F2324–13 (section 10.2.2) into the DOE test procedure for commercial prerinse spray valves.

Additionally, ASTM Standard F2324–13 removes the ASTM Standard F2324–03 (2009) requirement for any insulation to have a thermal resistance (R) of  $4 \text{ °F} \times \text{ft}^2 \times \text{h/Btu}$  for the entire length of the water pipe, from the mixing valve to the inlet of the flex tubing. ASTM Standard F2324–03 required using 120 °F water; however, ASTM Standard F2324–13 requires using 60 °F water. DOE believes ASTM removed the insulation requirement in 2013 in conjunction with the water temperature reduction because the insulation is unnecessary when the test water temperature is 60 °F. Insulating

the water pipe from the mixing valve to the inlet of the flex tubing is not required with 60 °F water because the water is below room temperature. DOE believes that removing the requirement to insulate the water pipe will have no effect on the measurement of either the flow rate or spray force because insulation only affects temperature, not water flow rate. DOE thus proposes to adopt the change not to require insulation.

Finally, Section 4.1 Summary of Test Method, of ASTM Standard F2324-13 states, “If the measured flow rate is not within 5 percent of the rated flow rate, all further testing ceases and the manufacturer is contacted. The manufacturer may make appropriate changes or adjustments to the prerinse spray valve.” DOE notes that it is not incorporating this section of ASTM Standard F2324-13 into the DOE test procedure.

In view of all the above, to align with current industry practice and to be consistent with test procedure requirements under EPCA, DOE proposes to incorporate by reference the following sections of ASTM Standard F2324–13: 6.1–6.9, 9.1–9.5.3.2, 10.1–10.2.5, 10.3.1–10.3.8, and 11.3.1 (replacing the plural “nozzles” with “nozzle”), and excluding references to the “Annex.” When ASTM Standard F2324–03 (2009) was updated to the current 2013 version, certain sections for measuring flow rate were renumbered. To reflect this renumbering, DOE is proposing to update the current flow rate test method to reference the appropriate sections of ASTM Standard F2324–13. The referenced sections describe the testing apparatus, test method, and calculations pertaining to flow-rate measurement.

## C. Proposed Additional Test Methods

### 1. Adding Test Method to Measure Spray Force

As described previously, ASTM Standard F2324–13 includes a test for measuring the spray force of a commercial prerinse spray valve. The test is conducted by mounting a 10-inch rigid disc to a force gauge, located eight inches from the prerinse spray valve, as shown in Figure 4 in section 9.5.2 of ASTM Standard F2324-13. The plate is mounted in a vertical orientation parallel to the face of the commercial prerinse spray valve. After water flow is initiated, the water exits the commercial prerinse spray valve and strikes the disc, creating a force on the disc, which in turn depresses the force gauge. The average force gauge measurement over a 15-second period is recorded.

During the September 30, 2014 Framework public meeting regarding the energy conservation standards for commercial prerinse spray valves, DOE invited comment on using spray force as a potential characteristic by which to separate product classes (Framework document, pp.17–18; Docket No. EERE-2014-BT-STD-0027, Public Meeting Transcript, No. 6 at p.38). DOE also invited comments about an alternative metric for spray force, gallons per minute divided by ounce-force (gpm/ozf). (Framework Document, p. 3)

Comments from interested parties during the Framework public meeting, comments submitted to the EPA WaterSense program, and other research by DOE indicate that spray force is an important characteristic in defining the performance of a commercial prerinse spray valve because it relates to the product’s application and user

satisfaction. During the Framework public meeting, T&S Brass stated that the maximum technologically feasible model (max-tech model) performance should not be evaluated solely based on flow rate, but should include at least one other variable. T&S Brass mentioned that, depending on application, spray force is a characteristic that is considered when determining commercial prerinse spray valve performance. (Docket No. EERE-2014-BT-STD-0027, T&S Brass, Public Meeting Transcript, No. 6 at p.52)

DOE also found through research that spray force is related to the utility of commercial prerinse spray valves.<sup>11</sup> For example, a high spray force is required to clean heavy stains, such as baked-on foods, from silverware, dishes, pots, and pans. By contrast, a commercial prerinse spray valve with lower spray force may be sufficient for food service establishments where baked-on foods are less common. T&S Brass stated that applications of commercial prerinse spray valves range from light rinsing to heavy-duty cleaning. Heavy-duty cleaning applications require more spray force than light rinsing. (Docket No. EERE-2014-BT-STD-0027, T&S Brass, Public Meeting Transcript, No. 6 at p.40-41)

Spray force also is important because a WaterSense field study found that low water pressure, or spray force, is a source of user dissatisfaction. WaterSense evaluated 14 commercial prerinse spray valve models and collected 56 customer satisfaction

---

<sup>11</sup> EPA WaterSense. Response to Public Comments Received on February 2013 *WaterSense Draft Specification for Commercial Pre-Rinse Spray Valves*,5-7. September 19, 2013. United States Environmental Protection Agency [http://www.epa.gov/watersense/docs/prsv\\_finalspec\\_publiccommentresponse\\_09.19.13\\_final\\_508.pdf](http://www.epa.gov/watersense/docs/prsv_finalspec_publiccommentresponse_09.19.13_final_508.pdf) (accessed May. 20, 2015).

reviews, of which nine were unsatisfactory. Seven of the nine unsatisfactory scores were attributed, among other factors, to the pressure (here, the subjective, user-perceived force) of the spray.<sup>12</sup> DOE, however, proposes to measure spray force objectively, as in ASTM Standard F2324–13.

In summary, spray force is a characteristic essential to evaluating the performance of commercial prerinse spray valves because there is a relationship between spray force and both the application of a commercial prerinse spray valve and user satisfaction. As a result, DOE proposes to incorporate by reference the spray force test method contained in sections 10.3.1–10.3.8 of ASTM Standard F2324-14 into the DOE commercial prerinse spray valve test procedure. DOE seeks comment on the addition of the spray force test method. See section V.E.2 of this NOPR.

## 2. Multiple Spray Patterns: Adding a Requirement to Measure Flow Rate and Spray Force of Each Spray Pattern

DOE has identified several commercial prerinse spray valves on the market with multiple spray patterns. On average, these prerinse spray valves provide up to three spray patterns. DOE’s research showed a maximum number of five spray patterns for commercial prerinse spray valves. , Each spray pattern is obtained by turning the adjustable spray head to select one of the available spray patterns at a time.

---

<sup>12</sup> EPA WaterSense. [Pre-Rinse Spray Valves Field Study Report, pages 24-25](http://www.epa.gov/watersense/docs/final_epa_prsv_study_report_033111v2_508.pdf). March 31, 2011. United States Environmental Protection Agency [www.epa.gov/watersense/docs/final\\_epa\\_prsv\\_study\\_report\\_033111v2\\_508.pdf](http://www.epa.gov/watersense/docs/final_epa_prsv_study_report_033111v2_508.pdf) (accessed Oct. 31, 2014).

For these commercial prerinse spray valves, each spray pattern can be used in distinct prerinsing applications. The applications range from washing off baked-on food to light washing, as each spray pattern can provide different flow rates and spray forces.

Because a commercial prerinse spray valve with multiple spray patterns can give different flow rates and spray forces, DOE proposes to test each spray pattern using the flow rate and spray force test methods described in sections III.B and III.C.1, respectively. Additionally, section 10.3.7 from ASTM Standard F2324-13, which is incorporated by reference in this NOPR, also specifies that force shall be tested for each mode (i.e. spray pattern). DOE seeks comment about whether manufacturers should be required to test commercial prerinse spray valves with multiple spray patterns in all spray pattern modes. See section V.E.3 of this NOPR.

#### D. Rounding Requirements

##### 1. Flow Rate

DOE proposes to change the rounding requirements for recording flow rate measurements from one decimal place to two decimal places. Currently, 10 CFR 431.264(b) requires rounding to one decimal place. However, the current WaterSense standard for commercial prerinse spray valves is rounded to two decimal places (1.28 gpm).<sup>13</sup> DOE believes that rounding to one decimal place is insufficiently precise for the low magnitude flow rate measurements that may be needed for the forthcoming

---

<sup>13</sup> U.S. Environmental Protection Agency's (EPA's) WaterSense program, September 19, 2013. WaterSense Specification for Commercial Pre-Rinse Spray Valves Supporting Statement, Version 1.0.

energy conservation standard. Therefore, DOE proposes to amend the flow rate measurement rounding requirements to two decimal places.

## 2. Spray Force

Section 11.4.2 of the ASTM Standard F2324–13 specifies that the spray force is rounded to one decimal place. DOE proposes to adopt the same spray force rounding requirements (i.e., one decimal place) in newly created 10 CFR 431.264(b)(2).

DOE seeks comment about the proposed rounding requirements for flow rate and spray force. See section V.E.4 of this NOPR.

## E. Certification, Compliance, and Enforcement

### 1. Selection of Units to Test

DOE proposes to retain the existing CPSV sampling plan at 10 CFR 429.51(a). CPSV testing is subject to DOE's general certification regulations at 10 CFR 429.11. These require a manufacturer to randomly select and test a sample of sufficient size to ensure that the represented value of water consumption adequately represents performance of all of the units within the basic model, but no fewer than two units. 429.11(b). The purposes of these requirements are to achieve a realistic representation of the water consumption of the basic model and to mitigate the risk of noncompliance, without imposing undue test burden.

Section 8.1 of ASTM Standard F2324–13 requires three representative production units to be selected for all performance testing. DOE is not proposing to adopt this requirement. DOE is only proposing to adopt the testing methodology (i.e., applicable to testing of a unit) – not the rating methodology (i.e., applicable to a basic model) – found in ASTM Standard F2324-13. Accordingly, where ASTM Standard F2324–13 references testing of multiple units, DOE proposes to incorporate by reference the standard subject to the limitation that the DOE test procedure applies to testing of one unit in each sample set (e.g., product class).

## 2. Representative Value Formula

DOE proposes to revise the statistical methods for certification, compliance, and enforcement for commercial prerinse spray valves in 10 CFR 429.51(a)(2). Currently, 10 CFR 429.51(a)(2)(i) and (ii) provide that for any represented value of water consumption of a basic model for which consumers would favor lower values, the upper confidence level (UCL) is used and where consumers would favor higher values, the lower confidence limit (LCL) is used. Where the standard for commercial prerinse spray valves is expressed as a maximum rate of water consumption (gpm) rather than water efficiency, customers would favor a lower value. Therefore, the LCL formula in 10 CFR 429.51(a)(2)(ii) is unnecessary. DOE proposes to remove the LCL formula from the sampling plan for the selection of units for testing and retain only the provision for a UCL under 10 CFR 429.51(a)(2)(i). DOE seeks comment about amending 10 CFR 429.51(a)(2)(ii) by removing the formula for LCL. See section V.E.5 of this NOPR.

#### F. Effective and Compliance Date

In view of the above, any amendments to the commercial prerinse spray valve test procedure, under 10 CFR 431.264, would become effective 30 days after the date of the final rule. Representations would be required to be based on the amended test procedure 180 days after the effective date.

### **IV. Procedural Issues and Regulatory Review**

#### A. Review Under Executive Order 12866

The Office of Management and Budget (OMB) has determined that test procedure rulemakings do not constitute “significant regulatory actions” under section 3(f) of Executive Order 12866, Regulatory Planning and Review, 58 FR 51735 (Oct. 4, 1993). Accordingly, this action was not subject to review by the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget.

#### B. Review under the Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires preparation of an initial regulatory flexibility analysis (IRFA) for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking,” 67 FR 53461 (Aug. 16, 2002), DOE published procedures and policies on February 19, 2003, to ensure that the potential impacts of its rules on small entities are properly

considered during the DOE rulemaking process. 68 FR 7990. DOE has made its procedures and policies available on the Office of the General Counsel's website: <http://energy.gov/gc/office-general-counsel>.

The potential burden on manufacturers related to commercial prerinse spray valves has been analyzed in previous rules. The following analysis is informed by previous rules, but also includes additional analysis.

When the DOE test procedure was initially adopted in 2006, the test procedure was identical to ENERGY STAR's test procedure. DOE stated in the 2006 test procedure final rule that many manufacturers had been redesigning the products covered under that final rule. These products were tested for compliance with existing voluntary performance standards such as ENERGY STAR program requirements, using industry-developed test procedures that were the basis for the test procedures in the Energy Policy Act of 2005 (EPAAct 2005). DOE stated that manufacturers would experience no additional burdens if DOE adopted the test procedure (ASTM Standard F2324-03) referenced in EPAAct 2005. 71 FR 71340, 71363 (Dec. 8, 2006). In the final rule that last updated DOE's test procedure, DOE did not adopt any changes to the referenced test procedure, thus DOE determined that there was no incremental cost burden to manufacturers of commercial prerinse spray valves. 78 FR 62970, 62983 (Oct. 23, 2013). Historically, when DOE has adopted the industry's test procedure, it has not resulted in any incremental cost burden to manufacturers of commercial prerinse spray valves.

For this proposed rule, DOE made inquiry into small business manufacturers of commercial prerinse spray valves. In its market assessment, DOE used public information to identify potential small manufacturers. DOE reviewed the Department of Energy Compliance Database, individual company websites, and various marketing research tools (e.g., Dun and Bradstreet reports, Manta) to create a list of companies that import or otherwise manufacture commercial prerinse spray valves covered by this rulemaking.<sup>14</sup> DOE identified 11 distinct manufacturers of commercial prerinse spray valves – the smallest business had two employees and the largest had 237 employees.

In view of the collected data, DOE considered what manufacturers met the Small Business Administration's (SBA's) definition of the term "small business" as it relates to the North American Industry Classification System (NAICS) code 332919 (SBA sets the size standard of 500 or fewer employees),<sup>15</sup> and to screen out (1) companies that do not offer commercial prerinse spray valves covered by this rulemaking, (2) do not meet the definition of the term "small business," or (3) are foreign owned and operated. As a result of its review, DOE identified eight manufacturers that would be considered small businesses. The number of small businesses and the applicable NAICS code 332919 are consistent with the Certification, Compliance, and Enforcement final rule at 76 FR 12422, 12488 (March 7, 2011). Thus, DOE has determined that amending the test

---

<sup>14</sup> The Certification Database is part of DOE's Compliance Certification Management System. See [www.regulations.doe.gov/certification-data/](http://www.regulations.doe.gov/certification-data/) (last accessed November 10, 2014).

<sup>15</sup> U.S. Small Business Administration Table of Small Business Size Standards Matched to North American Industry Classification System Codes See [www.sba.gov/sites/default/files/files/Size\\_Standards\\_Table.pdf](http://www.sba.gov/sites/default/files/files/Size_Standards_Table.pdf) (last accessed February 13, 2015)

procedures under 10 CFR 431.264 would have minimal, if any, effect on covered small businesses, and that an IRFA was not needed.

Table IV.1 lists the eight small businesses covered by this proposed rulemaking, according to the number of employees. DOE estimated that the average revenue per small business is approximately \$21 million and the combined total annual revenues associated with these small businesses is about \$124 million. Further, DOE analyzed the CPSV industry to determine what manufacturers would be covered under a test procedure rulemaking, and determined that 8 of the 11 CPSV manufacturers, or 72 percent, may qualify as a “small business” under SBA classification guidelines.

**Table IV.1 Small Business Size by Number of Employees**

<b>Number of Employees</b>	<b>Number of Small Businesses</b>	<b>Percentage of Small Businesses</b>
1–10	1	12.5%
21-30	1	12.5%
31–40	1	12.5%
41–50	2	25%
61-70	1	12.5%
101-150	2	25%

DOE estimated the labor burden associated with testing, in view of the 2012 (most recent) median annual pay for (1) environmental engineering technicians (\$45,350), (2) mechanical engineering technicians (\$51,980), and (3) plumbers, pipefitters, and steamfitters (\$49,140) for an average annual salary of \$48,823.<sup>16,17</sup> DOE

<sup>16</sup> U.S. Department of Labor Bureau of Labor Statistics. Occupational Outlook Handbook, Architecture and Engineering. [www.bls.gov/ooh/Architecture-and-Engineering/home.htm](http://www.bls.gov/ooh/Architecture-and-Engineering/home.htm) (last accessed November 4, 2014).

divided the average by 1,920 hours per year (40 hours per week for 48 weeks per year) to develop an hourly rate of \$25.43. DOE adjusted the hourly rate by 31 percent to account for benefits, resulting in an estimated total hourly rate of \$33.31.<sup>18,19</sup> DOE used this hourly rate to assess the labor costs for testing units according to the proposed amendments to the test procedures.

Currently, 10 CFR 431.264 prescribes measurements for a flow rate, but does not address testing flow rate for commercial prerinse spray valves with multiple spray patterns. Instead, it requires testing to be repeated three times for the same unit. As such, DOE believes that testing could be completed in less than an hour per commercial prerinse spray valve. To assess the potential burden of the proposed amended test procedures, DOE rounds the current duration for testing up to a whole hour, for cases where the testing technician needs to document the results or cannot allot his or her labor hours. In view of the foregoing, DOE believes that the current testing process costs, on average, are \$66.62 for labor for a total of two basic models to meet the testing requirements of 10 CFR 429.11 and 429.51.

The proposed amendments to the test procedures include an additional test for spray force. DOE believes that the additional time required to test spray force is not

---

<sup>17</sup> U.S. Department of Labor Bureau of Labor Statistics. Occupational Outlook Handbook, Construction and Extraction Occupations. [www.bls.gov/ooh/construction-and-extraction/home.htm](http://www.bls.gov/ooh/construction-and-extraction/home.htm) (last accessed November 4, 2014).

<sup>18</sup> Obtained from the Bureau of Labor Statistics. News Release: Employer Cost For Employee Compensation – December 2012, December 2012. U.S. Department of Labor. [www.bls.gov/news.release/ecec.nr0.htm](http://www.bls.gov/news.release/ecec.nr0.htm).

<sup>19</sup> Additional benefits include paid leave, supplemental pay, insurance, retirement and savings, Social Security, Medicare, unemployment insurance, and workers compensation.

significant but, understandably, the number of spray patterns could potentially increase any testing time. DOE's review of commercial prerinse spray valves yielded an average of three patterns per commercial prerinse spray valve. DOE estimates that the time to measure both flow rate and spray force for all three spray patterns to be greater than one hour but typically less than two hours. DOE again presumes that testing staff may not easily apportion their testing time between product, and rounds the total testing time to two hours per unit tested. Thus, DOE estimates the total labor time to test for two basic models of commercial prerinse spray valves each with multiple spray patterns to be \$133.24.<sup>20</sup>

DOE examined the CPSV industry to identify the manufacturers of commercial prerinse spray valves covered in this NOPR, and determined that 72 percent of all CPSV manufacturers could be classified as small entities according to SBA classification guidelines. Although 72 percent of the market could be considered a significant portion of the overall industry, DOE believes that small manufacturers would not be substantially affected by the proposed amendments to the test procedure, because there would be no significant incremental costs to any entity. The cost of testing for each small business analyzed was less than or equal to 0.01 percent of revenue for a sample size of two commercial prerinse spray valves. The current industry standard used for commercial prerinse spray valves (ASTM Standard F2324-13) requires three representative production models be selected for performance testing. However, the DOE sample size of

---

<sup>20</sup> Basic model means all units of a given type of covered product (or class thereof) manufactured by one manufacturer, having the same primary energy source, and which have essentially identical electrical, physical, and functional (or hydraulic) characteristics that affect energy consumption, energy efficiency, water consumption, or water efficiency. (10 CFR 431.262)

a minimum of two units remains unchanged with this proposed rule. Therefore, DOE concludes that the cost effects accruing from the proposed rule would not have a “significant economic impact on a substantial number of small entities,” and that the preparation of an IRFA is not warranted. DOE will submit a certification and supporting statement of factual basis to the Chief Counsel for Advocacy of the Small Business Administration for review under 5 U.S.C. 605(b).

DOE seeks comments about whether the proposed test procedure amendments would have a significant economic impact on a substantial number of small entities. See section V.E.6 of this NOPR.

#### C. Review Under the Paperwork Reduction Act of 1995

Manufacturers of commercial prerinse spray valves must certify to DOE that their products comply with any applicable energy conservation standards. In certifying compliance, manufacturers must test their products according to the DOE test procedures for commercial prerinse spray valves, including any amendments adopted for those test procedures. DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including commercial prerinse spray valves. (76 FR 12422 (March 7, 2011)). The collection-of-information requirement for the certification and recordkeeping is subject to review and approval by OMB under the Paperwork Reduction Act (PRA). This requirement has been approved by OMB under OMB control number 1910-1400. Public reporting burden for the certification is estimated to average 30 hours per response,

including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number.

#### D. Review Under the National Environmental Policy Act of 1969

In this proposed rule, DOE proposes test procedure amendments that it expects will be used to develop and implement future energy conservation standards for commercial prerinse spray valves. DOE has determined that this rule falls into a class of actions that are categorically excluded from review under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and DOE's implementing regulations at 10 CFR part 1021. Specifically, this proposed rule would amend the existing test procedures without affecting the amount, quality or distribution of energy usage, and, therefore, would not result in any environmental impacts. Thus, this rulemaking is covered by Categorical Exclusion A5 under 10 CFR part 1021, subpart D, which applies to any rulemaking that interprets or amends an existing rule without changing the environmental effect of that rule. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

#### E. Review Under Executive Order 13132

Executive Order 13132, “Federalism,” 64 FR 43255 (Aug. 4, 1999) imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have Federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. 65 FR 13735. DOE has examined this proposed rule and has determined that it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPCA governs and prescribes Federal preemption of State regulations as to energy conservation for the products that are the subject of this proposed rule. States can petition DOE for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. (42 U.S.C. 6297(d)) No further action is required by Executive Order 13132.

#### F. Review Under Executive Order 12988

Regarding the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, “Civil Justice Reform,” 61 FR 4729

(Feb. 7, 1996), imposes on Federal agencies the general duty to adhere to the following requirements: (1) eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; (3) provide a clear legal standard for affected conduct rather than a general standard; and (4) promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in sections 3(a) and 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the proposed rule meets the relevant standards of Executive Order 12988.

#### G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and Tribal governments and the private sector. Pub. L. No. 104-4, sec. 201 (codified at 2 U.S.C. 1531). For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and Tribal governments, in the aggregate, or by the

private sector of \$100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a), (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and Tribal governments on a proposed “significant intergovernmental mandate,” and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA. 62 FR 12820; also available at <http://energy.gov/gc/office-general-counsel>. DOE examined this proposed rule according to UMRA and its statement of policy and determined that the rule contains neither an intergovernmental mandate, nor a mandate that may result in the expenditure of \$100 million or more in any year, so these requirements do not apply.

#### H. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

#### I. Review Under Executive Order 12630

DOE has determined, under Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights” 53 FR 8859 (March 18, 1988) that this regulation would not result in any takings that might require compensation under the Fifth Amendment to the U.S. Constitution.

#### J. Review Under Treasury and General Government Appropriations Act, 2001

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB’s guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE’s guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed this proposed rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

#### K. Review Under Executive Order 13211

Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,” 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to OMB, a Statement of Energy Effects for any proposed significant energy action. A “significant energy action” is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or

use of energy; or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

This regulatory action to amend the test procedure for measuring the energy efficiency of commercial prerinse spray valves is not a significant regulatory action under Executive Order 12866. Moreover, it would not have a significant adverse effect on the supply, distribution, or use of energy, nor has it been designated as a significant energy action by the Administrator of OIRA. Therefore, it is not a significant energy action, and, accordingly, DOE has not prepared a Statement of Energy Effects.

#### L. Review Under Section 32 of the Federal Energy Administration Act of 1974

Under section 301 of the Department of Energy Organization Act (Pub. L. 95–91; 42 U.S.C. 7101), DOE must comply with section 32 of the Federal Energy Administration Act of 1974, as amended by the Federal Energy Administration Authorization Act of 1977. (15 U.S.C. 788; FEAA) Section 32 essentially provides in relevant part that, where a proposed rule authorizes or requires use of commercial standards, the notice of proposed rulemaking must inform the public of the use and background of such standards. In addition, section 32(c) requires DOE to consult with the Attorney General and the Chairman of the Federal Trade Commission (FTC) concerning the impact of the commercial or industry standards on competition.

The proposed rule incorporates testing methods contained in the following commercial standards: ASTM F2324–13, Standard Test Method for Prerinse Spray Valves, sections 6.1 - 6.9, 9.1 – 9.5.3.2, 10.1 – 10.2.5, 10.3.1 – 10.3.8, 11.3.1 (replacing “nozzles” with “nozzle”), and disregarding references to the Annex. DOE has evaluated these standards and is unable to conclude whether they fully comply with the requirements of section 32(b) of the FEAA, (i.e., that they were developed in a manner that fully provides for public participation, comment, and review). DOE will consult with the Attorney General and the Chairman of the FTC concerning the impact of these test procedures on competition prior to prescribing a final rule.

#### M. Description of Materials Incorporated by Reference

In this NOPR, DOE proposes to incorporate by reference the test standard published by ASTM, titled, “Standard Test Method for Prerinse Spray Valves,” ASTM Standard F2324–2013. ASTM Standard F2324–2013 is an industry-accepted test procedure that measures water flow rate and spray force for prerinse spray valves, and is applicable to product sold in North America. ASTM Standard F2324–2013 specifies testing conducted in accordance with other industry accepted test procedures (already incorporated by reference). The test procedure proposed in this NOPR references various sections of ASTM Standard F2324–2013 that address test setup, instrumentation, test conduct, and calculations. ASTM Standard F2324–2013 is readily available at ASTM’s website at [www.astm.org/Standard/standards-and-publications.html](http://www.astm.org/Standard/standards-and-publications.html).

## **V. Public Participation**

### **A. Attendance at Public Meeting**

The time, date, and location of the public meeting are listed in the DATES: and ADDRESSES: sections at the beginning of this document. If you plan to attend the public meeting, please notify Ms. Brenda Edwards at (202) 586-2945 or [Brenda.Edwards@ee.doe.gov](mailto:Brenda.Edwards@ee.doe.gov).

Please note that foreign nationals participating in the public meeting are subject to advance security screening procedures which require advance notice prior to attendance at the public meeting. Any foreign national wishing to participate in the public meeting should advise DOE as soon as possible by contacting [foreignvisit@ee.doe.gov](mailto:foreignvisit@ee.doe.gov) to initiate the necessary procedures. Please also note that any person wishing to bring a laptop into the Forrestal Building will be required to obtain a property pass. Visitors should avoid bringing laptops, or allow an extra 45 minutes. Persons may also attend the public meeting via webinar.

Because of the REAL ID Act implemented by the Department of Homeland Security (DHS), there have been recent changes regarding identification (ID) requirements for individuals wishing to enter Federal buildings from specific States and U.S. territories. As a result, driver's licenses from the following States or territory will not be accepted for building entry, and instead, one of the alternate forms of ID listed below will be required.

DHS has determined that regular driver's licenses (and ID cards) from the following jurisdictions are not acceptable for entry into DOE facilities: Alaska, American Samoa, Arizona, Louisiana, Maine, Massachusetts, Minnesota, New York, Oklahoma, and Washington. Acceptable alternate forms of Photo-ID include: U.S. Passport or Passport Card; an Enhanced Driver's License or Enhanced ID-Card issued by the States of Minnesota, New York or Washington (Enhanced licenses issued by these States are clearly marked Enhanced or Enhanced Driver's License); a military ID or other Federal government-issued Photo-ID card.

In addition, you can attend the public meeting via webinar. Webinar registration information, participant instructions, and information about the capabilities available to webinar participants will be published on DOE's website

[www1.eere.energy.gov/buildings/appliance\\_standards/product.aspx/productid/54](http://www1.eere.energy.gov/buildings/appliance_standards/product.aspx/productid/54).

Participants are responsible for ensuring that their systems are compatible with the webinar software.

#### B. Procedure for Submitting Prepared General Statement for Distribution

Any person who has plans to present a prepared general statement may request that copies of his or her statement be made available at the public meeting. Such persons may submit requests, along with an advance electronic copy of their statement in portable document format (PDF) (preferred), Microsoft Word or Excel, WordPerfect, or text in American Standard Code for Information Interchange (ASCII) file format, to the

appropriate address shown in the ADDRESSES: section at the beginning of this notice. The request and advance copy of statements must be received at least one week before the public meeting and may be emailed, hand-delivered, or sent by mail. DOE prefers to receive requests and advance copies via email. Please include a telephone number to enable DOE staff to make a follow-up contact, if needed.

### C. Conduct of Public Meeting

DOE will designate a DOE official to preside at the public meeting and may also use a professional facilitator to aid discussion. The meeting will not be a judicial or evidentiary-type public hearing, but DOE will conduct it in accordance with EPCA. (42 U.S.C. 6306) A court reporter will be present to record the proceedings and prepare a transcript. DOE reserves the right to schedule the order of presentations and to establish the procedures governing the conduct of the public meeting. After the public meeting, interested parties may submit further comments on the proceedings as well as on any aspect of the rulemaking until the end of the comment period.

The public meeting will be conducted in an informal, conference style. DOE will present summaries of comments received before the public meeting, allow time for prepared general statements by participants, and encourage all interested parties to share their views on issues affecting this rulemaking. Each participant will be allowed to make a general statement (within time limits determined by DOE), before the discussion of specific topics. DOE will allow, as time permits, other participants to comment briefly on any general statements.

At the end of all prepared statements on a topic, DOE will permit participants to clarify their statements briefly and comment on statements made by others. Participants should be prepared to answer questions by DOE and by other participants concerning these issues. DOE representatives may also ask questions of participants concerning other matters relevant to this rulemaking. The official conducting the public meeting will accept additional comments or questions from those attending, as time permits. The presiding official will announce any further procedural rules or modification of the above procedures that may be needed for the proper conduct of the public meeting.

A transcript of the public meeting will be included in the docket, which can be viewed as described in the DOCKET section at the beginning of this notice. In addition, any person may buy a copy of the transcript from the transcribing reporter.

#### D. Submission of Comments

DOE will accept comments, data, and information regarding this proposed rule not later than the date provided in the DATES: section at the beginning of this proposed rule. Interested parties may submit comments using any of the methods described in the ADDRESSES: section at the beginning of this notice.

Submitting comments via regulations.gov. The regulations.gov web page will require you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies staff only. Your contact information will not

be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to regulations.gov information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through regulations.gov cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through regulations.gov before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not

be viewable for up to several weeks. Please keep the comment tracking number that regulations.gov provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery, or postal mail. Comments and documents submitted via email, hand delivery, or postal mail also will be posted to regulations.gov. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via mail or hand delivery, please provide all items on a CD, if feasible. It is not necessary to submit printed copies. No facsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English and free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. According to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery two well-marked copies: one copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked non-confidential with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Factors of interest to DOE when evaluating requests to treat submitted information as confidential include: (1) A description of the items; (2) whether and why such items are customarily treated as confidential within the industry; (3) whether the information is generally known by or available from other sources; (4) whether the information has previously been made available to others without obligation concerning its confidentiality; (5) an explanation of the competitive injury to the submitting person which would result from public disclosure; (6) when such information might lose its confidential character due to the passage of time; and (7) why disclosure of the information would be contrary to the public interest.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

#### E. Issues on Which DOE Seeks Comment

Although DOE welcomes comments on any aspect of this proposal, DOE is particularly interested in receiving comments and views of interested parties concerning the following issues:

##### 1. Definitions Discussed and Proposed

###### a. Commercial Prerinse Spray Valve

DOE seeks comments on its proposal to revise the definition of "commercial prerinse spray valve" in this NOPR; see section III.A.1.

###### b. Normally-Closed Valve

DOE seeks comment on its tentative proposal to add a definition for "normally-closed valve" in this NOPR; see section III.A.2.

###### c. Spray Force

DOE seeks comments on its proposal add the definition of "spray force" in this NOPR; see section III.A.3.

##### 2. DOE seeks comment on the addition of the spray force test method; see section III.C.1.

##### 3. Spray Patterns

DOE seeks comment on whether manufacturers should be required to test commercial prerinse spray valves with multiple spray patterns in all spray pattern modes, see section III.C.2.

4. DOE seeks comment on changing the flow rate measurement rounding requirements from one decimal place to two decimal places, see section III.D.
5. DOE seeks comment on the removal of 10 CFR 429.51(a)(2)(ii), see section III.E.

6. Small Entities

DOE seeks comments on its reasoning that the proposed test procedures will not have a significant economic impact on a substantial number of small entities; see section IV.B.

## **VI. Approval of the Office of the Secretary**

The Secretary of Energy has approved publication of this proposed rule.

### **List of Subjects**

#### **10 CFR part 429**

Administrative practice and procedure, Confidential business information, Energy conservation, Household appliances, Reporting and recordkeeping requirements.

#### **10 CFR part 431**

Administrative practice and procedure, Confidential business information, Energy conservation test procedures, Incorporation by reference, and Reporting and recordkeeping requirements.

Issued in Washington, DC, on June 5, 2015.



Kathleen B. Hogan  
Deputy Assistant Secretary for Energy Efficiency  
Energy Efficiency and Renewable Energy

For the reasons stated in the preamble, DOE is proposing to amend parts 429 and 431 of Chapter II of Title 10, Code of Federal Regulations as set forth below.

**PART 429 -- CERTIFICATION, COMPLIANCE, AND ENFORCEMENT FOR  
CONSUMER PRODUCTS AND COMMERCIAL AND INDUSTRIAL  
EQUIPMENT**

1. The authority citation for part 429 continues to read as follows:

**Authority:** 42 U.S.C. 6291–6317.

2. In § 429.51, paragraph (a) is revised to read as follows:

**§429.51 Commercial prerinse spray valves.**

(a) Sampling plan for selection of units for testing. (1) The requirements of §429.11 apply to commercial prerinse spray valves; and

(2) For each basic model of commercial prerinse spray valves, a sample of sufficient size must be randomly selected and tested to ensure that any represented value of water consumption or other measure of water consumption of a basic model for which consumers would favor lower values must be greater than or equal to the higher of:

(i) The mean of the sample, where:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

and,  $\bar{x}$  is the sample mean;

n is the number of samples; and

$x_i$  is the  $i^{\text{th}}$  sample; Or,

(ii) The upper 95 percent confidence limit (UCL) of the true mean divided by 1.10,

where:

$$UCL = \bar{x} + t_{.95} \left( \frac{s}{\sqrt{n}} \right)$$

and,  $\bar{x}$  is the sample mean;

$s$  is the sample standard deviation;

$n$  is the number of samples; and

$t_{.95}$  is the  $t$  statistic for a 95 percent two-tailed confidence interval with  $n-1$

degrees of freedom (from Appendix A of this subpart).

\* \* \* \* \*

## **PART 431--ENERGY EFFICIENCY PROGRAM FOR CERTAIN COMMERCIAL AND INDUSTRIAL EQUIPMENT**

3. The authority citation for part 431 continues to read as follows:

**Authority:** 42 U.S.C. 6291-6317.

4. Section 431.262 is revised to read as follows:

### **§ 431.262 Definitions.**

Basic model means all units of a given type of covered product (or class thereof) manufactured by one manufacturer, having the same primary energy source, and which have essentially identical electrical, physical, and functional (or hydraulic) characteristics

that affect energy consumption, energy efficiency, water consumption, or water efficiency.

Commercial prerinse spray valve means a handheld device, containing a normally-closed valve, suitable for use with commercial dishwashing and ware washing equipment for the purpose of removing food residue before cleaning the items.

Normally-closed valve means a valve that opens when an external force is exerted upon it and automatically closes when the external force is removed.

Spray force means the amount of force exerted onto the spray disc, measured in ounce-force (ozf).

5. Section 431.263 is amended by revising paragraph (b)(1) to read as follows:

**§431.263 Materials incorporated by reference.**

\* \* \* \* \*

(b) \* \* \*

(1) ASTM Standard F2324–13, (“ASTM F2324–13”), Standard Test Method for Prerinse Spray Valves, approved June 1, 2013; IBR approved as follows, sections: 6.1 – 6.9, 9.1 – 9.5.3.2, 10.1–10.2.5, 10.3.1 – 10.3.8, and 11.3.1 (replacing “nozzles” with “nozzle”), excluding reference to the Annex, IBR approved for §431.264.

\* \* \* \* \*

6. Section 431.264 is revised to read as follows:

**§431.264 Uniform test method to measure flow rate and spray force of commercial prerinse spray valves.**

(a) Scope. This section provides the test procedure to measure the water consumption flow rate and spray force of a commercial prerinse spray valve.

(b) Testing and Calculations.

(1) Flow rate. Test a sample unit in accordance with the requirements of sections 6.1 through 6.9 (Apparatus) except 6.4 and 6.7, 9.1 through 9.4 (Preparation of Apparatus), and 10.1 through 10.2.5 (Procedure), and perform calculations in accordance with section 11.3.1 (Calculation and Report) of ASTM F2324-13, (incorporated by reference, see §431.263). Disregard any references to the Annex. Record flow rate measurements at the resolutions of the test instrumentation. For the sample unit, calculate the mean of the flow rate measurements. Round the final value for flow rate to two decimal places.

(2) Spray force. Test each sample unit in accordance with the test requirements specified in sections 6.2 and 6.4 through 6.9 (Apparatus), 9.1 through 9.5.3.2 (Preparation of Apparatus), and 10.3.1 through 10.3.8 (Procedure) of ASTM F2324-13. Disregard any references to the Annex. Record spray force measurements at the resolution of the test instrumentation. For each sample unit, calculate the mean of the spray force measurements. Round the spray force to one decimal place.

(3) Multiple spray patterns. If a sample unit has multiple spray patterns, for each possible spray pattern:

(i) Measure both the flow rate and spray force according to paragraphs (b)(1) and (b)(2) of this section (including calculating the mean flow rate and spray force for each spray pattern); and

(ii) Record the mean flow rate for each spray pattern, rounded to two decimal places. Record the mean spray force for each spray pattern, rounded to one decimal place.