



Ballot Vote Sheet

TO: The Commission
Alberta E. Mills, Secretary

THROUGH: Austin C. Schlick, General Counsel
Jason K. Levine, Executive Director

FROM: Elisabeth Layton, Attorney, Regulatory Affairs
Daniel R. Vice, Assistant General Counsel, Regulatory Affairs

SUBJECT: *Federal Register* Notice: Amendment to Standard for
All-Terrain Vehicles; Notice of Proposed Rulemaking

DATE: July 5, 2023

BALLOT VOTE DUE: Tuesday, July 11, 2023

Section 42 of the Consumer Product Safety Act, 15 U.S.C. § 2089, addresses regulation of all-terrain vehicles. In accordance with that section, on November 14, 2008, the Commission published in the *Federal Register* as a mandatory consumer product safety standard the American National Standard for Four Wheel All-Terrain Vehicles, ANSI/SVIA 1- 2007. Section 42 provides that if ANSI revises its voluntary ATV standard, it must notify the Commission. Within 120 days of receiving notification, the Commission must issue a notice of proposed rulemaking (under 5 U.S.C. § 553) to amend its mandatory ATV standard to include “any such revision that the Commission determines is reasonably related to the safe performance of ATVs” and notify ANSI of any provision it determines is not related to safe performance. Within 180 days of publication of the proposed rule, the Commission must promulgate any amendment to its ATV standard. Using this process, in 2018 CPSC amended its ATV rule by adopting the 2017 version of ANSI/SVIA-1 as the incorporated voluntary standard.

On March 21, 2023, ANSI notified the Commission that the 2017 edition of the ANSI/SVIA standard had been revised. Attached is a draft notice of proposed rulemaking opening a proceeding to consider the 2023 revision of the 2017 ANSI/SVIA standard, as required by section 42 of the CPSA.

Please indicate your vote on the following options:



Ballot Vote Sheet

- I. Approve publication of the attached document in the *Federal Register*, as drafted.

(Signature)

(Date)

- II. Approve publication of the attached document in the *Federal Register*, with the specified changes.

(Signature)

(Date)

- III. Do not approve publication of the attached document in the *Federal Register*.

(Signature)

(Date)

- IV. Take other action specified below.

(Signature)

(Date)



United States
Consumer Product Safety Commission

Ballot Vote Sheet

Attachment: Draft *Federal Register* notice, Amendment to Standard for All-Terrain Vehicles;
Notice of Proposed Rulemaking.

**U.S. Consumer Product
Safety Commission**
4330 East-West Highway
Bethesda, MD 20814

**National Product Testing
and Evaluation Center**
5 Research Place
Rockville, MD 20850

THIS DOCUMENT HAS NOT BEEN REVIEWED
OR ACCEPTED BY THE COMMISSION

Page 3 of 3
CLEARED FOR PUBLIC RELEASE
UNDER CPSA 6(b)(1)

Billing Code 6355-01-P

CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Part 1420

[CPSC Docket No. 2017-0032]

Amendment to Standard for All-Terrain Vehicles; Notice of Proposed Rulemaking

AGENCY: Consumer Product Safety Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY The Consumer Product Safety Improvement Act of 2008 (CPSIA) required the Consumer Product Safety Commission (CPSC or the Commission) to publish, as a mandatory consumer product safety standard, the *American National Standard for Four-Wheel All-Terrain Vehicles Equipment Configuration, and Performance Requirements* developed by the Specialty Vehicle Institute of America (ANSI/SVIA 1-2007). CPSC published that mandatory consumer product safety standard on November 14, 2008. Since then, the Commission has revised this mandatory standard twice in accordance with the revision procedures set out in the CPSIA. ANSI/SVIA has again revised its standard. In accordance with CPSIA, CPSC proposes to amend the Commission's mandatory ATV standard to reference the 2023 edition of the ANSI/SVIA standard.

DATES: Submit comments by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Comments related to the Paperwork Reduction Act aspects of the proposed rule's information collection requirements should be directed to the Office of Information and Regulatory Affairs, OMB, Attn: CPSC Desk Officer, FAX: 202-395-6974, or emailed to:

oir_submission@omb.eop.gov. In addition, written comments that are sent to OMB also should be submitted electronically at www.regulations.gov, under Docket No. CPSC-2017-0032.

Comments related to the proposed rule, identified by Docket No. CPSC-2017-0032, may be submitted electronically or in writing by any of the following methods:

Electronic Submissions: Submit electronic comments to the Federal eRulemaking Portal at <http://www.regulations.gov>. Follow the instructions for submitting comments. Do not submit through this website: confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public. CPSC typically does not accept comments submitted by email, except as described below.

Mail/Hand Delivery/Courier/Confidential Written Submissions: CPSC encourages you to submit electronic comments using the Federal eRulemaking Portal. You may, however, submit comments by mail, hand delivery, or courier to: Office of the Secretary, Consumer Product Safety Commission, 4330 East West Highway, Bethesda, MD 20814; telephone: (301) 504–7479.

Instructions: All submissions must include the agency name and docket number. CPSC may post all comments without change, including any personal identifiers, contact information, or other personal information provided to www.regulations.gov. If you wish to submit confidential business information, trade secret information, or other sensitive or protected information that you do not want to be available to the public, you may submit such comments by mail, hand delivery, or courier, or you may email them to: cpsc-os@cpsc.gov.

Docket: For access to the docket to read background documents or comments received, go to: <http://www.regulations.gov>, and insert the docket number, CPSC-2017-0032, into the “Search” box, and follow the prompts.

FOR FURTHER INFORMATION CONTACT: Han Lim, Project Manager, Directorate for Engineering Sciences, U.S. Consumer Product Safety Commission, 5 Research Place, Rockville, MD 20850; telephone: (301) 987-2327; email: HLiml@cpsc.gov.

SUPPLEMENTARY INFORMATION:

I. Background and Statutory Authority

CPSIA directed the Commission to “publish in the Federal Register as a mandatory consumer product safety standard the American National Standard for Four Wheel All-Terrain Vehicles Equipment Configuration, and Performance Requirements developed by the Specialty Vehicle Institute of America (American National Standard ANSI/SVIA 1-2007).” 15 U.S.C. 2089(a)(1). Accordingly, on November 14, 2008, CPSC published a final rule mandating ANSI/SVIA 1-2007 as a consumer product safety standard. 73 FR 67385. The final rule was codified at 16 CFR part 1420.

The Commission has revised the mandatory standard twice in accordance with the revision procedures set out in CPSIA and incorporated into section 42 of the Consumer Product Safety Act, 15 U.S.C. 2089(b). On February 29, 2012, the Commission published a final rule that amended the Commission’s ATV standard to reference the 2010 edition of the ANSI/SVIA standard. 77 FR 12197. Then on February 27, 2018, the Commission published a final rule that amended the mandatory ATV standard to reference the 2017 edition of the ANSI/SVIA standard. 83 FR 8336. On March 21, 2023, ANSI notified the Commission that the 2017 edition of the ANSI/SVIA standard had been revised.

Section 42(b) of the CPSA provides that, if ANSI/SVIA 1-2007 is revised, ANSI must notify the Commission of the revision. The Commission has 120 days after it receives that notification to issue a notice of proposed rulemaking to amend the Commission’s mandatory

ATV standard “to include any such revision that the Commission determines is reasonably related to the safe performance of [ATVs] and notify the Institute of any provision it has determined not to be so related.” 15 U.S.C. 2089(b)(1) and (2). Thereafter, the Commission has 180 days after publication of the proposed amendment to publish a final rule to revise the ATV standard. *Id.*

II. Evaluation of ANSI/SVIA 1-2023

ANSI/SVIA 1-2023 contains requirements and test methods relating to ATVs, including vehicle equipment and configuration, vehicle speed capability, brake performance, pitch stability, electromagnetic compatibility, and sound level limits. The staff memorandum at Tab A of the July XX, 2023 Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the All-Terrain Vehicle (ATV) Standard (Staff’s NPR Briefing Package)¹ reviews in detail the changes from the 2017 edition of the ANSI/SVIA standard, which is currently the mandated consumer product safety standard for ATVs, to the 2023 edition. The following revisions are particularly significant:

- Requirements for hot surfaces;
- Requirements for fuel system components;
- Removal of the maximum recommended tire pressure of 69 kPa (10 psi); and
- Requirement of an effective date “beginning with 2026 model year vehicles” within the scope of the standard;
- Removal of requirement that paper user manuals be provided with all ATVs.

A. Hot Surfaces Requirements

¹ Available at [\[WEB ADDRESS\]](#).

ANSI/SVIA 1-2023 Section 12.1, *Touch Points*, specifies performance requirements that limit maximum surface temperatures for various touch points that, if too hot, may harm vehicle occupants. Without the proper surface temperature limits on ATV surfaces, consumers may experience contact burns. In addition, excessive exhaust temperatures can melt nearby combustible plastic components, which may pose a risk of fire.

ANSI/SVIA 1-2023 sets out performance tests to evaluate whether surface temperatures for various touch points are within specified limits. In September 2018, CPSC recommended that SVIA add requirements to address burn hazards to users of ATVs. CPSC staff subsequently worked with SVIA to develop standards for maximum surface temperatures on ATVs to address the risk of burns associated with ATVs. The Commission preliminarily concludes that testing the temperature of specified ATV touch points as provided by ANSI-SVIA 1-2023 is reasonably related to the safe performance of ATVs.

B. Fuel System Requirements

The 2017 edition of the ANSI/SVIA standard does not contain performance requirements to address fire hazards from fuel leaks. ANSI/SVIA 1-2023 adds multiple performance requirements to mitigate the risk of fuel leaks and fire hazards. These performance requirements apply to various aspects of an ATV's fuel system that may contribute to fire hazards.

Most of the requirements are based on other similar standards that each address different aspects of the fuel system. For example, the fuel hose tensile test is similar to the test procedure from ANSI/OPEI B71.10-2018 *Standard for Off-Road Ground-Supported Outdoor Power Equipment – Gasoline Fuel Systems – Safety Specifications*. There are two options to test for fuel tank structural integrity. One of these options to evaluate the structural integrity of the fuel tank for resistance to impact forces is based on the SAE J288 standard for snowmobile fuel tanks. The

other option is to follow the SVIA-1 test method involving striking the tank with a metal sphere.

The SVIA-1 committee adapted various fuel system component requirements from other standards to be applicable to ATVs.

These fuel system performance requirements are organized into four general categories:

Fuel Tank Structural Integrity

- Section 13.3 Fuel Tank Immersion Leak Test
- Section 13.5 Fuel Tank Cyclic Pressure Integrity Test
- Section 13.6 Fuel Soak Test for Plastic Tanks and Assemblies with Grommets and Seals
- Sections 13.8 and 13.15 Fuel Tank Leak Mitigation from Rollover or Tip over

Fuel Hoses

- 13.9 Fuel Line Integrity
- 13.10 Fuel Line Connection Tensile Test

Fuel Filter and Shut-off Valve

- Section 13.4 Fuel Filter and Shut-off Valve Immersion Test

Elastomeric Component Durability

- Section 13.11 Elastomeric exposure to fuel
- Section 13.12 Ozone resistance
- Section 13.13 UV resistance
- Section 13.14 Corrosion resistance

CPSC staff is aware of three fuel tank recalls, two fuel hose recalls, and one fuel filter-related recall associated with ATVs.² A fuel leak occurs when there is a breach in the fuel system. A fuel breach can originate from multiple locations, such as the fuel hose to nozzle connections, fuel tank seam split or crack, cracked fuel filter, cracked fuel hose, etc. A fuel leak

² Voluntary Standards Meeting with Recreational Off-Highway Institute (ROHVA), Specialty Vehicle Institute of America (SVIA), and Outdoor Power Equipment Institute (OPEI) to discuss Off-Highway Vehicle Fire and Debris Penetration Hazards, September 19, 2018. Weblink to Meeting Log: https://www.cpsc.gov/s3fs-public/2018-09-19_Voluntary_Standards_Meeting_on_Off-Highway_Vehicles.pdf?GhlbD87TF1W8m6F9B10g2CpZTCNzSrjP See pages 8 through 10 for the fuel-related recalls.

from any of the above components near a hot engine and/or exhaust components can increase the risk of fire.

Section 13 contains test requirements that are (a) one-time design qualification tests and (b) tests that are required of every fuel system for new production ATVs. Most of the requirements are one-time design qualification tests. The one-time qualification test requires manufacturers to conduct a single test that proves the design of a subsystem component such as the fuel tank meets all the applicable requirements. The water immersion leak test is required for all fuel tank units that will be installed on a manufacturer's ATV production line. Appendix A of the Staff's NPR Briefing Package lists all the tests contained in Section 13 and distinguishes which tests are one-time design qualification type of tests and which tests are required for every ATV.

Section 13.3 is a leak test that requires every ATV fuel tank to be tested for leaks. The production fuel tank, fitted with all the fuel system components, is pressurized with compressed air and then submerged in water. Failures are detected by visual inspection of bubbles. This leak test is repeated during the course of various other tests after subjecting the fuel tank and/or fuel tank components to impact loading, pressure cycling, and elevated temperature conditioning to ensure no stress cracks or fuel tank breaches result from those three physical tests. Section 13.4 provides leak tests for individual components such as fuel filters and fuel shut-off valves that are similar to the leak tests Section 13.3 establishes for fuel tanks. Section 13.4 sets out a water immersion test to ensure these components are leak-free. CPSC staff has advised the Commission that these performance tests to detect leaks from fuel tanks, fuel filters, and fuel shut-off valves are effective in mitigating the risk of fuel leaks and can reduce the risk of fire hazards.

Fuel tanks are subjected to pressure cycling due to the varying amounts of fuel in the tank and changing temperatures. To simulate the effects of pressure cycling, a performance test described in section 13.5 (Fuel Tank Cyclic Pressure Integrity Test) applies a cyclic air pressure up to 4 psi for 10,000 cycles. This is a one-time design qualification test. Upon completion of the 10,000 pressure cycles, a leak test per the section 13.3 test procedure is conducted. CPSC staff assesses that the test procedure described in section 13.5 adequately evaluates the structural integrity of ATV fuel tanks when subjected to the repeated, fatigue type of pressure test.

The elevated temperature test set out in Section 13.6 evaluates structural damage that may occur when a fuel tank is subjected to elevated temperature scenarios. This performance test requires a sample fuel tank filled with gasoline to be kept in a test chamber at a constant elevated temperature of 60°C (140°F) for 480 hours. This requirement would detect stress cracks, seam splits, or other structural damage that can cause fuel to leak. At the conclusion of this 480-hour high temperature exposure test, the test sample fuel tank is emptied and then subjected to the Section 13.3 leak test to ensure no stress cracks form during the long period of elevated temperature. CPSC staff assesses that this performance test is effective in evaluating the structural integrity of ATV fuel tanks when subjected to extended elevated temperature environments. The Commission concludes that this performance test is reasonably related to the safe performance of ATVs.

In a vehicle fuel system, components such as fuel pumps, shutoff valves, and fuel filters are joined with multilayered rubber hoses that may be connected in various ways such as barbed friction fittings, hose clamps, or quick snap-on connect mechanisms. Sections 13.9 and 13.10 contain tensile test requirements to ensure hose connections do not leak. Sample hose connections are subjected to a 30 lb tensile (pull) force to ensure fuel hoses do not slip off. Staff

assesses that these performance tests are effective in mitigating the risk of fuel hoses slipping off and therefore this testing reduces the risk of fire hazards. The Commission concludes that that these tensile test requirements are reasonably related to the safe performance of ATVs.

ATVs are driven in a wide range of environments and conditions, from extreme cold, snowy conditions to extreme hot weather. Plastic fuel tanks are susceptible to expansion and contraction due to temperature fluctuations and variations in operating conditions and over time plastic fuel tanks may develop stress cracks. Unprotected portions of the fuel tank can be struck by debris, such as rocks, which can compromise the structural integrity of the tank. Section 13.7 provides that ATV fuel tanks be subjected to a qualification impact test that evaluates the structural integrity of the fuel tank after it is either struck by a steel ball (SVIA test option) or dropped from 1.25 meters onto a concrete surface (SAE J288 – Snowmobile Fuel Tank Standard Test method option). The test option is decided by the manufacturer. Prior to the impact, the fuel tanks are subjected to a low temperature soak (-30°C for the SVIA test option or -40°C for the SAE J288 test option). CPSC staff assesses that this performance test is effective in evaluating the structural integrity of ATV fuel tanks when subjected to impact forces. The Commission concludes that that these tensile test requirements are reasonably related to the safe performance of ATVs.

Section 13.8 (Fuel Tank Protection Envelope Analysis) requires visual, computer aided design (CAD), or similar inspection to ensure neighboring components do not inadvertently compromise the structural integrity of fuel system components such as the fuel tank, fuel hoses, etc. in the event of a tip-over or roll-over. The procedure is a visual inspection or spatial analysis done with CAD, which CPSC staff consider useful to aid in addressing potential structural

integrity issues of ATV fuel systems. The Commission concludes that that these inspection requirements are reasonably related to the safe performance of ATVs.

The performance test set out in Section 13.15 evaluates the effectiveness of the fuel system to limit the amount of fuel leakage (and associated risk of fire and/or explosion) in a rollover scenario where the ATV and its fuel tank are not in their normal upright positions. A test sample fuel tank filled with water is flipped upside down (180° from its normal upright position) for 10 minutes and the maximum allowable volume of water that can leak within that period is 300 mL. On average, the allowable leak rate is 30 mL per minute. Gasoline evaporates relatively quickly when exposed to air. This rate is consistent with the requirement from the 2012 edition of the golf car standard, ANSI/ILTV (International Light Transportation Vehicle Association) Z130.1. CPSC staff assesses that this performance test is effective in evaluating the rollover vent valve's ability to limit the amount of fuel leakage if the ATV fuel tank is involved in a rollover.

Components with elastomeric parts such as fuel filters and fuel shut off valves are susceptible to cracking, corrosion, and/or deterioration when exposed to certain chemical or environmental elements such as ethanol-blended gasolines, ultraviolet (UV) light, and ozone. Elastomeric parts are composed of various rubber-like materials. Sections 13.10 through 13.14 set out the performance tests that expose sample fuel filters and fuel shut off valves to E10 (gasoline blended with 10% ethanol), UV light, and ozone for extended periods. The test components are visually examined for any cracks or signs of deterioration upon the completion of the performance tests. Parts made of fluoroelastomer are exempt, as this material is not susceptible to deterioration due to UV, ozone, or E10 exposures. Fluoroelastomer is a fluorocarbon-based type of synthetic rubber that has chemical corrosion resistant properties that are used for applications such as gaskets, O-rings, and seals. CPSC staff assesses that this

performance test is effective in evaluating the corrosion resistance properties of elastomeric parts.

The Commission preliminarily concludes that the fuel system performance requirements in Section 13 of the 2023 edition of the ANSI/SVIA standard are reasonably related to the safe performance of ATVs on the basis of staff's assessment that they will reduce the risk of fuel leaks and associated fire and burn hazards due to possible fuel breaches, over pressurizations, fuel spills, and component deterioration.

C. Tire Pressure

The 2007, 2010, and 2017 editions of the SVIA-1 standard defined low-pressure tires as “having a recommended tire pressure of no more than 69 kPa (10 psi)” in section 4.19 Tires. In the 2017 edition, Section 4.19 differentiated between Pneumatic (section 4.19.1) and Non-Pneumatic Tires (NPT) (section 4.19.2) and changed Pneumatic Tire requirements to “Maximum recommended tire pressure of 69kPa (10 psi).” Section 4.19.2 specifies “NPTs vertical stiffness shall be designed to produce a ground pressure of 69kPa (10 psi) or less with the subject vehicle.” In the 2023 edition, the tire pressure value and vertical stiffness equivalent tire pressure value have been deleted.

The 2023 version retains the 4.19 requirement that ATVs be equipped with tires designed for off-highway use on these vehicles and that the tire sidewalls be marked with the recommended tire pressure. In addition, the 2023 version retains the various testing and performance requirements in sections 5 to 9 for speed capability, brakes, and pitch stability.

An ATV manufacturer could design an ATV with a proper suspension and 12 psi tires, and the tires would still be “low pressure” yet conflict with the definition. For that reason, staff does not believe that it is necessary to include a maximum tire pressure of 10 psi in the standard.

Since ANSI/SVIA 1-2023 instructs consumers to follow manufacturers' recommendations for tire inflation pressures, either from the markings on the tires or the owners' manuals, CPSC staff assesses that this change to the standard is neutral and is not detrimental to ATV safety. The Commission concludes that these inspection requirements are reasonably related to the safe performance of ATVs.

D. Owner's Manual

The 2017 edition of the SVIA-1 standard provides in Section 4.21 that all ATVs shall be provided an owner's manual "in paper form" and adds that the paper manual "may be supplemented at the manufacturer's option in electronic form viewable on a display on the ATV or other device." The 2023 edition of SVIA-1 removes the phrase "which may be supplemented at the manufacturer's option in electronic form viewable on a display on the ATV or other device" which was added to the 2017 edition. Section 4.21 now states "All ATVs shall be provided with a manual in paper or electronic format at the time of delivery to the first purchaser. All ATVs with printed manuals shall be equipped with a means of carrying the manual that protects it from destructive elements while allowing reasonable access." Under this standard the manufacturer has the choice of whether to provide electronic or paper manuals. The information required to be provided in the owner's manual includes a dedicated introductory safety section and important safety messages regarding age recommendations, proper operation of the ATV, and training resources. Therefore, CPSC staff believes that paper manuals should remain the default medium for important safety information because in that format the information will be immediately available for consumers. Many consumers are already disinclined to read instruction manuals and requiring them to go through extra steps to access them in electronic format reduces the likelihood that they will do so. Based on the increased risk of consumers not

receiving information on the safe use of ATVs if that information is only electronically available, CPSC staff assesses that this change would likely result in a reduction in safety. For that reason, the Commission preliminarily concludes that this provision is not consistent with the safe operation of ATVs and therefore proposes maintaining in effect the current regulatory provision incorporating the 2017 version Section 4.21.

E. Effective Date

The CPSIA provides a timetable for the Commission to issue a notice of proposed rulemaking (within 120 days of receiving notification of a revised ANSI/SVIA standard) and to issue a final rule (within 180 days of publication of the proposed rule), but it does not establish requirements for effective dates. When the Commission adopted the 2010 revision to the ANSI/SVIA standard, it provided for an effective date of 60 days from publication of the final rule. That date was revised based on comments from several ATV companies in order to allow them time to update their certification labels. When the Commission adopted the 2017 revision to the ANSI/SVIA standard, it provided for an effective date of January 1, 2019, approximately 10 months after publication of the final rule, based on SVIA's comments about the time needed for manufacturers to make the required changes.

CPSC staff assesses that many ATVs may already meet the new requirements in ANSI/SVIA 1-2023, and the changes from the 2017 to the 2023 voluntary standard will not require significant vehicle design or testing. Once SVIA notifies the Commission of a new version of the SVIA standard, CPSC is required to issue an NPR within 120 days and then issue a final rule 180 days after the NPR publication (300 days total). Because the projected date for issuance of a final rule is early in calendar year 2024, setting the effective date 180 days after publication of the final rule, as the Commission did with the 2017 standard, would result in an

effective date in July 2024, with the specific date dependent on the date the final rule is issued. However, in order to set a date certain that will facilitate industry planning, as well as to align the effective date more closely with the timing of the ATV industry's typical transition from one model year to the next, the Commission proposes an effective date of September 1, 2024. With this effective date, ATV manufacturers will have approximately 17 months to comply with the new hot surface and fuel system requirements. The Commission preliminarily concludes that the proposed effective date is reasonable, feasible, and adequate to protect consumer safety for the following reasons:

- Since all ATVs' gasoline powered engines and associated components sold in the U.S. are regulated by the U.S. EPA for Exhaust and Evaporative emissions (40 CFR 1051.515(d) – Fuel Tank Permeation Testing), those ATVs will be exempt from having to conduct testing per Section 13.5 (Fuel Tank Cyclic Pressure Integrity Test) of ANSI/SVIA-1-2023. Where hazards associated with fuel tank cyclic pressure have already been addressed, there will be no negative effect on safety by providing this effective date rather than a shorter time period to comply.
- Depending on a firm's ATV manufacturing schedule cycle during the calendar year, any design changes and associated testing to comply with the new standard will take place sometime within the 17-month period, with the understanding that firms will not produce ATVs all year round. The 17-month period from the issuance of SVIA-1-2023 to the proposed effective date will allow for resolution of supply chain issues, quality control issues, and any other issues that may arise.
- The proposed timeline here is similar to the timeline for the SVIA-1-2017 standard update. In June 2017, SVIA notified the Commission of the 2017 edition

of the SVIA-1 standard. The final rule established an effective date of January 1, 2019, which was 18 months from start to finish (comparable to the recommended 17-month period proposed here).

For these reasons, the Commission proposes an effective date that is more clearly defined than the effective date for SVIA-1-2023 and that allows sufficient time for manufacturers to prepare to comply with the new standard while at the same time protecting consumer safety by requiring compliance within a reasonable time.

III. Initial Regulatory Flexibility Act Analysis

The Regulatory Flexibility Act (RFA) requires that agencies review a proposed rule for the rule's potential economic impact on small entities, including small businesses. Section 603 of the RFA generally requires that agencies prepare an initial regulatory flexibility analysis (IRFA) and make the analysis available to the public for comment when the agency publishes an NPR. 5 U.S.C. 603. Section 605 of the RFA provides that an IRFA is not required if the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities.

The IRFA, or a summary of it, must be published in the *Federal Register* with the proposed rule. Under Section 603(b) of the RFA, each IRFA must include:

- (1) a description of why action by the agency is being considered;
- (2) a succinct statement of the objectives of, and legal basis for, the proposed rule;
- (3) a description and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- (4) a description of the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which

will be subject to the requirement and the type of professional skills necessary for preparation of the report or record; and

(5) an identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule.

The IRFA must also describe any significant alternatives to the proposed rule that would accomplish the stated objectives and that minimize any significant economic impact on small entities. Staff's initial regulatory flexibility analysis is provided in Tab B of Staff's NPR Briefing Package.

A. Reason for Agency Action

The intent of this rulemaking is to reduce deaths and injuries resulting from fire and burn hazards associated with ATVs. The Commission is considering this rule to amend the current mandatory standard to reference ANSI/SVIA 1-2023 because we preliminary conclude that compliance with ANSI/SVIA 1-2023 would reduce fatal and non-fatal injuries associated with ATVs.

B. Objectives and Legal Basis of the Rule

The Commission proposes this rule to reduce the risk of fatal and non-fatal injuries associated with ATVs. On March 24, 2023, ANSI published the latest revision of the American National Standard for Four-Wheel All-Terrain Vehicles, ANSI/SVIA 1-2023. This rule is promulgated as required by, and under the authority of, CPSA section 42(b).

C. Small Entities to Which the Rule Will Apply

The proposed rule would directly affect manufacturers and importers of ATVs that are responsible for ensuring that the ATVs distributed in the United States meet the Commission's mandatory rule based on the ANSI/SVIA-1 standard. If promulgated as a final rule, it would not

have any direct impact on other businesses, such as ATV dealers (unless they are also importers), or other small entities, including small governmental jurisdictions or other organizations.

To be distributed in the United States, ATVs must be covered by “ATV Action Plans,” which, among other things, describe the actions that manufacturers or importers will undertake to ensure that consumers are offered safety training and to monitor that ATVs intended for adult riders are not sold by ATV dealers for the use of children. As of April 2023, there were 38 ATV manufacturers or importers with ATV Action Plans registered with the CPSC.³ Of the 38 firms with ATV Action Plans, staff has assessed that 14 are either large domestic manufacturers or subsidiaries of foreign manufacturers. In addition, staff has assessed that no domestic manufacturers of ATVs meet the U.S. Small Business Association (SBA) criteria to be considered small businesses.

Staff believes that the remaining 24 companies are likely importers, although in several cases there was insufficient information to make this determination. Of these 24 likely importers, staff has identified 14 firms that meet SBA criteria to be considered small businesses. For the remaining 10 firms, there was insufficient information to make a size determination.

D. Compliance, Reporting, and Recordkeeping Requirements of the Proposed Rule

The CPSA requires manufacturers (a term which includes importers) to certify that their products comply with applicable CPSC standards and regulations. 15 U.S.C. 2052(a)(11) & 2063(a)(1). The proposed rule amends the performance requirements and test procedures that suppliers must meet in order to sell ATVs in the United States. CPSC staff has examined differences between ANSI/SVIA 1–2017 and ANSI/SVIA 1–2023. A detailed list and discussion of these differences appear Staff’s NPR Briefing Package. In addition to making minor modifications to Sections 1 through 11, ANSI/SVIA 1–2023 adds Section 12 (Burn

³ The ATV Action Plan Requirement is found in section 42 of the CPSA, 15 U.S.C. 2089. A list of firms with active ATV Action Plans can be found at [ATV Action Plans | CPSC.gov](https://www.cpsc.gov/ATV-Action-Plans).

Hazards) and Section 13 (Fuel Systems Requirements). Manufacturers and/or importers of models that do not currently comply with ANSI/SVIA 1-2023 will incur costs for testing, and possibly for parts and vehicle redesign.

In accordance with Section 14 of the CPSA, manufacturers would have to issue a GCC for each ATV model, certifying that the model complies with the proposed rule. According to Section 14 of the CPSA, GCCs must be based on a test of each product, or a reasonable testing program; and GCCs must be provided to all distributors or retailers of the product. The manufacturer would have to comply with 16 CFR part 1110 concerning the content of the GCC, retention of the associated records, and any other applicable requirement.

1. Impact on Small Manufacturers

Because modifications in Sections 1 through 11 consist primarily of editorial updates and clarifications to the existing voluntary standards, staff assesses that manufacturer costs to comply with these modifications are insignificant.

Manufacturers will incur testing costs to comply with Section 12 of the revised standard, which sets forth a one-time design qualification that requires the identification and testing of ATV surfaces that come into continuous, intermittent, momentary, and incidental contact with the vehicle occupant and passengers. Those manufacturers whose models do not meet the performance requirement will incur costs associated with model reconfiguration or redesign.

Manufacturers will also incur testing costs to comply with Section 13 of the revised standard which contains several one-time design qualifications and production part inspection tests related to ATV fuel systems.

For ATVs that already meet the performance requirements of Section 12 and 13, the cost to manufacturers is limited to the cost of testing. The Commission estimates that one-time design qualification inspection tests would cost approximately \$12,096 per model. To comply with new

Sections 13.3 (Fuel Tank Immersion Leak Test) and 13.4 (Fuel Filter and Shut-off Valve Immersion Leak Test), manufacturers will incur costs associated with testing each production part; CPSC estimates that the cost of production part testing is approximately \$20.00 per vehicle.

Manufacturers whose ATV models do not meet the performance requirements of Sections 12 and 13 may incur additional costs associated with sourcing compliant--likely more expensive--parts that were previously tested by the parts manufacturer/supplier. These costs are expected to be approximately \$20.00 per vehicle, some of which may be borne by the parts supplier. ATV models which do not meet Sections 12, 13.8 (Fuel Tank Production Envelope Analysis), or 13.9 (Fuel Line Integrity) requirements may require reconfiguration or redesign, which CPSC estimates would cost approximately \$70,000 per model.

The Commission generally assesses a draft proposed rule to have a significant adverse economic impact if a firm's costs to comply exceed 1 percent of the firm's annual sales revenue. Because, as noted above, none of the 14 identified ATV manufacturers meet the SBA criteria to be considered a small business, CPSC preliminarily assesses that the draft proposed rule requiring compliance with ANSI/SVIA 1–2023 will not have a significant economic impact on any small ATV manufacturers, since none was identified. Staff seeks information on any other ATV manufacturers that may meet the SBA criteria to be considered small businesses.

2. Impact on Small Importers

Foreign manufacturers whose models do not meet the ANSI/SVIA 1–2023 performance requirements may choose to exit the U.S. ATV market. An importer whose foreign manufacturer exited the market, and was unable to procure an alternative source, would likely suffer a significant, adverse economic impact. However, given that ATV sales volume has been stable over the last 5 years, and grew by approximately 5 percent in 2020 (the last year for which CPSC has data), it is unlikely that foreign ATV manufacturers will exit the market. Therefore, CPSC preliminarily

concludes that the draft proposed rule will not have a significant, adverse economic impact on ATV importers.

If a foreign manufacturer chooses not to conduct the required testing and/or provide the documentation necessary to support the issuance a GCC, importers of that manufacturer's products may choose to conduct and document compliance testing, incurring the associated costs. For importers whose costs exceed 1 percent of the firm's annual ATV revenues, the effect would be considered significant. Of the 14 small importers identified by staff, only 7 could be found in the 2020 ATV market sales data.⁴ Staff estimates that 4 of these 7 small importers would face a significant, adverse economic impact as a result of the proposed rule. However, as noted above, CPSC considers this scenario unlikely.

3. Alternatives to the Draft Proposed Rule

An effective date later than September 1, 2024, could reduce manufacturers' costs of compliance and/or allow manufacturers to spread those costs over a longer period of time. However, an effective date of September 1, 2024 allows manufacturers approximately 17 months from the publication of ANSI/SVIA 1-2023 to comply with its requirements, which the Commission preliminarily considers reasonable, feasible, and adequate as explained above.

For these reasons, any cost savings that might accrue to manufacturers if a later effective date were adopted are likely to be insignificant. Delaying implementation of the rule would allow continued manufacture and importation of non-compliant models for a longer period of time, expose a greater number of consumers to ATV fire and burn hazards, and increase associated societal costs. Therefore, the Commission is not proposing this alternative.

⁴ Source: Power Products Marketing, Prairie Eden, MN, 2021.

The Commission preliminarily concludes that the draft proposed rule will not have a significant, negative economic impact on a substantial number of small entities and requests comments with data supporting or refuting whether the Commission could certify to that effect.

IV. The Proposed Rule

The proposed rule would revise 16 CFR sections 1420.1 and 1420.3. Consistent with current requirements, the revised language states that new assembled or unassembled ATVs manufactured before September 1, 2024, must comply with ANSI/SVIA 1-2017. Any new assembled or unassembled ATVs manufactured on or after September 1, 2024 must comply with ANSI/SVIA 1-2023. The revision also removes extraneous references to past effective dates.

V. Paperwork Reduction Act

This proposed rule contains information collection requirements that are subject to public comment and review by the Office of Management and Budget (OMB) under the Paperwork

Reduction Act of 1995 ([44 U.S.C. 3501-3521](#)). In this document, pursuant to [44 U.S.C. 3507\(a\)\(1\)\(D\)](#), we set forth –

- a title for the collection of information;
- a summary of the collection of information;
- a brief description of the need for the information and the proposed use of the information;
- a description of the likely respondents and proposed frequency of response to the collection of information;
- an estimate of the burden that shall result from the collection of information; and
- notice that comments may be submitted to the OMB.

Title: Notice of Proposed Rulemaking (NPR) to Amend the All-Terrain Vehicle (ATV) Standard.

Summary and Description: The proposed rule amends the ATV standard to mandate industry compliance with ANSI/SVIA 1-2023, *American National Standard for Four Wheel All-Terrain Vehicles*. The proposed rule would require ATVs to comply with ANSI/SVIA 1-2023, including certification testing in support of GCCs required by Section 14 of the Consumer Product Safety Act, 15 U.S.C. 2063.⁵ GCCs must comply with 16 CFR part 1110 concerning the content of the GCC, retention of the associated records, and any other applicable requirement. ANSI/SVIA 1-2023 Sections 4. Vehicle (ATV) Configuration and Equipment, 5. Maximum Speed Capability, 7. Service Brake Performance, 8. Parking, 9. Pitch Stability, 11. Sound Level Limits, 12. Hot Surfaces, and 13. Fuel Systems Requirements contain certification testing

⁵ Section 14(a)(3)(A) of the CPSA states that the third-party testing requirement applies to any children's product manufactured more than 90 days after the Commission has established and published a "notice of requirements" for the accreditation of third-party conformity assessment bodies to assess conformity with a children's product safety rule.

requirements. These recordkeeping requirements, as well as the preparation of the GCC itself, fall within the definition of “collection of information,” as defined in [44 U.S.C. 3502\(3\)](#). PRA requirements such as labels, hang tags, and instruction manuals, which are unchanged from the previous version of the standard, SVIA 1-2017, are not included in this analysis.

Description of Respondents: Entities which manufacture or import ATVs.

Estimated Burden: We estimate the total burden of this collection of information is 441 hours and \$16,229. Table 1, below, summarizes our estimation of annual reporting burden hours and cost.

Table 1—Estimated Annual Reporting Burden

Burden Type	Number of Respondents	Frequency of Responses	Total Annual Responses	Hours per Response	Total Burden Hours	Annual Cost
Labor Burden						
GCC Preparation	38	1	38	1.5	57	\$2,098
One-Time Design Qualification Testing	25	1.9	48	8	384	\$14,131
Total Burden					441	\$16,229

Comments: In compliance with the Paperwork Reduction Act of 1995 ([44 U.S.C. 3507\(d\)](#)), CPSC has submitted the information collection requirements of this proposed rule to the OMB for review. Interested persons are requested to submit comments regarding information collection by **[insert date 60 days after date of publication in the FEDERAL REGISTER]**to

the Office of Information and Regulatory Affairs, OMB (see the **ADDRESSES** section at the beginning of this document).

Pursuant to 44 U.S.C. 3506(c)(2)(A), we invite comments on:

- Whether the collection of information is necessary for the proper performance of the CPSC's functions, including whether the information will have practical utility;
- The accuracy of the CPSC's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- Ways to enhance the quality, utility, and clarity of the information to be collected;
- Ways to reduce the burden of the collection of information on respondents, including the use of automated collection techniques, when appropriate, and other forms of information technology; and
- The estimated burden hours associated with producing the GCC and the certification testing required to support the GCC.

A. GCC Preparation

Section 14 of the Consumer Product Safety Act requires manufacturers and importers of ATVs to prepare GCCs. Based on current ATV action plans filed with the CPSC, there are 38 entities that supply, or intend to supply ATVs to the U.S. market. CPSC staff found evidence of ATV sales activity, in the form of actual sales or advertisement for sale, for only 32 of the 38 entities. Nevertheless, taking a conservative approach, CPSC staff assumed that all 38 entities are currently supplying ATVs to the U.S. market and used this number to calculate the burden hours and annual cost associated with GCCs. ATV manufacturers typically produce one GCC that covers all the models of a model year, which implies the number of PRA responses is one per entity, per year. CPSC conservatively estimates the time required to produce this GCC is about

1.5 hours per year (although in most cases the actual time required will likely be significantly lower). Therefore, the estimated burden associated with GCCs is 57 hours (38 entities \times 1 GCC per year \times 1.5 hours per GCC = 57 hours). CPSC staff multiplied the estimated number of burden hours by \$36.80⁶, the total hourly compensation for sales and office workers in goods-producing private industries, to generate the estimated annual cost to industry associated with GCCs. Therefore, the estimated annual cost to industry associated with preparation of the GCCs is \$2,097.60 (\$36.80 per hour \times 57 hours = \$2,097.60).

B. Recordkeeping Supporting GCC Preparation

In the event a foreign manufacturer chooses not to conduct required certification testing and/or provide documentation to support preparation of the GCC, its importer could choose to conduct its own certification testing. However, CPSC considers this scenario unlikely, and for several of the importers, cost prohibitive. Therefore, the Commission assumes entities conducting certification testing and associated recordkeeping are limited to ATV manufacturers. Based on 2020 sales data, there were 25 known U.S. and foreign manufacturers supplying as many as 239 new and old ATV models and 420,730 ATVs to the U.S. market.⁷

CPSC estimates the average life cycle of an ATV model is approximately 5 years, which implies each manufacturer will conduct one-time design qualification testing on approximately 1.6 models per year (239 models \div 25 entities \div 5 years \approx 1.9 models per entity per year). CPSC staff estimates the time required to create and maintain certification records to be approximately 8 person hours per model.⁸ Therefore, the estimated labor burden associated with certification

⁶ U.S. Bureau of Labor Statistics, "Table 4. Employer Costs for Employee Compensation for private industry workers by occupational and industry group," updated March 17, 2023, [Table 4. Private industry workers by occupational and industry group - 2022 Q04 Results \(bls.gov\)](#).

⁷ Source: Power Products Marketing, Prairie Eden, MN, 2021.

⁸ This estimate includes recordkeeping hours associated with individual parts testing required by ANSI/SVIA 1-2023, Sections 13.3 (Fuel Tank Immersion Leak Test) and 13.4 (Fuel Filter and Shut-off Valve Immersion Leak Test, allocated per model, as well as recordkeeping hours associated with one-time design qualification testing.

testing recordkeeping is 384 person hours (25 entities \times 1.9 ATV models per year \times 8 person hours per model = 384 person hours). As above, staff multiplied the estimated number of burden hours by \$36.80, the total hourly compensation for sales and office workers in goods-producing private industries. The estimated annual cost to industry associated with certification testing recordkeeping is \$14,131 (\$36.80 per person hour \times 384 person hours = \$14,131).

C. Summary of Burden Hours and Cost

Based on this analysis, the proposed rule for ATVs would impose an annual burden to industry of approximately 441 hours per year (57 for preparation of the GCC and 384 hours for recordkeeping associated with the certification tests upon which the GCCs are based). The estimated annual cost is approximately \$16,229 (\$2,098 and \$14,131 for GCC preparation and certification testing recordkeeping, respectively).

The above estimates are a conservative estimate of the average annual burden to ATV entities. The proposed rule requires all ATVs manufactured on or after September 1, 2024, to comply with ANSI/SVIA 1-2023. Therefore, in the first year following promulgation of the rule, existing entities may be required to redesign and test more than the estimated average 48 models per year and incur higher costs than the estimates in this PRA analysis. In subsequent years, costs could be less, as fewer numbers of ATV models will require design updates. To the extent that the ATV industry already complies, or substantially complies, with the ANSI/SVIA 1-2023 standard, these figures may over-estimate the actual burden.

VI. Environmental Considerations

The Commission's regulations provide a categorical exemption for the Commission's rules from any requirement to prepare an environmental assessment or an environmental impact

statement as they “have little or no potential for affecting the human environment.” 16 CFR 1021.5(c)(1). This proposed amendment falls within the categorical exemption.

VII. Incorporation by Reference

The Commission proposes to incorporate by reference those provisions of ANSI/SVIA 1-2023 that it has concluded are related to the safe operation of ATVs, which encompass all provisions other than Section 4.21 concerning the provision of paper user manuals. The Office of the Federal Register (OFR) has regulations concerning incorporation by reference. 1 CFR part 51. For a proposed rule, agencies must discuss in the preamble to the NPR ways that the materials the agency proposes to incorporate by reference are reasonably available to interested persons or how the agency worked to make the materials reasonably available. In addition, the preamble to the proposed rule must summarize the material. 1 CFR 51.5(a).

In accordance with the OFR’s requirements, section II of this preamble summarizes the provisions of ANSI/SVIA 1-2023 that the Commission proposes to incorporate by reference. ANSI/SVIA 1-2023 is copyrighted. Interested persons may purchase a copy of ANSI/SVIA 1-2023 from Specialty Vehicle Institute of America, 2 Jenner, Suite 150, Irvine, CA 92618-3806; telephone: 949-727-3727 ext.3023; www.svia.org. In addition, a read-only copy of the standard is available for viewing on the SVIA website at <https://svia.org/ansi-svia-1-2023/>. You may also inspect a copy at the Office of the Secretary, U.S. Consumer Product Safety Commission, 4330 East West Highway, Bethesda, MD 20814, telephone: (301) 504-7479, email: cpsc-os@cpsc.gov, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

VIII. Preemption

Section 26(a) of the CPSA, 15 U.S.C. 2075(a), provides that when a consumer product safety standard is in effect and applies to a product, no state or political subdivision of a state may either establish or continue in effect a standard or regulation that prescribes requirements for the performance, composition, contents, design, finish, construction, packaging, or labeling of such product dealing with the same risk of injury unless the state requirement is identical to the federal standard. Section 26(c) of the CPSA also provides that states or political subdivisions of states may apply to the Commission for an exemption from this preemption under certain circumstances. Section 42 of the CPSA refers to the rules to be issued under that section as “consumer product safety standards.” Therefore, the preemption provision of section 26(a) of the CPSA would apply to this proposed rule.

IX. Notice of Requirements

The CPSA establishes certain requirements for product certification and testing. Certification of children’s products subject to a children’s product safety rule must be based on testing conducted by a CPSC-accepted third-party conformity assessment body. 15 U.S.C. 2063(a)(2). The Commission is required to publish a notice of requirements (NOR) for the accreditation of third-party conformity assessment bodies to assess conformity with a children’s product safety rule to which a children’s product is subject. *Id.* 2063(a)(3). On August 27, 2010, the Commission published an NOR for accreditation of third-party conformity assessment bodies for testing ATVs designed or intended primarily for children 12 years of age or younger. 75 FR 52616. Because the revisions to the 2017 edition of the ANSI/SVIA standard would not substantially alter third-party conformance testing requirements for ATVs designed or intended primarily for children 12 years of age or younger, the current NOR for third-party

testing of youth ATVs will remain unchanged. Thus, the Commission considers the existing accreditations that the Commission has accepted for testing to the 2017 ATV standard would also cover testing of children's products to the revised ATV standard.

X. Request for Comments

This NPR begins a rulemaking proceeding under section 42 of the CPSA to amend the Commission's mandatory ATV standard to reference the 2023 edition of the ANSI/SVIA standard. We invite all interested persons to submit comments on any aspect of this proposal, including whether any of the changes to the standard (summarized in Tab A of the Staff's NPR Briefing Package) are substantive changes and whether they improve or do not improve the safety of ATVs. In particular, as noted previously, we invite comment as to the standard's proposed change to format in which an owner's manual must be provided and as to the proposed effective date. We also invite comments on the estimated burden of the recordkeeping associated with issuing a GCC for ATVs as required by 16 CFR part 1110, discussed in Section VI, above. Comments should be submitted in accordance with the instructions in the **ADDRESSES** section at the beginning of this notice.

List of Subjects in 16 CFR Parts 1420

Consumer protection, Imports, Incorporation by reference, Infants and children, Information, Labeling, Law enforcement, Recreation and recreation areas, Reporting and recordkeeping requirements, Safety.

For the reasons stated in the preamble, the Commission proposes to amend Title 16 of the Code of Federal Regulations, as follows:

PART 1420—REQUIREMENTS FOR ALL-TERRAIN VEHICLES

1. The authority citation for part 1420 is changed to read as follows:

Authority: 15 U.S.C. 2089.

2. Revise § 1420.1 to read as follows:

§ 1420.1 Scope and application

This part 1420, a consumer product safety standard, prescribes requirements for all terrain vehicles.

3. Revise § 1420.3 to read as follows:

§ 1420.3 Requirements for four-wheel ATVs.

- (a) Each new assembled or unassembled ATV manufactured before September 1, 2024, shall comply with all applicable provisions of the American National Standard for Four-Wheel All-Terrain Vehicles (ANSI/SVIA 1-2017), approved on June 8, 2017. Each new assembled or unassembled ATV manufactured on or after September 1, 2024, shall comply with all applicable provisions of the American National Standard for Four-Wheel All-Terrain Vehicles (ANSI/SVIA 1-2023), approved on March 21, 2023 with the exception of Section 4.21 Owner's Manual, as to which it shall continue to comply with the ANSI/SVIA 1-2017 standard. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy of these standards from Specialty Vehicle Institute of America, 2 Jenner, Suite 150, Irvine, CA 92618-3806; telephone: 949-727-3727 ext.3023; www.svia.org. In addition, a read-only copy of the 2023 standard is available for viewing on the SVIA website at <https://svia.org/ansi-svia-1-2023/>. You may also inspect a copy of these standards at the Office of the Secretary, U.S. Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD. 20814, telephone: (301) 504-7479 or at the National Archives and

Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go

to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Alberta E. Mills
Secretary, Consumer Product Safety Commission



United States
Consumer Product Safety Commission

Staff Briefing Package

Notice of Proposed Rulemaking (NPR) to Amend the All-Terrain Vehicle (ATV) Standard

July 5, 2023

For additional information, contact:

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*This report was prepared by the CPSC staff.
It has not been reviewed or approved by,
and may not necessarily reflect the views of,
the Commission.*

Table of Contents

Briefing Memorandum	1
Introduction.....	2
Background	3
Discussion	3
ANSI/SVIA Voluntary Standard for ATVs	3
Evaluation of ANSI/SVIA-1-2023	5
Evaluation of Effective Date	12
Economic Impact of Revision on Small Entities	13
Staff Conclusion and Recommendation.....	14
Tab A: Memorandum by the Directorate for Engineering Sciences.....	15
Tab B: Memorandum by the Directorate for Economic Analysis.....	24
Paperwork Reduction Act.....	31

Briefing Memorandum



Briefing Memorandum

TO: The Commission

DATE: July 5, 2023

Alberta E. Mills, Secretary

THROUGH: Austin C. Schlick, General Counsel

Jason K. Levine, Executive Director

DeWane Ray, Deputy Executive Director for Operations

FROM: Duane E. Boniface, Assistant Executive Director,
Office of Hazard Identification and Reduction

Han Lim, Project Manager,
Division of Mechanical and Combustion Engineering,
Directorate for Engineering Sciences

SUBJECT: All-Terrain Vehicles: Amendment of Consumer Product Safety
Standard

Introduction

This memorandum provides information about the March 2023 revision to the American National Standards Institute/Specialty Vehicle Institute of America (ANSI/SVIA) 1-2017 voluntary standard for Four-Wheel All-Terrain Vehicles (ATVs).

Pursuant to section 42 of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2089, the Commission issued a mandatory standard for ATVs at 16 C.F.R. part 1420 that incorporates ANSI/SVIA-1. Section 42(b) of the CPSA requires that ANSI notify the Commission of any revisions to this ANSI/SVIA standard. Additionally, within 120 days of this notice, the Commission must issue a notice of proposed rulemaking (NPR) to amend 16 C.F.R. part 1420 to include any revision the Commission determines is reasonably related to the safe performance of ATVs and notify ANSI of any provision the Commission determines not to be so related.

ANSI notified CPSC of the March 2023 revision on March 21, 2023, ANSI/SVIA 1-2023. CPSC staff recommends that the Commission issue an NPR to amend the current mandatory ATV standard to include the March 2023 ANSI/SVIA revision by the statutory deadline of July 19, 2023.

Background

Section 232 of the Consumer Product Safety Improvement Act of 2008 (CPSIA) added section 42 to the CPSA, requiring CPSC to publish a Federal Register notice mandating ANSI/SVIA 1-2007 as a consumer product safety standard. The Commission did so in November 2008, and the standard, 16 C.F.R. part 1420, became effective on April 13, 2009. 73 Fed. Reg. 67,385 (Nov. 14, 2008).

Since issuing the ATV standard in 2009, the Commission has revised the standard twice in accordance with the revision procedures set out CPSA section 42(b). On February 29, 2012, the Commission published a final rule that amended the Commission's ATV standard to reference the 2010 edition of ANSI/SVIA; the rule took effect on April 30, 2012.¹ And on February 27, 2018, the Commission published a final rule that amended the mandatory ATV standard to reference the 2017 edition of ANSI/SVIA; the rule took effect on January 1, 2019.²

On March 21, 2023, ANSI notified the Commission that ANSI/SVIA 1-2023 would be published on March 24, 2023. CPSC staff reviewed the revised standard and prepared this package for Commission consideration.

Discussion

ANSI/SVIA-1 Standard for ATVs

On September 19, 2018, CPSC staff participated in a voluntary standards meeting with members of the SVIA, the Outdoor Power Equipment Institute (OPEI), and the Recreational Off-Highway Vehicle Association (ROHVA).³ CPSC staff presented recall data associated with fire hazards in off-highway vehicles, including ATVs, and recommended that SVIA, OPEI, and ROHVA members develop requirements for their respective standards to mitigate fire/burn hazards. At this meeting, staff recommended that SVIA, OPEI, and ROHVA develop performance requirements related to the fuel system, electrical system, and surface temperature limits related to the exhaust system.

Between June 2019 and September 2020, CPSC staff met and corresponded with SVIA, ROHVA, and OPEI to review in-depth investigation reports (IDIs), categorize the root causes of fires or thermal events, and explore requirements from other similar product areas that would be appropriate for off-highway vehicles. In June and October 2019, CPSC staff participated in follow-up meetings with industry members to review IDIs involving fires or thermal events such as melted plastics of off-highway vehicles. In March and July 2020, CPSC staff sent letters to SVIA/ROHVA/OPEI in which staff summarized the group's progress on categorizing the root

¹ 77 Fed. Reg. 12,197 (Feb. 29, 2012).

² 83 Fed. Reg. 8,336 (Feb. 27, 2018).

³ Voluntary Standards Meeting with Recreational Off-Highway Institute (ROHVA), Specialty Vehicle Institute of America (SVIA), and Outdoor Power Equipment Institute (OPEI) to discuss Off-Highway Vehicle Fire and Debris Penetration Hazards, September 19, 2018. Weblink to Meeting Log: https://www.cpsc.gov/s3fs-public/2018-09-19_Voluntary_Standards_Meeting_on_Off-Highway_Vehicles.pdf?GhlbD87TF1W8m6F9B10q2CpZTCNzSrlP

SVIA is the trade organization that represents U.S. ATV manufacturers. ROHVA is the trade organization that represents U.S. recreational off-highway vehicle (ROV) manufacturers. OPEI is the trade organization that represents U.S. ROV and utility task/terrain vehicle (UTV) manufacturers.

causes of fire hazards relative to the vehicle's fuel system, engine/exhaust heat, and electrical system.⁴ Staff suggested the group consider fuel system and hot surface requirements from other standards such as the ANSI standards for golf cars and light transportation vehicles and Society of Automotive Engineers (SAE) and OPEI standards for fuel systems.

On September 9, 2020, CPSC staff met virtually with SVIA/ROHVA/OPEI and further discussed fuel system requirements from other products that also may be appropriate for off-highway vehicles. In particular, the group discussed fuel component integrity, fuel system ventilation, and fuel rollover containment⁵.

On May 11, 2021, CPSC published an advance notice of proposed rulemaking (ANPR) to consider developing a rule to address fire hazards on ATVs, ROVs, and UTVs and to address debris penetration hazards on ROVs and UTVs.⁶ CPSC is now addressing those hazards through separate rulemakings, and the Commission published an NPR for the ROV and UTV debris penetration hazard on July 21, 2022. 87 Fed. Reg. 43,688.

On September 8, 2022, CPSC staff received a canvass draft and ballot for the proposed revision of ANSI/SVIA 1-2017. The revision included provisions regarding fuel systems and hot surfaces; harmonization with certain Canadian technical standards; and addition of a friction coefficient for braking test surfaces. On October 5, 2022, CPSC staff sent SVIA a letter stating staff's vote of "Abstain with comment" on the ballot.⁷ In that letter, staff suggested that all tests should be conducted under the most stringent test conditions and that SVIA should consider the electrical requirements in BS EN 16990 Standard for Light Motorized Vehicles related to grounding, over-current protection, wiring harnesses, and batteries. On January 25, 2023, CPSC staff received a letter from SVIA agreeing with staff's concept of testing under the most stringent conditions for hot surfaces and fuel systems but disagreeing with staff's suggestion to consider the addition of requirements to address fires caused by electrical components. SVIA stated it was open to receiving more data about this fire hazard associated with electrical components. CPSC staff will continue engaging with SVIA with respect to sharing redacted fire hazard IDs and meet with SVIA to advance ATV safety.

On January 26, 2023, CPSC staff received a recirculation ballot with no substantive changes to the revised standard. The ballot received 24 approvals, 2 abstentions, and 1 negative that remained unresolved. The recirculation ballot provided canvass members the opportunity to review the unresolved objection along with an opportunity to respond, reaffirm, or change their vote. No new voting was required unless a canvass member decided to change their vote.

⁴ March 25, 2020 Voluntary Standards Letter, Weblink: https://www.cpsc.gov/s3fs-public/Letter-to-OHV-SDOs-March-2020-6b-CLEARED_Redacted.pdf?tKMNCh3BYcsi7rPiMCNi9Gqm_eCJt6DO

July 28, 2020 Voluntary Standards Letter, Weblink: https://www.cpsc.gov/s3fs-public/07-28-20-CPSC-Letter-to-OHV-SDOs.pdf?53T10_jm_IHLP4OZulvYBa6SGiq.cna

⁵ September 9, 2020 virtual meeting with OPEI, SVIA, and ROHVA. Meeting Log: <https://www.cpsc.gov/s3fs-public/2020-9-9VoluntaryStandardsMeetingtoDiscussPossibleFuelSystemRequirementsforOff-HighwayVehiclesOHVs.pdf?Goe4B867L2Gbl8gkw6KtELIZ7qDiQ3e6>

⁶ 86 Fed. Reg. 25817 (May 11, 2021)

⁷ CPSC Staff's Canvass Vote and Voluntary Standards Letter on the Comments on the American National Standard for Four Wheel All-Terrain Vehicles (ANSI/SVIA-1-202x) Draft Performance Requirements for Fire Hazards. October 5, 2022. Weblink: https://www.cpsc.gov/s3fs-public/VSLetterSVIA1CommentsOct52022FINAL.pdf?VersionId=ndUy2r1_yBSYT5g93yzdkc9yXL0KATaN

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | cpsc.gov

CPSC staff did not respond to the ballot because staff's abstain vote and comments did not change. As with most voluntary standards canvass votes, CPSC staff provide abstain votes with attached voluntary standards letters that explain CPSC staff's position and/or concerns with the updates of any standards changes.

ANSI/SVIA 1-2023 was approved on March 17, 2023, and the revised standard was published on March 24, 2023.

Evaluation of ANSI/SVIA 1-2023

CPSC staff reviewed and compared the 2023 revision of the ANSI/SVIA standard with the 2017 version, which is currently the mandated consumer product safety standard for ATVs. 16 C.F.R. § 1420.3(a). The specific changes made in the revision are described in the Engineering Sciences Memorandum (Tab A).

Staff considers the following revisions to be material changes:

- Requirements for hot surfaces;
- Requirements for fuel system components;
- Removal of the maximum recommended tire pressure of 69 kPa (10 psi); and
- Requirement for an effective date "beginning with 2026 model year vehicles" within the scope of the standard
- Removal of requirement that paper user manuals be provided with all ATVs

Evaluation of Hot Surface Requirements

The ANSI/SVIA-1-2017 standard did not have any requirements to address the risk of burn hazards associated with hot surfaces. SVIA added Section 12, Hot Surfaces, which consists of test procedures and requirements to measure surface temperatures when a test vehicle is subjected to a 30-minute driving portion and then a heat soak period, as described below. Heat soak can result when localized temperatures may increase after engine shutdown, where heat is radiated and conductively transferred.

Section 12.1 *Hot Surfaces* of ANSI/SVIA 1-2023 specifies performance requirements that limits the maximum surface temperatures for various touch points that may harm a vehicle occupant. New production ATV engines have transitioned to the electronic fuel injection (EFI) type for various reasons including, but not limited to, improved reliability, improved fuel economy, and reduced exhaust emissions. When compared to carburetor type engines, EFI engines can produce hotter exhaust temperatures. These higher temperatures can be managed through routine design and manufacturing techniques. Without the proper surface temperature limits on the ATV surfaces, consumers may experience contact burns. Also, excessive exhaust temperatures can melt nearby combustible plastic components, which may pose a risk of fire.

The purpose of the performance test set forth in Section 12, Hot Surfaces, is to evaluate the increase in surface temperatures when an ATV is subjected to an extended period driving test. This test evaluates the heat generated from a test vehicle in its gross vehicle weight rating (GVWR) configuration when it is driven on a test course or a chassis dynamometer at for 30 minutes at a maximum speed of 20 mph. GVWR is equal to the weight of the test vehicle plus the weight of the occupant(s) and maximum allowable payload. A chassis dynamometer is a

laboratory-based vehicle testing setup in which a test vehicle's tires are placed on top of one or more roller assemblies that simulate various road conditions within a controlled environment. At the conclusion of the driving portion of this test track or chassis dynamometer test, the test instrumentation continues to log surface temperature data throughout the heat soak period, during which the excess heat load from the exhaust and surrounding components may transfer to other parts of the ATV. The performance requirement limits the maximum temperature for various touch points shown in Table 1 below:

Table 1 – ANSI/SVIA-1-2023 Surface Temperature Limits

Touch Point Category	Typical Contact Duration	Maximum Material Temperature Limits °C (°F), Source: ISO 13732-1	
		Metal, No Coatings	Plastics, General
Continuous	1 minute or longer	44 (111)	44 (111)
Intermittent	4 seconds or longer but less than 1 minute	51 (124)	60 (140)
Momentary	1 second or longer but less than 4 seconds.	58 (136)	76 (169)
Incidental	Less than 1 second	64 (147)	85 (185)

Assessment

At a public meeting on September 19, 2018, CPSC staff recommended that SVIA add requirements to address burn hazards to ATV users. In the previously mentioned March 25, 2020, voluntary standards letter to SVIA, staff recommended SVIA consider the requirements in ASTM C1055 *Standard Guide for Heated System Surface Conditions that Produce Contact Burn Injuries*. CPSC staff provided SVIA with in-depth investigation reports of fires and injuries associated with ATVs in the March 25, 2020, voluntary standards letter, which contained a spreadsheet that indicated which IDIs involved fires and/or injuries. These injuries involved burns. The severity of the injuries ranged from third degree burns to minor burns that did not require hospitalization.

ASTM Committee C16 created a task group to determine safe surface operating conditions for heated system. The work of Subcommittee C16.24 on Health and Safety and Subcommittee C16.30 on Thermal Measurements established guidance as to what constitutes safe surface conditions. The resultant standard, ASTM C1055, is based on research into the physical and medical processes involved in skin damage due to contact with heat, and the standard provides a process for determining acceptable surface conditions for heat. Figure 1 below shows the level of skin damage based on the duration and intensity of surface contact.

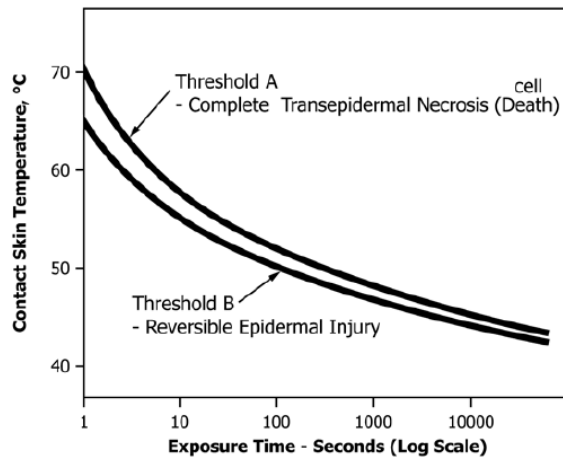


Figure 1 – Temperature-Time Relationship for Burns

Section 6.4.2 of ASTM C1055 states that metallic surfaces with temperatures exceeding 70°C present a hazard regardless of contact duration, while nonmetallic surfaces may be safe for limited exposures above 70°C.

The maximum temperature limits of surfaces specified in Section 12.1 Hot Surfaces of ANSI/SVIA 1-2023 are below the criteria for burn injury in accordance with ASTM C1055. The maximum temperature for metallic surfaces is 64°C and the maximum temperature for plastic surfaces is 85°C for less than 1 second. The ANSI/SVIA-1-2023 temperature values were based on the ISO 13732-1:2006 *Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces standard and the ASTM C1057 Standard Practice for Determination of Skin Contact Temperature from Heated Surfaces Using a Mathematical Model and Thermesthesiometer*. Furthermore, the ANSI Z21.1-2018 *Standard for Household Gas Cooking Appliances* has maximum allowable surface temperatures of 83.5°C for plastic surfaces and 66.5°C for metal surfaces of gas ranges, which are very comparable to the temperature limits set by SVIA. Based on the ASTM C1055 temperature limits, CPSC staff concludes that the new requirements for hot surfaces in ANSI/SVIA-1-2023 are an improvement in safety because they will address the incidents associated with burns on ATVs.

Evaluation of Fuel System Requirements

The 2017 edition of the standard did not have performance requirements to address fire hazards from fuel leaks. The 2023 edition adds multiple performance requirements to mitigate the risk of fuel leaks and fire hazards. Section 13. Fuel System Requirements of ANSI/SVIA-1-2023 specifies comprehensive performance requirements for different aspects of the vehicle's fuel system that may contribute to fire hazards.

Most of the requirements are based on other similar standards that each address different aspects of the fuel system. For example, the fuel hose tensile test is similar to the test procedure from ANSI/OPEI B71.10-2018 *Standard for Off-Road Ground-Supported Outdoor Power Equipment – Gasoline Fuel Systems – Safety Specifications*. There are two options to test for fuel tank structural integrity. One of these options to evaluate the structural integrity of

the fuel tank for resistance to impact forces is based on the SAE J288 standard for snowmobile fuel tanks. The other option is to follow the SVIA-1 test method involving striking the tank with a metal sphere. The SVIA-1 committee adapted various fuel system component requirements from other standards to be applicable to ATVs.

These fuel system performance requirements are organized into four general categories:

Fuel Tank Structural Integrity

- Section 13.3 Fuel Tank Immersion Leak Test
- Section 13.5 Fuel Tank Cyclic Pressure Integrity Test applies a cyclic pressure up to 4 psi for 10,000 cycles
- Section 13.6 Fuel Soak Test for Plastic Tanks and Assemblies with Grommets and Seals
- Sections 13.8 and 13.15 Fuel Tank Leak Mitigation from Rollover or Tip over

Fuel Hoses

- 13.9 Fuel Line Integrity
- 13.10 Fuel Line Connection Tensile Test

Fuel Filter and Shut-off Valve

- Section 13.4 Fuel Filter and Shut-off Valve Immersion Test

Elastomeric Component Durability

- Section 13.11 Elastomeric exposure to fuel
- Section 13.12 Ozone resistance
- Section 13.13 UV resistance
- Section 13.14 Corrosion resistance

CPSC staff is aware of three fuel tank, two fuel hose, and one fuel filter related recall associated with ATVs.⁸ A fuel leak occurs when there is a breach in the fuel system. A fuel breach can originate from multiple locations, such as the fuel hose to nozzle connections, fuel tank seam split or crack, cracked fuel filter, cracked fuel hose, etc. A fuel leak from any of the above components near a hot engine and/or exhaust components can increase the risk of fire.

Section 13 contains test requirements that are (a) one-time design qualification types of tests and (b) tests that are required of every fuel system for new production ATVs. Most of the requirements are one-time design qualification types of tests. The one-time qualification test requires manufacturers to conduct a single test that proves the design of a subsystem

⁸ Voluntary Standards Meeting with Recreational Off-Highway Institute (ROHVA), Specialty Vehicle Institute of America (SVIA), and Outdoor Power Equipment Institute (OPEI) to discuss Off-Highway Vehicle Fire and Debris Penetration Hazards, September 19, 2018. Weblink to Meeting Log: https://www.cpsc.gov/s3fs-public/2018-09-19_Voluntary_Standards_Meeting_on_Off-Highway_Vehicles.pdf?GhlbD87TF1W8m6F9B10g2CpZTCNzSrlP See pages 8 through 10 for the fuel-related recalls.

component such as the fuel tank meets all the applicable requirements. The water immersion leak test is required for all fuel tank units that will be installed on a manufacturer's ATV production line. Appendix A lists all the tests contained in Section 13 and distinguishes which tests are one-time design qualification type of tests and which tests are required for every ATV.

Section 13.3 is a leak test that requires every ATV fuel tank to be tested for leaks. The production fuel tank, fitted with all the fuel system components, is pressurized with compressed air and then submerged in water. Failures are detected by visual inspection of bubbles. This leak test is repeated during the course of various other tests after subjecting the fuel tank and/or fuel tank components to impact loading, pressure cycling, and elevated temperature conditioning to ensure no stress cracks or fuel tank breaches result from those three physical tests. Section 13.4 provides leak tests for individual components such as fuel filters and fuel shut-off valves that are similar to the leak tests Section 13.3 provided for fuel tanks. Section 13.4 sets out a water immersion test to ensure these components are leak-free. CPSC staff concludes that these performance tests to detect leaks from fuel tanks, fuel filters, and fuel shut-off valves are effective in mitigating the risk of fuel leaks and can reduce the risk of fire hazards.

Fuel tanks are subjected to pressure cycling due to the varied amount of fuel in the tank and the varied amount of vapor pressure in the fuel tank due to temperature changes that can increase the pressure with increasing temperature and vice-versa. To simulate the effects of pressure cycling, a performance test described in section 13.5 (Fuel Tank Cyclic Pressure Integrity Test) applies a cyclic air pressure up to 4 psi for 10,000 cycles. This is a one-time design qualification test. Upon completion of the 10,000 pressure cycles, a leak test per section 13.3 test procedure is conducted to ensure the fuel tank design will not have leaks. CPSC staff concludes the test procedure described in section 13.5 adequately evaluates the structural integrity of ATV fuel tanks when subjected to the repeated, fatigue type of pressure test.

A vehicle fuel system consists of multiple components that connect the fuel tank to the engine fuel injector or fuel rail. In between, components such as fuel pumps, shutoff valves, and fuel filters are joined with multilayered rubber hoses that may be connected in various ways such as barbed friction fittings, hose clamps, or quick snap-on connect mechanisms. Sections 13.9 and 13.10 contain tensile test requirements to ensure hose connections do not leak. Sample hose connections are subjected to a 30 lb tensile (pull) force to ensure fuel hoses do not slip off. CPSC staff concludes these performance tests are effective in mitigating the risk of fuel hoses slipping off and therefore this testing reduces the risk of fire hazards.

ATVs are driven in a wide range of environments and conditions, from extreme cold, snowy conditions to extreme hot weather. Plastic fuel tanks are susceptible to expansion and contraction due to temperature fluctuations and variations in operating conditions and over time plastic fuel tanks may develop stress cracks. Any unprotected portions of the fuel tank can be struck by debris, such as rocks, which can compromise the structural integrity of the fuel tank. Section 13.7 provides that ATV fuel tanks be subjected to a qualification impact test that evaluates the structural integrity of the fuel tank after it is struck by a steel ball (SVIA test option) or dropped from 1.25 meters onto a concrete surface (SAE J288 – Snowmobile Fuel Tank Standard Test method option). The test option is decided by the manufacturer. Prior to the impact, the fuel tanks are subjected to a low temperature soak (-30°C for the SVIA test option or -40°C for the SAE J288 test option). These test conditions are realistic as ATVs are designed to be driven in snowy environments and it is not uncommon for ATVs used in sub -30°C

temperatures. CPSC staff concludes this performance test is effective in evaluating the structural integrity of ATV fuel tanks when subjected to impact forces.

There may be instances where fuel system components need to be protected from impacts from adjacent surfaces in the event of a tip-over or roll-over. Section 13.8 (Fuel Tank Protection Envelope Analysis) requires visual, computer aided design (CAD), or similar inspection is allowed to ensure neighboring components inadvertently compromise the structural integrity of fuel system components such as the fuel tank, fuel hoses, etc. in the event of a tip-over or roll-over. There is no testing involved. Rather, the procedure is a visual inspection, or a spatial analysis done with CAD. CPSC staff concludes this performance requirement aids in addressing potential structural integrity issues of ATV fuel systems via a verification checking method.

At elevated temperatures, pressure in fuel tanks can build, and, if the venting system is not sufficient, fuel tanks can over pressurize, causing the fuel tank to expand cause, and scalding hot fuel can be expelled onto consumers when they open the fuel cap under these high-pressure scenarios. The elevated temperature test set out in Section 13.6 evaluates structural damage that may occur when a fuel tank is subjected to elevated temperature scenarios. This performance test requires a sample fuel tank filled with gasoline to be kept in a test chamber at a constant elevated temperature of 60°C (140°F) for 480 hours. This requirement would detect stress cracks, seam splits, or other structural damage that can cause fuel to leak. At the conclusion of this 480-hour high temperature exposure test, the test sample fuel tank is emptied and then subjected to the Section 13.3 leak test to ensure no stress cracks form during the long period of elevated temperature. CPSC staff concludes this performance test is effective in evaluating the structural integrity of ATV fuel tanks when subjected to extended elevated temperature environments.

If an ATV is involved in a rollover due to a collision; or due to an ATV being tripped, driven at high speeds on a curved road, or another other similar event, fuel can spill if the orientation of the fuel tank is not in the intended upright position. If fuel is spilled onto hot exhaust parts during a rollover, a fire and/or explosion can occur. Leaks can originate from rollover vent valves, fuel shut-off valves, fuel filters, fuel caps, etc. The performance test set out in Section 13.15 evaluates the effectiveness of the fuel system to limit the amount of fuel leakage in a scenario where the ATV and its fuel tank are not in their normal upright positions. A test sample fuel tank filled with water is flipped upside down (180° from its normal upright position) for 10 minutes and the maximum allowable volume of water that can leak within that period is 300 mL. On average, the allowable leak rate is 30 mL per minute. Gasoline evaporates relatively quickly when exposed to air. This rate is consistent with the requirement from the 2012 edition of the golf car standard, ANSI/ILTV (International Light Transportation Vehicle Association) Z130.1. CPSC staff concludes this performance test is effective in evaluating the rollover vent valve's ability to limit the amount of fuel leakage if the ATV fuel tank is involved in a rollover.

Components with elastomeric parts such as fuel filters and fuel shut off valves are susceptible to cracking, corrosion, and/or deterioration when exposed to certain chemical or environmental elements such as ethanol-blended gasolines, ultraviolet (UV) light, and ozone. Elastomeric parts are composed of various rubber-like materials. Sections 13.10 through 13.14 set out the performance tests that expose sample fuel filters and fuel shut off valves to E10 (gasoline blended with 10% ethanol), UV light, and ozone for extended periods. The test components are visually examined for any cracks or signs of deterioration upon the completion of the

performance tests. Parts made of fluoroelastomer are exempt, as this material is not susceptible to deterioration due to UV, ozone, or E10 exposures. Fluoroelastomer is a fluorocarbon-based type of synthetic rubber that has chemical corrosion resistant properties that are used for applications such as gaskets, O-rings, and seals. CPSC staff concludes this performance test is effective in evaluating the corrosion resistance properties of elastomeric parts.

The fuel system performance requirements in Section 13 of the 2023 edition of the standard will reduce the risk of fuel leaks due to possible fuel breaches, over pressurizations, fuel spills, and component deterioration. The addition of these performance requirements will reduce ATV fire and burn hazards.

Evaluation of the Removal of the Maximum Recommended tire pressure of 69 kPa (10 psi)

The 2007, 2010, and 2017 editions of the SVIA-1 standard defined low-pressure tires as “having a recommended tire pressure of no more than 69 kPa (10 psi)” in section 4.19 Tires. In the 2017 edition, Section 4.19 differentiated between Pneumatic (section 4.19.1) and Non-Pneumatic Tires (section 4.19.2) and changed Pneumatic Tire requirements to “Maximum recommended tire pressure of 69kPa (10 psi).” Section 4.19.2 specifies “NPTs vertical stiffness shall be designed to produce a ground pressure of 69kPa (10 psi) or less with the subject vehicle.” In the 2023 edition, the tire pressure value and vertical stiffness equivalent tire pressure value have been deleted.

The 2023 version retains the 4.19 requirement that ATVs be equipped with off-highway tires designed for off-highway use on all-terrain vehicles and the tire sidewalls shall be marked with the operating pressure. In addition, the 2023 version retains the various requirements in sections 5 to 9 for testing and performance requirements for speed capability, brakes, and pitch stability.

An ATV manufacturer could design an ATV with a proper suspension and 12 psi tires, and the tires would still be “low pressure” yet conflict with the definition. The 10-psi requirement was viewed as not necessary in the standard. Since consumers are instructed to follow manufacturers’ recommendations for inflation tire pressures, either from the markings on the tires or the owner’s manuals, CPSC staff concludes that this change is neutral and is not detrimental to ATV safety.

Evaluation of the Removal of requirement that paper user manuals be provided with all ATVs

The 2023 edition of SVIA-1 removes the phrase “which may be supplemented at the manufacturer’s option in electronic form viewable on a display on the ATV or other device” which was added to the 2017 edition. Section 4.21 now states “All ATVs shall be provided with a manual in paper or electronic format at the time of delivery to the first purchaser. All ATVs with printed manuals shall be equipped with a means of carrying the manual that protects it from destructive elements while allowing reasonable access.” The information required to be provided in the owner’s manual include a dedicated introductory safety section and important safety messages regarding age recommendations, proper operation of the ATV, and training resources. Therefore, CPSC staff continues to advocate that paper manuals remain the default

medium for important safety information because the information will be immediately available for consumers. Many consumers are already disinclined to read instruction manuals and requiring them to go through extra steps to access them in electronic format reduces the likelihood that they will do so. Based on the increased risk of consumers not receiving information on the safe use of ATVs if that information is only electronically available, CPSC staff concludes this change would result in a reduction in safety.

Evaluation of Effective Date

CPSA section 42(b)(2) provides a timetable for CPSC to issue an NPR (within 120 days of receiving notification of a revised ANSI/SVIA standard) and to issue a final rule (within 180 days of publication of the NPR), but it does not set an effective date. The Administrative Procedure Act requires that the final rule generally must be effective 30 days or more after publication. 5 U.S.C. § 553(d).

Since issuing the ATV standard in 2009, the Commission has revised it twice in accordance with the revision procedures set out in the CPSIA. On February 29, 2012, the Commission published a final rule that amended the Commission's ATV standard to reference the 2010 edition of ANSI/SVIA (77 Fed. Reg. 12,197). Based on comments to the NPR from several ATV companies, the final rule provided for a 60-day effective date from publication of the final rule to allow companies time to update their certification labels. On February 27, 2018, the Commission published a final rule that amended the mandatory ATV standard to reference the 2017 edition of ANSI/SVIA (83 Fed. Reg. 8,336). Based on SVIA's objection to a 60-day effective date, the final rule specified an effective date of January 1, 2019, about 10 months after publication of the final rule.

CPSC staff is recommending an effective date of September 1, 2024. The ANSI/SVIA-1-2023 standard was developed by SVIA member companies, an ATV test laboratory, a consumer advocacy group, individual ATV users, and U.S. and Canadian government agencies through a consensus process.

As of March 2023, SVIA canvass members were aware of the finalized hot surface and fuel system requirements in the 2023 edition of the SVIA-1 standard. Once SVIA notifies the Commission of a new version of the SVIA standard, CPSC is required to issue an NPR within 120 days and then issue a final rule 180 days after the NPR publication (300 days total). Thus, the projected date for the final rule is January 2024. If the effective date is set 180 days after the publication of the final rule, the projected effective date is July 2024. However, in order to set a date certain that will facilitate industry planning, as well as to align the effective date more closely with the timing of the ATV industry's typical transition from one model year to the next, the Commission proposes an effective date of September 1, 2024. Essentially, ATV manufacturers will have approximately 17 months to comply with the new hot surface and fuel system requirements. CPSC staff believes approximately 17 months is reasonable, feasible, and adequate to protect consumer safety for the following reasons:

- Since all ATVs' gasoline powered engines and associated components sold in the U.S. are regulated by the U.S. EPA for Exhaust and Evaporative emissions (40 C.F.R. § 1051.515(d) – Fuel Tank Permeation Testing), those ATVs will be exempt from having to conduct testing per Section 13.5 (Fuel Tank Cyclic Pressure Integrity Test) of ANSI/SVIA-1-2023. For

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | [cpsc.gov](https://www.cpsc.gov)

certain requirements, because the hazards associated with fuel tank cyclic pressure has already been addressed, there will be no effect on safety as a result of using a 180-day effective date rather than a shorter time period. In addition, most ATV manufacturers will already satisfy some criteria of ANSI/SVIA-1-2023 with no additional effort.

- Depending on a firm's ATV manufacturing schedule cycle during the calendar year, any design changes and associated testing to comply with the new standard will take place sometime within the 17-month period, with the understanding that firms will not produce ATVs all year round. The 17-month period will allow for supply chain issues, quality control issues, etc.
- The timeline is similar to the SVIA-1-2017 standard update. In June 2017, SVIA notified the Commission of the 2017 edition of the SVIA-1 standard. The final rule established an effective date of January 1, 2019, which is 18 months from start to finish (comparable to the recommended 17-month period).
- Historically, some similar fuel system requirements for other off-highway vehicle voluntary standards such as the 2012 edition of the golf car standard, ANSI/ILTV (International Light Transportation Vehicle Association) Z130.1-2012, had an effective date of one-year after publication of the voluntary standard. The ANSI/ILTV Z130.1-2012 standard has the same rollover vent leakage test (Section 11.3.5) with the 30 mL per minute allowable leak rate as the Section 13.15 (Fuel Tank Venting) of the ANSI/SVIA-1-2023 standard. This is another example that supports the 17-month lead time is reasonable.

Tab B, memorandum by the Directorate for Economic Analysis, has further information supporting the economic reasons for the recommended effective date.

Economic Impact of Revision on Small Entities

When considering an NPR, the Regulatory Flexibility Act generally requires that agencies consider the potential impact of the proposed rule on small entities. This section summarizes the Directorate of Economics' analysis of the economic impact of the revised ATV standard on small businesses (see Tab B).

The draft proposed rule would revise the mandatory ATV standard to incorporate the revisions in the 2023 version of the ANSI/SVIA-1 standard. The most significant changes involve requirements for fuel systems and hot surfaces. The other changes to the standard either increase the options for manufacturers in designing and equipping their vehicles or are minor changes that clarify requirements, but do not actually change the standard's requirement.

Manufacturers whose ATVs do not already comply with ANSI/SVIA 1-2023 may incur significant costs for model redesign and sourcing compliant parts in addition to testing. However, there are no identified manufacturers that meet SBA criteria to be considered small entities. An importer whose foreign manufacturer exited the market, and was unable to procure an alternative source, would likely suffer a significant, adverse economic impact. However, given that ATV sales volume has been stable over the last 5 years, and grew by approximately 5 percent in 2020 (the last year for which CPSC has data), staff considers it unlikely that foreign ATV manufacturers will exit the market. Therefore, the draft proposed rule is not expected to have a significant

impact on a substantial number of small entities, and the Directorate for Economic Analysis assesses that the Commission could certify to that effect.

Conclusion

CPSC staff determined that the ANSI/SVIA 1-2023 standard improves the safety of ATVs with additional requirements to reduce the risk of fire and burn hazards of ATVs. Specifically, the 2023 standard adds: 1) requirements for hot surfaces to address contact burns, and 2) requirements for fuel system structural integrity to reduce the likelihood of fuel leaks from various components of the fuel system (fuel tank, filter, and hoses) that pose fire risks. Staff recommended that SVIA add these requirements to the voluntary standard to address ATV-related incidents with contact burns and incidents in which a vehicle fire was possible because of leaking fuel. CPSC staff determined that the revisions included in the ANSI/SVIA-1-2023 standard are not detrimental to ATV safety. However, the ANSI/SVIA-1-2023 standard does not have requirements to address fire hazards associated with ATV electrical components.

CPSC staff recommends that the Commission propose to amend the current mandatory ATV standard by replacing the reference in 16 C.F.R. part 1420, Requirements For All-Terrain Vehicles, to refer to the ANSI/SVIA-1-2023 American National Standard for Four-Wheel All-Terrain Vehicles.

CPSC staff recommends that the Commission propose an effective date of September 1, 2024. Staff's recommendation is based on staff's determination that many ATVs already meet the new hot surface and fuel requirements in ANSI/SVIA 1-2023, and that this effective date would correspond with the approximate time frame in which sales of the 2025 model year vehicles would begin.

Tab A: Memorandum by the Directorate for Engineering Sciences

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | [cpsc.gov](https://www.cpsc.gov)



Memorandum

TO: Duane Boniface, Assistant Executive Director
Office of Hazard Identification and Reduction

THROUGH: Caroleene Paul, Director
Division of Mechanical and Combustion Engineering

FROM: Han Lim, Project Manager
Division of Mechanical and Combustion Engineering

SUBJECT: Comparison of the ANSI/SVIA 1-2017 and ANSI/SVIA 1-2023 Standards

DATE: July 5, 2023

Introduction

This memorandum provides the detailed differences between the ANSI/SVIA 1-2017 and ANSI/SVIA 1-2023 Standards.

Comparison of the ANSI/SVIA 1-2017 and ANSI/SVIA 1-2023 Standards

Formatting Change

The 2017 edition placed all figures at the end of the standard document, whereas the 2023 edition places each figure after the first mention of each figure. For example, when Figure 1 is mentioned for the first time on page 9, the Figure 1 immediately follows the first mention of Figure 1. Since this formatting change is editorial, this change does not affect ATV safety.

Foreword

ANSI/SVIA 1-2017: When compared to the 2010 edition of the standard, the 2017 edition included provisions regarding vehicle conspicuity (headlights, lamps, reflectors, etc.) and allowed for the use of non-pneumatic tires.

ANSI/SVIA 1-2023: The 2023 edition includes provisions regarding fuel systems and hot surfaces; harmonization with certain Canadian technical standards; addition of a friction coefficient for braking test surfaces; and relocation of figures to their respective sections within the standard. As discussed in detail in the briefing memorandum, CPSC staff concludes the addition of fuel systems and hot surfaces improves ATV safety. The addition of a friction coefficient adds specificity to the braking test procedure, thus reducing any vague interpretation of the braking test procedure.

Section 1. Scope

ANSI/SVIA 1-2017: This section states that the standard will be effective beginning with 2019 model year vehicles.

Additional information: In a comment letter to SVIA, CPSC staff suggested a production-based effective date in early 2018. SVIA declined to use a production-based effective date but reasoned that 2019 model year vehicles will be released in the 2018 calendar year.

ANSI/SVIA 1-2023: This section states that the standard will be effective beginning with 2026 model year vehicles. It is likely that model year 2026 vehicles will be introduced into commerce approximately in July to August of calendar year 2025,¹ although as noted in Tab B, the majority of manufacturers appear to be complying already.

Section 2. Referenced Standards

ANSI/SVIA 1-2017: This section lists the standards and recommended practices that are referenced in the voluntary standard's requirements for lighting, spark arrester, tires, labels, and electromagnetic compatibility.

ANSI/SVIA 1-2023: This section lists the standards and recommended practices that are referenced in the voluntary standard's requirements for lighting, spark arrester, tires, labels, and electromagnetic compatibility. The referenced standards are updated from the 2017 edition of the voluntary standard, and are organized by standards development organization (e.g., American National Standard Institute (ANSI) and European Union (EU)). There are two new Society of Automotive Engineers (SAE) standards listed: SAE J288:JUN2021 (Standard for Snowmobile Fuel Tanks) and SAE J30:JUN1998 (Standard for Fuel and Oil Hoses) and one Canadian standard: Canadian Motor Vehicle Safety Regulation, C.R.C.,c. 1038 – Standard 108 on "Lighting System and Retroreflective Devices." Since one of the test options for fuel tank structural integrity references the 2021 edition of the SAE J288 standard for snowmobile fuel tanks, these standard reference changes improve ATV safety. The SAE J288 standard has been a reliable standard for ensuring fuel tank structural integrity, as the stringent performance tests subject sample fuel tanks to extreme temperature conditions and the appropriate impact forces.

Section 3. Definitions

ANSI/SVIA 1-2017: This section provides definitions of terms and phrases used in the standard.

ANSI/SVIA 1-2023: A definition of Gross Vehicle Weight Rating (GVWR) was added. It is defined as the maximum permissible loaded vehicle weight specified by the manufacturer. The GVWR is the sum of the vehicle curb weight and the vehicle load capacity. The update to this section is informational and is neutral with respect to ATV safety.

Section 4.7 Throttle Control

ANSI/SVIA 1-2017: This section did not include any descriptions of throttle control with respect to battery powered electric ATVs.

¹ In the briefing memorandum, CPSC staff recommends an effective date of September 1, 2024.

ANSI/SVIA 1-2023: The 2023 edition has the throttle control description to include electric battery powered ATVs: “All ATVs shall be equipped with a means of controlling engine or electric motor power through a throttle control.” The inclusion of the throttle control descriptions for electric ATVs improves safety, as this addition provides specificity of how the electric ATV speeds are controlled.

Section 4.17. Lighting and Reflex Reflector

ANSI/SVIA 1-2017: This section states that all adult and transition category ATVs shall have a headlamp, tail lamp, and stop lamp (this was formerly an option in the 2010 standard). Headlamps are still optional on youth category ATVs; however, if a youth ATV comes equipped with a headlamp, it must also have a tail lamp and stop lamp. Conspicuity lights are optional on adult and youth category ATVs.

This section also states that all category ATVs shall have reflex reflectors installed on the sides (amber and red in color) and rear (red in color) of the ATV. White reflectors on the front of the ATV are required if the ATV does not come equipped with a headlamp or conspicuity light.

ANSI/SVIA 1-2023: Table 1 of Section 4.17 updates the standards references and the instructions on installations of the stop lamp and tail lamp. The update to this section is informational and is neutral with respect to ATV safety.

Section 4.19 Tires

ANSI/SVIA 1-2017: This section includes “MST” as a tire designation and includes the European Tyre and Rim Technical Organisation (ETRTO) Standards manual as a guideline. This section states that non-pneumatic tires must be rated for the vehicle’s weight and speed, and vertical stiffness shall be designed to produce a ground pressure of 69 kPa (10 psi) or less with the subject vehicle. This section also differentiates between pneumatic tires (Section 4.19.1 and Section 4.19.4) and non-pneumatic tires (Section 4.19.2 and 4.19.5) in terms of specifications and tire markings.

ANSI/SVIA 1-2023: The 2023 edition does not specify a maximum recommended tire pressure. Thus, instances of the maximum recommended tire pressure of 69 kPa (10 psi) are removed from Sections 4.19.1 and 4.19.2 of the 2017 edition. Instead ATV owners are directed to refer to their owner’s manuals or vehicle labels to inflate tires to the manufacturer’s recommended air pressures. Every ATV model is designed to be used in different operating conditions which affects how manufacturers determine the optimal tire pressures for a given ATV model. As noted in the briefing memorandum, CPSC staff concludes the removal of the maximum recommended tire pressure of 69 kPa (10 psi) is neutral with respect to ATV safety.

Section 4.19 Tire Pressure Gauge

The 2017 edition of the standard is identical to the 2023 edition.

Section 4.21 Owner’s Manual

ANSI/SVIA 1-2017: This section clarifies that all ATVs shall be provided with a manual “in paper form” and adds that the paper manual “may be supplemented at the manufacturer’s option in electronic form viewable on a display on the ATV or other device.”

Additional information: The pre-canvass draft proposed allowing electronic form of the owner’s manual, but CPSC staff objected. The revised proposal allows the electronic form as a supplement to, but not replacement for, the owner’s manual in paper format.

ANSI/SVIA 1-2023: The 2023 edition removes the phrase “which may be supplemented at the manufacturer’s option in electronic form viewable on a display on the ATV or other device” which was added to the 2017 edition. Section 4.21 now states: “All ATVs shall be provided with a manual in paper or electronic format at the time of delivery to the first purchaser. All ATVs with printed manuals shall be equipped with a means of carrying the manual that protects it from destructive elements while allowing reasonable access.” The information requirements in the owner’s manual include a dedicated introductory safety section and important safety messages regarding age recommendations, proper operation of the ATV, and training resources. Therefore, CPSC staff continues to advocate paper manuals as the default medium for important safety information because the information will be immediately available for consumers. Many consumers are already disinclined to read instruction manuals and requiring them have to go through extra steps to access an electronic format reduces the likelihood that they will do so. Based on the increased risk of consumers not receiving information on the safe use of ATVs if that information is only electronically available, CPSC staff concludes the change is a reduction in safety.

Section 4.22 ATV Identification Number

The 2017 edition of the standard is identical to the 2023 edition.

Section 4.23 Labels

The 2023 edition contains two editorial updates to the 2017 edition: (a) on Section 4.23.1 – General Format, the words “or surface area” in parentheses follow the words “Minimum label size” and (b) on Section 4.23.3.5 Certification Label – the year of the most recent standard is updated. Thus, the statement is as follows: “The label shall use the following wording: (Manufacturer’s Name) certifies that this ATV complies with ANSI/SVIA 1–2023 Standard.” The update to this section relates to label editorial updates and thus, this change is neutral with respect to ATV safety.

Section 5. Maximum Speed Capability Measurement

The 2017 edition of the standard is identical to the 2023 edition.

Section 6. Category Y and Category T ATV Speed Capability Requirements

The 2017 edition of the standard is identical to the 2023 edition.

Section 7. Service Brake Performance

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | [cpsc.gov](https://www.cpsc.gov)

The 2023 edition adds a maximum allowable wind speed of 18 km/h (11 mph) in any direction during the service brake test and that the coefficient of friction is at least 0.75 for the flat concrete test surface when measured in accordance with ASTM E1337 (Standard Test Method for Determining Longitudinal Peak Braking Coefficient (PBC) of Paved Surfaces Using Standard Reference Test Tire) or another scientifically valid method that produces repeatable results comparable to ASTM E1337. The new text in this section adds specificity to the braking test procedure to reduce test procedure ambiguity, which CPSC staff views will add to ATV safety, as there will be improved test consistency

Section 8. Parking Brake/Mechanism Performance

The 2017 edition of the standard is identical to the 2023 edition.

Section 9. Pitch Stability

The 2023 edition adds the following: for Section 9.2 (3) – identification of the variables for L1, the longitudinal distance from the rear axle to the center of gravity and for Section 9.3.1 – deletes “L = wheelbase” since the L variable is not part of the pitch stability coefficient Kp equation. The update to this section is informational and is neutral with respect to ATV safety.

Section 10. Electromagnetic Compatibility

The 2023 edition of the standard adds, “Directive 2014/30 EU as amended, or Regulation (EU) 44/2014 Annex VII as amended, or Regulation (EU) 2015/208 Annex XV as amended or, UNECE R10” to the list of standards to which the electronic systems can conform to avoid electromagnetic interference issues. The update to this section is informational and is neutral with respect to ATV safety.

Section 11. Sound Level Limits

The 2017 edition of the standard is identical to the 2023 edition.

Section 12. Hot Surfaces

ANSI/SVIA 1-2017: The 2017 edition did not have any hot surfaces requirements.

ANSI/SVIA 1-2023: The 2023 edition added multiple sections to address possible burn hazards due to elevated surface temperatures from exhaust systems. These additions improve ATV safety, as these requirements will reduce the likelihood of contact burn injuries. The briefing memorandum section on Evaluation of Hot Surfaces provides a detailed analysis and rationale. The subsections for Section 12 are as follows:

Section	Purpose
12.1 Touch Points	This section defines the four different types of touch points: continuous, intermittent, momentary, and incidental.
12.2 Test Operator	This section defines the role of the test operator in relation to Section 12-Hot surfaces performance test.

12.3 Test Vehicle Configuration	This section requires the test vehicle to be in the gross vehicle weight rating (GVWR) configuration.
12.4 Test Course or Test Device	This section describes two different acceptable test methods: (a) vehicle driven on a test course or (b) test vehicle placed on a chassis dynamometer; conditions for ambient temperature and maximum wind speed are provided; test course method requires a flat asphalt or concrete surface.
12.5 Required Tools, Instrumentation, or Other Devices	This section specifies three tools: (a) means of speed measurement, e.g., radar technology, GPS, etc. (b) chassis dynamometer (c) temperature measurement devices.
12.6 Test Procedure	The test vehicle tested on a chassis dynamometer or driven on a test course are subjected to a dynamic drive cycle that has multiple transitions to maximize the heat load from the exhaust system. The vehicle is accelerated to 20 mph and maintained at 20 mph for 30 minutes, then the engine is set to idle, and finally, the vehicle is turned off and temperature data logging continues during the heat soak period.
12.7 Performance Requirements	Surface temperatures cannot exceed the continuous, intermittent, momentary, and incidental temperature limits of Table 2 of the standard. The temperature values were based on the ISO 13732-1:2006 Standard – <i>Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces</i>

Section 13. Fuel System Requirements

ANSI/SVIA 1-2017: The 2017 edition did not have any fuel system requirements.

ANSI/SVIA 1-2023: The 2023 edition added multiple sections to address possible fuel leaks from fuel system components. These additions improve ATV safety, as these requirements will reduce the likelihood of fire hazards associated with fuel leaks. The briefing memorandum section on Evaluation of Fuel System Requirements provides a detailed analysis and rationale. The subsections for Section 13 are as follows:

Section	Purpose
13.1 General Procedures	This section explains: (a) some test procedures are proof-of-design, one-time qualification tests, (b) identification of test samples, and (c) provides caution warnings when testing with gasoline.
13.2 Definitions	This section provides terminology of fuel system components that were not part of the 2017 edition.
13.3 Fuel Tank Immersion Leak Test	Every production unit fuel tank is required to be immersion leak tested. Each test sample fuel tank is immersed in water, with the sealed fuel tank pressurized with compressed air; failures are detected from visual inspection of bubbles.
13.4 Fuel Filter and Shut-off Valve Immersion Leak Test	Similar to Section 13.3, except sample filters and valves are inspected for bubbles to detect failures; alternative test methods such as pressure decay or mass flow methods are also allowable. This is a one-time design qualification test.

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | cpsc.gov

13.5 Fuel Tank Cyclic Pressure Integrity Test	The purpose of this test is to evaluate the structural integrity of the fuel tanks when subjected to pressure changes due to weather and/or usage variations. After a test sample is subjected to 10,000 pressure cycles, the sample tank is leak tested to Section 13.3 to verify the sample tank is leak-free. This is a one-time design qualification test.
13.6 Fuel Tank Elevated Temperature Fuel Soak Test for Plastic Tanks and Fuel Tanks Assemblies with Grommets and Seals	Plastic fuel tanks at elevated ambient temperatures can build up pressure and proper venting is needed to regulate the pressure inside the fuel tank. A plastic fuel tank can expand if there is excessive pressure build up. A fully assembled fuel tank is subjected to an ambient temperature of 140°F to evaluate the structural integrity of the fuel tank assembly. Upon completion of this test, the sample tank is leak tested to Section 13.3 to verify the sample tank is leak-free. This is a one-time design qualification test.
13.7 Fuel Tank Structural Integrity Test	The purpose of this section is to evaluate a fuel tank's ability to resist impact forces and temperature extremes that can compromise a fuel tank's structural integrity. The two options for meeting this requirement are: (a) compliance to the snowmobile fuel tank standard, SAE J288:2021 – drop test of fuel tank onto a concrete surface or (b) impact test procedure involving striking the fuel tank surface with a steel ball which can be propelled via a pendulum or free-fall using a guided plastic pipe. Upon completion of this test, the sample tank is leak tested to Section 13.3 to verify the sample tank is leak-free. This is a one-time design qualification test.
13.8 Fuel Tank System Protection Envelope Analysis	This section ensures fuel tank system components are protected from impact, which may result in a rollover or tip over event. This evaluation can be conducted in combination with section 13.7.
13.9 Fuel Line Integrity	Rubber fuel hoses need to meet the requirements of the SAE J30 standard to address the structural integrity of rubber fuel hoses.
13.10 Fuel Line Connection Tensile Test	A tensile force of 30 lbs is applied to evaluate the fuel hose connections for any slippage. A secondary 10 lb tensile test is conducted if slippage is found. This is a one-time design qualification test.
13.11 Fuel Resistance Test	The structural integrity of rubber components may be compromised when subjected to prolonged exposure to ethanol blended gasolines. The purpose of this test is to evaluate fuel filters, fuel system elastomeric components, and fuel shut-off valves for their resistance to chemical corrosion. Visual inspection of cracks or deterioration is conducted at the conclusion of the test. This is a one-time design qualification test.
13.12 Ozone Resistance Test	Similar to Section 13.11, except the fuel filters, fuel system elastomeric components, and fuel shut-off valves are exposed to 72 hours of 50 pphm of ozone. Visual inspection of cracks or deterioration is conducted at the conclusion of the test. This is a one-time design qualification test.
13.13 UV Resistance Test	Similar to Sections 13.11 and 13.12, except the fuel filters, fuel system elastomeric components, and fuel shut-off valves are exposed to 450 hours of ultraviolet light. Visual inspection of cracks

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | cpsc.gov

	or deterioration is conducted at the conclusion of the test. This is a one-time design qualification test.
13.14 Corrosion Resistance	The purpose of this section to ensure the fuel system is designed, constructed, and installed to resist the anticipated internal and external corrosive environment for the intended use and life of the vehicle. There are no specific procedures, rather a general statement is provided.
13.15 Fuel Tank Venting	This test evaluates the effectiveness of the fuel system's rollover vent valve to minimize the risk of fuel leakage. A fully assembled sample fuel tank filled with water is flipped upside down for 10 minutes and the maximum allowable leakage volume is 300 mL. This is a one-time design qualification test.

Figures

ANSI/SVIA 1-2017: There are 17 figures in the 2017 edition of the standard. The first four figures show relative dimensions for the operator foot environment on single-rider ATVs and relative dimensions for the operator and passenger foot environment for a tandem ATV. The remaining 13 figures show the required content and minimum size of warning labels.

ANSI/SVIA 1-2023: There is one additional figure in the 2023 edition, figure 18, which shows a graphical representation of the driving schedule for the hot surfaces test procedure. The update to this section is editorial and is neutral with respect to ATV safety.

Tab B: Revision of ATV Standard: Initial Regulatory Flexibility Analysis by the Directorate for Economic Analysis

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | [cpsc.gov](https://www.cpsc.gov)



Memorandum

TO: Han Lim, Project Manager,
Division of Mechanical and Combustion Engineering,
Directorate for Engineering Sciences

THROUGH: Alexander P. Moscoso, Associate Executive Director,
Directorate for Economic Analysis

Jose E. Tejeda, Supervisory Economist,
Directorate for Economic Analysis

FROM: Rodney R. Row, Economist,
Directorate for Economic Analysis

SUBJECT: ANSI/SVIA 1-2023 Revision Notice of Public Rulemaking,
Initial Regulatory Flexibility Analysis

DATE: July 5, 2023

Introduction

Whenever an agency publishes a notice of proposed rulemaking (NPR), Section 603 of the Regulatory Flexibility Act (RFA), 5 USC 601–612, requires agencies to prepare an initial regulatory flexibility analysis (IRFA), unless the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The IRFA, or a summary of it, must be published in the Federal Register with the proposed rule. Under Section 603(b) of the RFA, each IRFA must address:

- a description of why action by the agency is being considered;
- a succinct statement of the objectives of, and legal basis for, the proposed rule;
- a description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
- a description of the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record; and

- an identification to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule.

Discussion

Reason for Agency Action

The intent of this rulemaking is to fulfill statutory requirements related to reducing deaths and injuries resulting from fire and burn hazards associated with ATVs. The Commission is considering this rule to amend the current mandatory standard to reference ANSI/SVIA 1-2023 because CPSC staff assesses compliance with ANSI/SVIA 1-2023 would reduce fatal and non-fatal injuries associated with ATVs.

Objectives and Legal Basis of the Rule

The Commission proposes this rule to reduce the risk of fatal and non-fatal injuries associated with ATVs. On March 24, 2023, ANSI published the latest revision of the American National Standard for Four-Wheel All-Terrain Vehicles, ANSI/SVIA 1-2023. This rule is promulgated as required by, and under the authority of CPSA section 42(b).

Small Entities to Which the Rule Will Apply

The ANSI/SVIA standard establishes requirements for equipment configuration and performance requirements for ATVs. It also includes requirements for certain warning labels and hangtags to be provided with the ATVs. Therefore, revisions to the standard would directly affect manufacturers and importers of ATVs that are responsible for ensuring that the ATVs distributed in the United States meet the standard. The standard would not have any direct impact on other businesses, such as ATV dealers (unless also an importer), or other small entities, including small governmental jurisdictions or other organizations.

To be distributed in the United States, ATVs must be covered by “ATV Action Plans” which, among other things, describe the actions that manufacturers or importers will undertake to ensure that consumers are offered safety training and to monitor ATV dealers that ATVs intended for adult riders are not sold for the use of children. Through the ATV Action Plans, staff has knowledge and certainty as to the size of the ATV market. As of April 2023, there were 38 ATV manufacturers or importers with ATV Action Plans registered with the CPSC.¹

According to the criteria established by the U.S. Small Business Administration, manufacturers of ATVs (North American Classification System (NAICS) category 336991-Motorcycle, bicycle, and parts manufacturing) are considered small if they have fewer than 1,050 employees. Of the 38 firms with ATV Action Plans, 14 are either large domestic manufacturers or subsidiaries of foreign manufacturers². No domestic manufacturers meet the SBA criteria to be considered small businesses.

¹ Section 42 of the CPSA requires firms distributing ATVs in the U.S. to have ATV Action Plans. Firms with active ATV Action Plans can be found at [ATV Action Plans | CPSC.gov](https://www.cpsc.gov/ATV-Action-Plans).

² The sources used to estimate firm revenue and number of employees included ReferenceUSAGov, Dunn & Bradstreet, Pitchbook, and Zoominfo.

The remaining 24 companies are likely importers. However, in several cases there was not sufficient available information to make this determination. Importers of ATVs that are not manufacturers may be wholesalers (NAICS category 423110-Automobile and other motor vehicle merchant wholesalers), or possibly dealerships (441227-Motorcycle, ATV and all other dealerships), which are considered small if they have fewer than 250 employees or less than \$40 million in annual revenue, respectively.³ Staff identified 14 firms that meet SBA criteria to be considered small businesses. For the remaining 10 firms, there was insufficient information to make a size determination.

Compliance, Reporting, and Recordkeeping Requirements of the Proposed Rule

The proposed rule amends the performance requirements and test procedures that suppliers would have to meet to sell ATVs in the United States. CPSC staff has examined differences between ANSI/SVIA 1–2017 and ANSI/SVIA 1–2023.⁴ In addition to minor modifications to Sections 1 through 11, ANSI/SVIA 1–2023 adds Section 12 (Burn Hazards) and Section 13 (Fuel Systems Requirements). A detailed list and discussion of these changes appear in Appendix A to the Briefing Memorandum. Manufacturers and/or importers of models that do not comply with ANSI/SVIA 1–2023 will incur costs for testing, and possibly for parts and vehicle redesign.

In accordance with Section 14 of the CPSA, manufacturers would have to issue a GCC for each ATV model, certifying that the model complies with the proposed rule. According to Section 14 of the CPSA, GCCs must be based on a test of each product, or a reasonable testing program; and GCCs must be provided to all distributors or retailers of the product. The manufacturer would have to comply with 16 C.F.R. part 1110 concerning the content of the GCC, retention of the associated records, and any other applicable requirement.

Manufacturers

Modifications in Sections 1 through 11 consist primarily of editorial updates and clarifications to the existing voluntary standard. Staff assesses that manufacturer costs to comply with these modifications are insignificant.

Section 12 of the revised standard is a one-time design qualification that requires the identification and testing of ATV surfaces that come into continuous, intermittent, momentary, and incidental contact with the vehicle occupant and passengers. Manufacturers will incur testing costs to comply with this section of ANSI/SVIA 1–2023. Those manufacturers whose models do not meet the performance requirement will incur costs associated with model reconfiguration or redesign.

Section 13 of the revised standard (Fuel System Requirements) contains several one-time design qualifications and production part inspection tests related to ATV fuel systems.

For ATVs that already meet the performance requirements of Section 12 and 13, the cost to manufacturers is limited to testing. Staff estimates that one-time design qualification inspection

³ Available at: [Table of size standards | U.S. Small Business Administration \(sba.gov\)](https://www.sba.gov/sites/default/files/2017-07/2017-2018-Table-of-Size-Standards.pdf)

⁴ Both of these voluntary standards were developed by means of a consensus process in which a number of ATV manufacturers participated.

tests would cost approximately \$12,096 per model.⁵ To comply with Sections 13.3 (Fuel Tank Immersion Leak Test) and 13.4 (Fuel Filter and Shut-off Valve Immersion Leak Test), manufacturers will incur costs associated with testing each production part; staff estimates that the cost of production part testing is approximately \$20.00 per vehicle.

Manufacturers whose ATV models do not meet the performance requirements of Sections 12 and 13 may incur costs associated with sourcing compliant, likely more expensive, parts that were previously tested by the parts manufacturer/supplier. Staff estimates these costs to be approximately \$20.00 per vehicle, some of which may be borne by the parts supplier. ATV models which do not meet Sections 12, 13.8 (Fuel Tank Production Envelope Analysis), or 13.9 (Fuel Line Integrity) requirements may require reconfiguration or redesign. Staff estimates redesign and retesting costs at approximately \$70,000 per model.

Staff generally assesses a draft proposed rule to have a significant adverse economic impact if the firm's costs to comply exceed 1 percent of the firms' annual sales revenue. However, as noted above, none of the 14 identified ATV manufacturers meet the SBA criteria to be considered a small business. Therefore, staff preliminarily assesses the draft proposed rule requiring compliance with ANSI/SVIA 1–2023 will not have a significant economic impact on any small ATV manufacturers, since none were identified. Staff seeks information on any other ATV manufacturers that may meet the SBA criteria to be considered small businesses.

Importers

Foreign manufacturers whose models do not meet the ANSI/SVIA 1–2023 performance requirements may choose to exit the U.S. ATV market. An importer whose foreign manufacturer exited the market, and was unable to procure an alternative source, would likely suffer a significant, adverse economic impact. However, given that ATV sales volume has been stable over the last 5 years, and grew by approximately 5 percent in 2020 (the last year for which CPSC has data), staff considers it unlikely that foreign ATV manufacturers will exit the market. Therefore, staff concludes that the draft proposed rule will not have a significant, adverse economic impact on ATV importers.⁶

If a foreign manufacturer chooses not to conduct the required testing and/or provide the documentation necessary to support the issuance a General Certificate of Conformity (GCC), importers of this manufacturer's products may choose to conduct and document compliance testing, incurring the associated costs. For importers whose costs exceed 1 percent of the firm's annual ATV revenues, the effect would be considered significant. Of the 14 small importers identified by staff, only 7 could be found in the 2020 ATV market sales data.⁷ Staff estimates that 4 of these 7 small importers would face a significant, adverse economic impact. However, as noted above, staff considers this scenario unlikely.

⁵ Cost estimates to comply with the proposed rule are based on staff subject matter expert input and informed by staff work on other off-highway vehicles.

⁶ Source: Power Products Marketing, Prairie Eden, MN, 2021.

⁷ Source: Power Products Marketing, Prairie Eden, MN, 2021.

Alternatives to the Draft Proposed Rule

Staff considered introducing the draft proposed rule with an effective date greater than 180 days after promulgation of the rule. An effective date greater than 180 days could reduce manufacturers' costs of compliance and/or allow manufacturers to spread those costs over a longer period of time. However, an effective date of September 1, 2024 allows manufacturers about 17 months from the publication of ANSI/SVIA 1-2023 to comply with its requirements, which staff considers reasonable, feasible, and adequate for the following reasons.⁸

- ANSI/SVIA 1-2023 was developed by SVIA members and other stakeholders through a consensus process over a 3-year period. Therefore, SVIA canvass members, and likely most other ANSI members, have been aware of the revised standard since March 2023. Staff also notes that SVIA members manufacture and/or distribute approximately 68% of the ATVs sold in the U.S. in 2020 (the last year for which CPSC has sales data).⁹
- All ATV gasoline powered engines and associated components sold in the U.S. are regulated by the U.S. EPA for Exhaust and Evaporative emissions (40 CFR 1051.515(d) – Fuel Tank Permeation Testing). Those ATVs will be exempt from having to conduct testing per Section 13.5 (Fuel Tank Cyclic Pressure Integrity Test) of ANSI/SVIA 1-2023. Therefore, most ATV manufacturers will already satisfy some criteria of ANSI/SVIA 1-2023 with no additional effort.
- An effective date equating to approximately 17 months after publication of the voluntary standard is comparable to effective dates used for similar standards including ANSI/SVIA 1-2017 (18 months) and ANSI/ILTV (International Light Transportation Vehicle Association) Z130.1-2012 (1 year). Notably, ANSI/ILTV Z130.1-2012 standard has the same rollover vent leakage test (Section 11.3.5) with the 30 mL per minute allowable leak rate as the Section 13.15 (Fuel Tank Venting) of the ANSI/SVIA 1-2023 standard. Therefore, staff believes 17 months is adequate to implement design changes and associated testing, including design validation, retooling, sourcing of parts and supply chain issues, quality control, and other manufacturing requirements to comply with the new standard¹⁰.

Given the reasons listed above, staff believes manufacturers' cost savings from a later effective date are likely to be insignificant. Delaying implementation of the rule will however allow continued manufacture and import of non-compliant models for a longer period of time, expose a greater number of consumers to ATV fire and burn hazards, and increase associated societal costs. Therefore, staff does not recommend this alternative.

Summary and Conclusion

⁸ Section 42(b) of the CPSA requires the Commission to publish a final rule to amend 16 C.F.R. part 1420 to include any revisions to the voluntary standard the determined to be reasonably related to the safe performance of ATVs no later than January 19, 2024, which corresponds to an effective date of July 19, 2024, approximately 16 months after the publication of the ANSI/SVIA1-2023. The briefing memo contains a detailed discussion of the statutory requirements and timeline.

⁹ Source: Power Products Marketing, Prairie Eden, MN, 2021.

¹⁰ As noted in the Background section of the Briefing Memorandum, the Commission issued an amendment to the Commission's rule, 16 C.F.R. part 1420, to reference ANSI/SVIA 1-2017. The rule took effect on January 1, 2019. Subsequent to the effective date, ATV manufacturers and importers have issued GCCs certifying that their ATVs comply with that rule. Therefore, staff assumes that design modifications are limited to those required by the substantive additions and or changes that appear in ANSI/SVIA 1-2023.

The draft proposed rule would revise the mandatory ATV standard to incorporate the revisions in ANSI/SVIA 1–2023. The most significant changes are the addition of Sections 12 and 13, which detail performance requirements related to burn hazards and fuel systems. CPSC staff concludes that the majority of ATVs models will comply with these requirements and the overall costs to bring non-compliant models into compliance are not significant. The other changes in the standard are primarily editorial updates and clarifications to Sections 1 – 11.

Staff identified 14 domestic and foreign manufacturers supplying ATVs to the U.S. market, none of which meet the SBA criteria to be considered a small business. Staff also identified 24 potential ATV importers. Of these, 14 meet the SBA criteria to be considered a small business; there was not enough information to make a size determination for the remaining 10 firms. If importers were to procure the required testing with their own resources to comply with ANSI/SVIA 1–2023, at least 4 of the identified small importers would incur a significant, adverse impact. However, staff considers this possibility unlikely. Therefore, staff preliminarily concludes that the draft proposed rule will not have a significant, negative economic impact on a substantial number of small entities and requests comments with data supporting or refuting whether the Commission could certify to that effect.

Appendix A – Paperwork Reduction Act

Paperwork Reduction Act

This proposed rule contains information collection requirements under the Paperwork Reduction Act of 1995 ([44 U.S.C. 3501](#)-3521). The proposed rule amends the All-Terrain Vehicle (ATV) standard to mandate industry compliance with the latest ANSI/SVIA 1 revision, ANSI/SVIA 1-2023, *American National Standard for Four Wheel All-Terrain Vehicles*. These requirements fall within the definition of “collection of information,” as defined in [44 U.S.C. 3502](#)(3).

This proposed rule contains information collection requirements that are subject to public comment and review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 ([44 U.S.C. 3501](#)-3521). In this document, pursuant to [44 U.S.C. 3507](#)(a)(1)(D), we set forth –

- a title for the collection of information;
- a summary of the collection of information;
- a brief description of the need for the information and the proposed use of the information;
- a description of the likely respondents and proposed frequency of response to the collection of information;
- an estimate of the burden that shall result from the collection of information; and
- notice that comments may be submitted to the OMB.

Title: Notice of Proposed Rulemaking (NPR) to Amend the All-Terrain Vehicle (ATV) Standard.

Summary and Description: The proposed rule amends the All-Terrain Vehicle (ATV) standard to mandate industry compliance with ANSI/SVIA 1-2023, *American National Standard for Four Wheel All-Terrain Vehicles*. The proposed rule would require ATVs to comply with ANSI/SVIA 1-2023, including certification testing in support of General Certificates of Conformity (GCCs) required by Section 14 of the Consumer Product Safety Act.^{11, 12} GCCs must comply with 16 C.F.R. part 1110 concerning the content of the GCC, retention of the associated records, and any other applicable requirement. ANSI/SVIA 1-2023 Sections 4. Vehicle (ATV) Configuration and Equipment, 5. Maximum Speed Capability, 7. Service Brake Performance, 8. Parking, 9. Pitch Stability, 11. Sound Level Limits, 12. Hot Surfaces, and 13 Fuel Systems Requirements contain certification testing requirements. These requirements, as well as the preparation of the GCC itself, fall within the definition of “collection of information,” as defined in [44 U.S.C. 3502](#)(3). PRA requirements unchanged from the previous version of the standard, SVIA 1-2017, such as labels, hang tags, and instruction manuals, are not included in this analysis.

¹¹ [Federal Register: Consumer Product Safety Act: Notice of Commission Action on the Stay of Enforcement of Testing and Certification Requirements](#)

¹² Section 14(a)(3)(A) of the CPSA states that the third-party testing requirement applies to any children's product manufactured more than 90 days after the Commission has established and published a “notice of requirements” for the accreditation of third-party conformity assessment bodies to assess conformity with a children's product safety rule.

Description of Respondents: Entities which manufacture or import ATVs.

Estimated Burden: We estimate the total burden of this collection of information is 441 hours and \$16,229. Table 1, below, summarizes our estimation of annual reporting burden hours and cost.

Table 1—Estimated Annual Reporting Burden

Burden Type	Number of Respondents	Frequency of Responses	Total Annual Responses	Hours per Response	Total Burden Hours	Annual Cost
Labor Burden						
GCC Preparation	38	1	38	1.5	57	\$2,098
One-Time Design Qualification Testing	25	1.9	48	8	384	\$14,131
Total Burden					441	\$16,229

Comments: In compliance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), CPSC has submitted the information collection requirements of this proposed rule to the OMB for review. Interested persons are requested to submit comments regarding information collection by [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], to the Office of Information and Regulatory Affairs, OMB (see the **ADDRESSES** section at the beginning of this document).

Pursuant to 44 U.S.C. 3506(C)(2)(A), we invite comments on:

- Whether the collection of information is necessary for the proper performance of the CPSC's functions, including whether the information will have practical utility;
- the accuracy of the CPSC's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
- ways to enhance the quality, utility, and clarity of the information to be collected;
- ways to reduce the burden of the collection of information on respondents, including the use of automated collection techniques, when appropriate, and other forms of information technology; and
- the estimated burden hours associated with producing the GCC and the certification testing required to support the GCC.

OMB has not yet assigned a control number to this information collection. CPSC will publish a Notice of Proposed Rulemaking (NPR) in the **Federal Register** and request a new OMB Control Number for the collection, in accordance with the Paperwork Reduction Act, when the NPR is published.

Staff Briefing Package: Notice of Proposed Rulemaking (NPR) to Amend the
All-Terrain Vehicle (ATV) Standard | July 5, 2023 | cpsc.gov

PRA Burden Estimation

This section describes the development of staff's PRA burden estimates summarized in Table 1, above.

GCC Preparation

Section 14 of the Consumer Product Safety Act requires manufacturers and importers of ATVs to prepare GCCs. Based on current ATV action plans filed with the CPSC, there are 38 entities that supply, or intend to supply, ATVs to the U.S. market. CPSC staff found evidence of ATV sales activity, in the form of actual sales or advertisement for sale, for only 32 of the 38 entities. Nevertheless, taking a conservative approach, staff assumed that all 38 entities are currently supplying ATVs to the U.S. market and used this number to calculate the burden hours and annual cost associated with GCCs. ATV manufacturers typically produce one GCC that covers all the models of a model year, which implies the number of PRA responses is one per entity, per year. Staff estimates the time required to produce this GCC is about 1.5 person hours per year. Therefore, the estimated burden associated with GCCs is 57 person hours (38 entities \times 1 GCC per year \times 1.5 hours per GCC = 57 person hours). To generate the estimated annual cost to industry associated with GCCs, staff multiplied the estimated number of burden hours by \$36.80¹³, the total hourly compensation for sales and office workers in goods-producing private industries. Therefore, the estimated annual cost to industry associated with preparation of the GCCs is \$2,097.60 (\$36.80 per hour \times 57 hours = \$2,097.60).

Recordkeeping Supporting GCC Preparation

In the event a foreign manufacturer chooses not to conduct required certification testing and/or provide documentation to support preparation of the GCC, its importer could choose to conduct its own certification testing. However, staff considers this scenario unlikely, and for several of the importers, cost prohibitive. Therefore, staff assumes entities conducting certification testing and associated recordkeeping are limited to ATV manufacturers. Based on 2020 sales data, there were 25 known U.S and foreign manufacturers supplying as many as 239 new and old ATV models and 420,730 ATVs to the U.S. market.¹⁴

Staff estimates the average life cycle of an ATV model is approximately 5 years, which implies each manufacturer will conduct one-time design qualification testing on approximately 1.6 models per year (239 models ÷ 25 entities ÷ 5 years ≈ 1.9 models per entity per year). Staff estimates the time required to create and maintain certification records to be approximately 8 person hours per model.¹⁵ Therefore, the estimated labor burden associated with certification testing recordkeeping is 384 person hours (25 entities × 1.9 ATV models per year × 8 person hours per model = 384 person hours). As above, staff multiplied the estimated number of

¹³ U.S. Bureau of Labor Statistics, "Table 4. Employer Costs for Employee Compensation for private industry workers by occupational and industry group," updated March 17, 2023, [Table 4. Private industry workers by occupational and industry group - 2022 Q04 Results \(bls.gov\)](https://www.bls.gov/news.release/ocw.t4.pdf).

¹⁴ Source: Power Products Marketing, Prairie Eden, MN, 2021.

¹⁵ This estimate includes recordkeeping hours associated with individual parts testing required by ANSI/SVIA 1-2023, Sections 13.3 (Fuel Tank Immersion Leak Test) and 13.4 (Fuel Filter and Shut-off Valve Immersion Leak Test, allocated per model, as well as recordkeeping hours associated with one-time design qualification testing.

burden hours by \$36.80, the total hourly compensation for sales and office workers in goods-producing private industries. The estimated annual cost to industry associated with certification testing recordkeeping is \$14,131 ($\$36.80 \text{ per person hour} \times 384 \text{ person hours} = \$14,131$).

Summary of Burden Hours and Cost

Based on this analysis, the proposed rule for ATVs would impose an annual burden to industry of approximately 441 hours per year (57 for preparation of the GCC and 384 hours for recordkeeping associated with the certification tests upon which the GCCs are based). The estimated annual cost is approximately \$16,229 (\$2,098 and \$14,131 for GCC preparation and certification testing recordkeeping, respectively).

The above estimates are a conservative estimate of the average annual burden to ATV entities. The proposed rule requires all ATVs produced more than 180 days after Federal Register publication of the final rule to comply with ANSI/SVIA 1-2023. Therefore, in the first year following promulgation of the rule, existing entities may be required to redesign and test more than the estimated average 48 models per year and incur higher costs than the estimates in this PRA analysis. In subsequent years, costs could be less, as a fewer number of ATV models will require design updates.¹⁶

¹⁶ To the extent that the ATV industry currently complies, or substantially complies, with the proposed rule, these figures may over-estimate the actual burden.