



October 5, 2022

Mr. Ken Glaser
Director, Special Projects
Recreational Off-Highway Vehicle Association (ROHVA)
2 Jenner, Suite 150
Irvine, CA 92618

Subject: CPSC Staff¹ Comments on the American National Standard for Recreational Off-Highway Vehicles (ROVs) (ANSI/ROHVA-1-202x) Draft Performance Requirements for Fire and Debris Penetration Hazards

Dear Mr. Glaser:

This letter responds to your email of September 8, 2022, in which you included a copy of the ANSI/ROHVA-1-202x draft performance requirements to address fire and debris penetration hazards associated with recreational off-highway vehicles (ROVs) and a canvass ballot vote sheet.

Enclosed with this letter are:

- Comments of CPSC staff on the Draft Performance Requirements for ANSI/ROHVA-1-202x
- CPSC staff's Canvass Ballot Vote Sheet
- CPSC staff's Comments on the Draft ANSI/ROHVA-1-202x Performance Requirements

CPSC staff appreciates ROHVA's efforts to develop these proposed requirements. CPSC staff has general comments in Enclosure (1), including discussions of the test data from debris penetration sled testing recently conducted by our contractor, SEA, as well as detailed comments in Enclosure (3). Although we are abstaining in this canvass ballot, CPSC staff views the proposed drop test as insufficient, because it does not prevent penetration of simulated trail debris subject to reasonably foreseeable speed and energy such as when tested with a 2-inch diameter wooden dowel to the

¹ These comments are those of the CPSC staff, and have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

method described in CPSC's notice of proposed rulemaking. CPSC staff considers the proposed drop test inadequate to protect against debris penetration hazards because it uses an energy level that does not reflect the speeds and energies that can occur in real life scenarios.

If you have any questions or comments regarding the enclosures, please do not hesitate to contact me. Although CPSC staff views the proposed requirements as insufficient to protect consumers against the debris penetration hazard, we look forward to collaborating with you and your members as we continue to make progress in developing standard performance requirements that will reduce ROV fire and debris penetration hazards.

Sincerely,

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

cc: Jacqueline Campbell, CPSC Voluntary Standards Coordinator

Enclosure(s):

- (1) General Comments on the Draft Performance Requirements for ANSI/ROHVA-1-202x
- (2) CPSC Staff's Canvass Ballot Vote Sheet
- (3) CPSC Staff Comments on the Draft ANSI/ROHVA-1-202x Performance Requirements

ENCLOSURE 1:

General Comments on the Draft Performance Requirements for ANSI/ROHVA-1-202x

1. Test Results from Sled Testing by CPSC contractor SEA

SEA staff conducted off-highway vehicle (OHV) sled tests in accordance with CPSC staff's notice proposed rulemaking² (NPR) for debris penetration (in which a simulated test vehicle is propelled in a straight-line path towards a 2-inch diameter wooden dowel) at various impact energies. The simulated test vehicle was equipped with model year 2022 floorboards that ROHVA members stated were capable of resisting debris penetrations at the 355 J energy level associated with the proposed drop test method in ANSI/ROHVA-1-202x. At the 355 J energy level, CPSC staff observed an indentation on the floorboard surface and no debris penetration into the occupant area. In comparison, when SEA conducted the sled test as described in the NPR test condition of a fully loaded vehicle traveling at 10 mph (equivalent to 10,000 J of energy at impact), debris penetration did occur. The NPR requirements were designed to prevent debris penetration at a minimum speed of 10 mph to address a serious hazard pattern that has resulted in fatalities and serious injuries.

Based on these SEA test results, CPSC staff concludes the proposed 355 J energy drop test method draft requirement does not adequately prevent debris penetration at 10 mph. This speed is representative of incidents reviewed, and it is reasonable to assume that drivers are going to be operating vehicles at these speeds in wooded areas.

2. Requirements to Address Fire Hazards from Electrical Components

CPSC staff recommends the ROHVA committee consider including Sections 5.3.1 to 5.3.5 of the BS EN 16990-2020 *British Standard for Light Motorized Vehicles For The Transportation Of Persons And Goods And Related Facilities And Not Subject To Type-Approval For On-Road Use - Side By Side Vehicles - Safety Requirements And Test Methods*. These sections cover requirements for wiring harnesses, grounding, over-current protection, battery safety requirements, etc. for side-by-side vehicles (ROVs). These sections offer best practices to reduce fire and/or electric shock risks that are applicable to ROVs. These requirements are not in the most current version (2016 edition) of the ANSI/ROHVA-1 standard.

² Notice of Proposed Rulemaking for Safety Standard for Debris Penetration Hazards, Federal Register Volume 87, Number 139, Thursday, July 21, 2022.

ENCLOSURE 2:

CPSC Staff's Canvass Ballot Vote Sheet

Canvass Letter Ballot

Ballot Closes 10-10-22

Regarding the proposed ANSI/ROHVA 1-202X standard dated 9/8/22, I vote to (mark only one)

Affirmative	_____
Affirmative with comment	_____
Negative with reasons*	_____
Abstain	_____X_____

***Please note that negative votes must be accompanied by comments related to the proposal and that votes unaccompanied by such comments will be recorded as “negative without comments” without further notice to the voter. An abstention should be accompanied by reasons for the abstention.**

Supporting statements: Please attach additional pages as necessary.

CPSC staff has chosen to abstain with written comments (please see the attached letter).



10/5/2022

Signature:

Date:

Please update any information below

Name: Han Lim

Organization: U.S. Consumer Product Safety Commission (CPSC)

Phone: 301-987-2327

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ENCLOSURE 3:

CPSC Staff Comments on the Draft
ANSI/ROHVA-1-202x Performance Requirements

CPSC Staff Comments on the Draft ANSI/ROHVA-1-202x Standard

Section Number	Type of Comment	Comment	Recommended Change
15.6.1 (b)	Technical	CPSC staff recommends testing hot surfaces under the most stringent test conditions.	Following warm-up, operate the vehicle continuously in circular / down and back manner maintaining a vehicle speed of 32 +3/-0 km/h (20 +2/-0 mph) or 50% of the maximum speed +3/-0 km/h (+2/-0 mph) as determined in Section 5, whichever is lower more stringent , for 30 minutes.
15.6.2 (b)	Technical	CPSC staff recommends testing hot surfaces under the most stringent test conditions.	Following warm-up, accelerate the vehicle in a straight line to 32 +3/-0 km/h (20 +2/-0 mph) or 50% of the maximum speed +3/-0 km/h (+2/-0 mph) as determined in Section 5, whichever is lower more stringent .
16.7 and 16.8	General/ Technical	Multiple subsections of 13.7 and 13.8 have fuel tank structural integrity requirements that do not explicitly illustrate how rollover containment requirements are satisfied.	Please review these sections and separate the fuel tank structural integrity and rollover containment requirements.
16.11	Editorial	Fluoroelastomer was misspelled.	Exemption: Flouoroelastomer Fluoroelastomer ("FKM") fuel system components satisfy the requirements of this standard without testing in accordance with this section.
16.12	Editorial	Fluoroelastomer was misspelled.	Exemption: Flouoroelastomer Fluoroelastomer ("FKM") fuel system components satisfy the requirements of this standard without testing in accordance with this section.
17 (all subsections)	General	Comments regarding the debris penetration drop test method are included in the attached Voluntary Standards Letter, Enclosure (2).	
N/A	General	CPSC staff recommends the committee examine paragraphs 5.3.1 to 5.3.5 (Electrical Requirements) of BS EN 16990-2020 <i>British Standard for Light Motorized Vehicles For The Transportation Of Persons And Goods And Related Facilities And Not Subject To Type-Approval For On-Road Use - Side By Side Vehicles - Safety Requirements And Test Methods</i> to determine their applicability to U.S. ROVs. These paragraphs cover requirements for grounding, over-current protection, wiring harnesses, and batteries.	
N/A	General	CPSC staff recommends adding a rationale section to explain the reasons for including each new section and what hazards they would potentially address.	