

**COMMUNITY AFFAIRS**

**DIVISION OF CODES AND STANDARDS**

**Ski Lift Safety**

**Adoption of ANSI B77.1-2011**

**Readoption: N.J.A.C. 5:12**

**Adopted Repeals and New Rules: N.J.A.C. 5:12-1.4 and 4.2**

**Adopted Repeals: N.J.A.C. 5:12-6**

Proposed: August 15, 2016, at 48 N.J.R. 1517(a).

Adopted: December 21, 2016, by Charles A. Richman, Commissioner, Department of Community Affairs.

Filed: January 17, 2017, as R.2017 d.027, **with non-substantial changes** not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 34:4A-4 and Reorganization Plan 002-1998.

Effective Dates:        January 17, 2017, Readoption;  
   February 21, 2017, New Rules and Repeals.

Expiration Date:        January 17, 2024.

**Summary of Public Comments and Agency Responses:**

Comments were received from: Mitchell Malec, a retired employee of the Department of Community Affairs.

1. COMMENT: The Department makes no mention of working with representatives of New Jersey passenger tramway owners and operators, the stakeholders. Were these proposed amendments shared and discussed with these stakeholders?

RESPONSE: The Department has discussed the update of these standards with the owners of operating ski lifts in New Jersey.

2. COMMENT: It is obvious that if no new passenger tramways used for skiing are submitted for Department review during the six-month grace period proposed within the proposed amendments, the proposed amendments are moot points. This includes the 'twelve and twenty-four months after the effective date of this amendment' since operating or ready to operate ski lifts in New Jersey supposedly meet the 2011 edition of ANSI B77.1 standard as stated by the Department. But, as an example of what could occur: Assume ANSI B77.1-2011 goes into effect on 01-02-2017. A Ski Lift design is submitted to the Department on 07-01-2017 (within the six-month grace period) and meets ANSI B77.1-1999. The Ski Lift design is reviewed, approved, and released on 08-01-2017. The Ski Lift is constructed, approved, and receives registration certificate on 12-31-2017. On 01-02-2018, two days later, the Ski Lift needs to comply with ANSI B77.1-2011 in order to continue in operation (N.J.A.C. 5:12-3.2(b)). And the 24-month date is 01-02-2019. Even if the Department's intent was that the retrofit provisions become effective 12 months after the effective date of the amendments or 12 months after the date of registration certificate, whichever is longer; just doesn't make sense considering that retrofit is often more expensive to accomplish than if including the upgrades before construction or during construction.

RESPONSE: The Department disagrees. The applicant can, and should, read the rules and decide at which point the upgrade to the newer standard is most economical and feasible.

3. COMMENT: The Department said in the Economic Impact statement in the notice of proposal that the “costs associated with the requirements of the newer edition of the standard have already been incurred by the operating or approved ski areas in New Jersey.” Please explain. My guess is because ski lifts are insured and inspected by third-party inspectors who use latest edition of the ANSI B77.1 standard, ski lift owners would build to the 1999 edition or even 2006 edition because the lifts would never be insured.

RESPONSE: While discussing the cost of complying with the updated standard for the economic impact of the notice of proposal, Department staff were advised by the various ski lift operators that they have already performed the necessary changes to comply with the new standard. Department staff did not ask ski lift operators to furnish the reason.

4. COMMENT: What is the economic impact of the proposed rule for a new ski lift owner who built in accordance with the 1999 edition of ANSI B77.1? After one or two years, the ski lift must be upgraded to the new standards. What are additional costs for upgrades of communication systems, rollback devices, bullwheel brakes, and signage?

RESPONSE: When Department staff discussed these costs with the industry representatives, staff were advised that the ski lifts are in compliance with the newer version of the standard. Based on that, there would be no economic impact. Though asked, the industry did not furnish a cost breakdown for the upgrades performed.

5. COMMENT: The Department said ski lifts in New Jersey currently meet all safety standards in the 2011 edition with 2012 supplement. How was this determined?

RESPONSE: This was determined through discussions with the owners of operating ski lifts in New Jersey.

6. COMMENT: The Department appears to have made no revisions of the word ‘should’ to ‘shall’ in the 2011 edition, such as in sections 6.1.1.9.2 and 6.3.3.3 (2006 edition) making provisions enforceable or prohibited ski lift facilities to use television surveillance in lieu of an operator or attendant as in section 5.3.2.2 (2006 edition) or added a time for compliance with new signage requirements (Annex D as modified) or similar revisions. Please confirm the Department reviewed the 2011 edition in total, taking into consideration the sections mentioned above, and determined no revisions, such as the above, were needed.

RESPONSE: The Department has performed a comprehensive review of the 2011 edition. Changing “should” to “shall” in 6.1.1.9.2 could create a conflict. The section indicates that the profile for the discharge of the lift shall be appropriate for the speed and capacity of the lift and shall conform to the manufacturer’s requirements. If the manufacturer allows a flat discharge area, changing the “should” in 6.1.1.9.2 to “shall” would require that the discharge be sloped away. The basis for the language in the code is that the manufacturer’s recommendation takes precedence over the suggestion that the exit be sloped, and the Department wants to remain consistent with that approach. The permissive language in 6.3.3.3 suggests the wire rope towing devices be moved a uniform distance and in the same direction when relocated. The next sentence in the section references following the designer’s instructions as a requirement. The Department is comfortable with relying on the designers’ requirements. This is consistent with the Departments approach to sections 5.3.3.3.1 and 4.3.3.3, which contain similar language, but which were not pointed out by the commenter. The Department believes that the use of video

surveillance in lieu of an attendant is appropriate for surface lifts given the relative risks associated with surface lifts compared to aerial lifts. The Department does not see a need to provide additional time to comply with the sign requirements found in Annex D.

7. COMMENT: I recall a Department proposal in the September 8, 2015, New Jersey Register (PRN 2015-107) in which the Department updated N.J.A.C. 5:14A with the 2014 edition of ASTM F2291. The same approach and presentation should be done with the ski lift standards, comparing the current adopted 1999 edition of ANSI B77.1 to the 2006 and 2011 editions.

RESPONSE: The Department highlighted the changes to the standard in the Summary statement. The Department believes that this was sufficient to alert interested parties to the major differences between editions of the standard.

8. COMMENT: N.J.A.C. 5:14A-1.3 still lists ANSI B77.1-1999 and N.J.A.C. 5:14A-7.2(c) has ANSI B77.1 (2006). I assume passenger tramways not used for skiing (New Jersey State Fair, Six Flags, others) are within the scope of the Carnival-Amusement Rides regulations, please confirm this and address the lack of the coordinated adoption of the latest ANSI B77.1 standard. Have all lifts not used in skiing been upgraded and/or retrofitted to the latest standard?

RESPONSE: The Department plans to update the standards contained in N.J.A.C. 5:14A in a separate rulemaking. The update of the ANSI B77.1 standard will be included in that future notice of proposal. Because the devices are covered by different rules, there is no conflict, and, therefore, the update of ANSI B77.1 in the carnival and amusement ride rules does not need to be done concurrently. Ski lifts not used for skiing are treated as amusement rides and are not included under this rulemaking.

9. COMMENT: The Department should review the 2015 edition of ASTM F2291 along with revisions ASTM WK52396 and ASTM WK52397.

RESPONSE: These comments are not related to the current rulemaking, and, therefore, are beyond the scope of this rulemaking.

10. COMMENT: Why the Department included a six-month grace period for new ski lift construction appears illogical considering the number of ski lifts (current and future) is limited and the upgrades are safety items. Although other Department regulations have a six-month grace period, they also include State-sponsored code change proposal provisions, public hearing requirements, procedures for exceptions from the adopted standards, and many other provisions that could be added. But, because the Ski Lift Safety Act and regulations are specific and don't need to be over-complicated, the six-month grace period and additional provisions appear unnecessary. Note that the Ski Lift Safety Act contains provisions, N.J.S.A. 34:4A-8, for the Commissioner to address conditions endangering the safety of the public. Revisions in the 2006 and 2011 editions of ANSI B77.1, the 'safety requirements,' appear to fit this category.

RESPONSE: The design of a ski lift, like other large structures, often takes place over a long period of time. A change in the applicable standard in the middle of the design can be costly to applicants. The grace period allows applicants who have invested a significant amount of time in a design to finish that design under the standard under which it had begun. If issues are discovered that represent an imminent hazard to the public, they can be addressed by N.J.A.C.

5:12-3.2(c)

11. COMMENT: It is recommended that the Department abandon these proposed amendments and repeal and propose new amendments to the ski lift regulations that address the continuously updated ANSI B77.1 standard. Such as:

“All passenger tramways used in skiing shall comply with the current edition of ANSI B77.1 entitled *American National Standard for Passenger Ropeways-Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors-Safety Requirements*, as amended herein or applicable State standards, if more restrictive. The effective date of the most current edition of the ANSI B77.1 standard shall be one year from the ANSI Accredited Standards Committee B77 (ASC B77) approval date.”

Then ... “The following sections of the standard are modified as follows:....,” with no six month grace period or effective date changes.

I would anticipate the stakeholders (and their insurance underwriters) would agree to the above understanding that to reference an out-of-date ANSI B77.1 standard would potentially increase the risk to public safety. Contact them.

RESPONSE: The Department is concerned with the unintended consequences that adopting a standard automatically might create, but thanks the commenter for the suggestion.

12. COMMENT: The mailing address of ANSI in N.J.A.C. 5:12-1.4(a)1. appears incorrect.

RESPONSE: Thank you. The New York address for ANSI is updated upon adoption. The address for ANSI is also updated at N.J.A.C. 5:12-6.3.

### **Federal Standards Statement**

No Federal standards analysis is required because the rules readopted with new rules and repeals are not adopted under the authority of, or in order to implement, comply with, or participate in any program established under Federal law or any State statute that incorporates or refers to a Federal law, standards, or requirements.

**Full text** of the readopted rules can be found in the New Jersey Administrative Code at N.J.A.C. 5:12.

**Full text** of the adopted new rules follows (additions to proposal indicated in boldface with asterisks **\*thus\***; deletions from proposal indicated in brackets with asterisks **\*[thus]\***):

#### 5:12-1.4 Referenced publications

(a) The following publications contain provisions, which through incorporation by reference in the text of this chapter, constitute requirements of this chapter. In the event a provision in any of the following publications conflicts with a provision of this chapter, this chapter shall govern.

1. The following publications are available from the American National Standards Institute, **\*[11 West 42<sup>nd</sup> Street]\* \*25 West 43rd Street, 4th floor\***, New York, New York 10036:

i. (No change from proposal.)

#### 5:12-4.2 Adoption as amended of ANSI B77.1 – 2011 and ANSI B77.1a-2012

(a)-(b) (No change from proposal.)

(c) The following sections of the standard are modified as follows:



1. Section 1, General Requirements, shall be amended as follows:

i. Section 1.2.4.1, the words “design review completed by” shall be deleted and the words “all required design review documents, per N.J.A.C. 5:12, submitted to” shall be inserted in their place. Also, the words “the effective date of this standard” shall be deleted and the date “[six months after the effective date of this amendment]” **August 21, 2017** shall be inserted in their place. Also, add the following sentence at the end of the first paragraph: “However, design review documents submitted to the authority having jurisdiction between [(the effective date of this amendment)] **February 21, 2017** and [(six months after the effective date of this amendment)] **August 21, 2017**, when not in compliance with requirements of this edition, shall comply with requirements of the code in force immediately preceding [(the effective date of this amendment)] **February 21, 2017**.”

ii. Section 1.2.4.3, the words “design review completed by” shall be deleted and the words “required design review documents, per N.J.A.C. 5:12, submitted to” shall be inserted in their place. Also, the words “the effective date of this standard” shall be deleted and the date “[six months after the effective date of this amendment]” **August 21, 2017** shall be inserted in their place.

2. Section 2, Aerial Tramways, shall be amended as follows:

i. Section 2.3.1.1, the date “Nov.1, 2007” shall be deleted and the date “[twelve months after the effective date of this amendment]” **February 21, 2018** shall be inserted. Also, the date “Nov.1, 2008” shall be deleted and the date “[twenty-four months after the effective date of this amendment]” **February 21, 2019** shall be inserted.

ii. Section 2.3.4.4, the words “with initial testing being completed prior to \*[(twelve months after the effective date of this amendment)]\* **\*February 21, 2018\***” shall be added to the end of the first sentence.

3. Section 3, Detachable grip aerial lifts, shall be amended as follows:

i. Section 3.3.1.1, the date “Nov.1, 2007” shall be deleted and the date “\*[(twelve months after the effective date of this amendment)]\* **\*February 21, 2018\***” shall be inserted.

Also, in four places the date “Nov.1, 2008” shall be deleted and the date “\*[(twenty-four months after the effective date of this amendment)]\* **\*February 21, 2019\***” shall be inserted.

ii. Section 3.3.4.4, the words “with initial testing being completed prior to \*[(twelve months after the effective date of this amendment)]\* **\*February 21, 2018\***” shall be added to the end of the first sentence.

4. Section 4, Fixed grip aerial lifts, shall be amended as follows:

i. Section 4.3.1.1, the date “Nov.1, 2007” shall be deleted and the date “\*[(twelve months after the effective date of this amendment)]\* **\*February 21, 2018\***” shall be inserted.

Also, in four places the date “Nov.1, 2008” shall be deleted and the date “\*[(twenty-four months after the effective date of this amendment)]\* **\*February 21, 2019\***” shall be inserted.

ii. Section 4.3.4.4, the words “with initial testing being completed prior to \*[(twelve months after the effective date of this amendment)]\* **\*February 21, 2018\***” shall be added to the end of the first sentence.

5. Section 5, Surface lifts, shall be amended as follows:

i. Section 5.3.1.1, the date “Nov.1, 2007” shall be deleted and the date “\*[(twelve months after the effective date of this amendment)]\* **\*February 21, 2018\***” shall be inserted.

Also, in three places the date “Nov.1, 2008” shall be deleted and the date “\*[(twenty-four months after the effective date of this amendment)]\* **\*February 21, 2019\***” shall be inserted.

6. Section 6, Tows, shall be amended as follows:

i. Section 6.3.1.1, the date “Nov.1, 2007” shall be deleted and the date “\*[(twelve months after the effective date of this amendment)]\* **\*February 21, 2018\***” shall be inserted.

Also, the date “Nov.1, 2008” shall be deleted and the date “\*[(twenty-four months after the effective date of this amendment)]\* **\*February 21, 2019\***” shall be inserted.