DIVISION OF CODES AND STANDARDS
Carnival-Amusement Rides
Adopted Amendments: N.J.A.C. 5:14A-1.3 and 4.13

Adopted: August 25, 2021, by Lt. Governor Sheila Y. Oliver,
Commissioner, Department of Community Affairs.
Filed: September 20, 2021, as R.2021 d.117, without change.
Effective Date: October 18, 2021.
Expiration Date: March 15, 2022.

Of the current definitions, that should be addressed through training. The
there be specific owners or operators who are confused by the application
2003, and he believes them to be well-understood. He stated that, should
this rulemaking changes well-understood definitions for definitions that
serve carnival-amusement ride owners’ and operators’ interests. The
amendments amount to “self-serving propaganda” for the ride industry.
Instead, these proposed amendments utilize standards promulgated on a
national level by an ASTM committee of technical experts to ensure that
rides are developed, operated, and inspected to rigorous safety standards.
These proposed amendments were introduced to the Carnival-Amusement
Ride Safety Advisory Board by the Department for their review and
recommendations. The members are respected industry representatives
with a demonstrated expertise in understanding the impact of the rules on
both the industry and the residents of the State who frequent carnival
and amusement parks, and the Department; their role is advisory. The Carnival
Amusement Ride Safety Act, at N.J.S.A. 5:3-33, requires that the Board
be comprised of carnival-amusement industry representatives, and the
Department has a page on its website dedicated to the Board. The website
discloses the members’ names and their affiliation to the industry. This
information is public and available online at https://www.nj.gov/dca/divisions/codes/advisory/rideboard.html.
2. The commenter stated that the current definitions have existed since
2003, and he believes them to be well-understood. He stated that, should
there be specific owners or operators who are confused by the application
of the current definitions, that should be addressed through training. The
commenter asked what is considered to be a serious incident/injury under
the current definitions. He suggested the Department review the reports it
has received over the last decade to generate a list for use in providing
examples of reportable incidents/injuries. He also suggested the
Department review the reports it has received for examples that were not
deemed to be serious incidents/injuries, so that examples may be provided
to address these issues, as well. The commenter questioned how many incidents/injuries were not initially reported, but, upon discovery, were
deemed serious incidents/injuries warranting report to the Department.
The commenter stated that, if the Department is unable to create a list of
examples from its own reports, it should review California’s incident
reports.
RESPONSE: The commenter is correct that there is no legal
requirement for the Department to utilize ASTM F770
definitions or terminology.
RESPONSE: The commenter is correct that these definitions are
longstanding; however, the reason they are proposed for change is not due
to a lack of understanding, but to a change in how incidents are handled.
For example, under the existing definition, any transportation to the
hospital is considered a serious injury to be reported to the Department.
This is because, when these definitions were first adopted, it was thought
that transportation to the hospital only happened as a result of serious
injuries. The trend has been for patrons, as well as owners and operators,
to be more cautious when injuries occur and now opt for transportation to
a hospital even for injuries that would not be classified as serious; this is
done to ensure that the individual knows the extent of their injuries, even
if they are minor. As a result, many non-serious injuries are reported as
serious. The Department declines to create lists of incident report
specifies, from its own or other reports; the change in definition suits the
needs of the State without need for such listings.
3. COMMENT: The commenter stated that the way the Department
presented the proposed amendments implied that the reporting of non-
serious incidents/injuries to the Department is a major issue that this
rulemaking seeks to address. The commenter asked if this is a problem
because the non-serious incidents become part of the data collection and
are not able to be removed or noted by the Department. He further asked
what happens to erroneously reported non-serious incidents/injuries.
RESPONSE: The reporting of non-serious incidents is the issue that
this rulemaking seeks to address. It is a problem because it inflates the
number of major incidents and allows for the wrongful interpretation that
rides in the State are more dangerous. Though the Department is able to
note in its records when an incident was reported because of transportation
to a hospital, it is not clear to everyone who may access this data that
transport to the hospital does not mean that the incident resulted in a
major injury or illness; the Department is able to confirm through its records
that a large number of incident reports include hospital transports for events
that did not result in serious injury. This means that transportation to the
hospital is not a good indicator for the seriousness of an injury. The
proposed definitions rectify this issue both for the Department’s records
and the public’s understanding of incidents reported. Aside from this
issue, the Department does not receive erroneously reported non-serious
injuries on a regular basis.
4. COMMENT: The commenter asked why ASTM F770-18 was the
referenced standard used for the definitions, as opposed to either the 2019
edition of ASTM F770, or the 2015 edition, which is the edition currently
adopted by the Department. He asked if the terminology within all of these
editions has changed, because he does not have copies of this ASTM
standard. The commenter also found areas throughout the chapter with
different editions of the ASTM standard referenced. He further noted that
there is no legal requirement for the Department to utilize ASTM F770
definitions or terminology.
RESPONSE: The commenter is correct that there is no legal
requirement for the Department to utilize ASTM F770. However, because
that standard is the Standard Practice for Ownership, Operation,
Maintenance, and Inspection of Amusement Rides and Devices, and
ASTM’s process for developing standards ensures that documents are
reviewed by committees of technical experts to ensure accurate, relevant,
and high-quality standards for any applicable field, ASTM F770 is an
appropriate standard for the Department to reference in applying the
Carnival-Amusement Ride regulations and will help provide uniform data
across states. The Department utilized ASTM F770-18 in its initial review
of the definitions for adoption. The definitions did not change in the 2019
edition of the standard. The Department also recognizes that there are
sections at N.J.A.C. 5:14A where other editions of ASTM F770 are
referenced; the Department is undertaking further review of this chapter,
and will be updating relevant standards within separate, future
rulemakings.
5. COMMENT: The commenter took issue with the statement that
carnival-amusement ride owners and operators understand the
requirements set forth in ASTM F770. He felt that in deletion of the term
“first-aid,” the Department implied that ride owners and operators do not
understand what first-aid treatment is. The commenter noted that the
Department’s proposed definition of “minor injury/illness” is an injury or
illness that may or may not require emergency first-aid. He noted that this
means that such situations may or may not be reportable. The commenter

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expressed his understanding of “emergency first aid” as “the first response to a life-threatening medical emergency,” and he believes “first aid” is a different term with a different meaning; he did not provide his understood definition of “first aid.” The commenter stated that he felt the Department would want to be informed of occurrences meeting his definition of “emergency first aid.”

RESPONSE: The Department did not delete the definition of “first-aid” due to a lack of understanding; rather, as noted in the Summary statement in the notice of proposal, the definition was deleted because the new definition of “minor illness/injury” includes first-aid treatment. The definition of “emergency first-aid,” as specified in the definition of “minor illness/injury” includes incidents where treatment is “limited to such things as the dispensation of over-the-counter medication to plastic adhesive strips, cleaning, rest, and other similar duties or assistance.” This definition aligns with the old definition of “first aid,” which addressed one-time treatment for scratches, small cuts, burns, splinters, and minor complaints.

Because ride owners and operators know and understand the ASTM definitions, and those definitions replace the current definitions within N.J.A.C. 5:14A without losing the scope of minor injuries/illnesses, this change in definitions is appropriate. It will also help New Jersey align with other states utilizing ASTM F770 and provide a more uniform national approach to defining and recording incidents on amusement rides.

6. COMMENT: The commenter stated that the Department’s proposed amendments result in a change of what incidents and injuries are reportable. He stated that these changes will result in fewer incidents/injuries from being reported to the Department. He asked if the Department’s intent in doing so was to make it appear that amusement rides in New Jersey are safer than those in other states.

RESPONSE: The commenter is correct that there should be fewer reports as a result of these changes. This is because, as explained in the Responses to Comments 2 and 3, voluntary transportation to the hospital is not always a good indicator of serious incidents and has been inflating the number of reports in recent years, even though rides have not become any less safe in those years. The Department’s intention is not to make rides appear safer, but to ensure that rides do not appear less safe than they are, as well as align with the national consensus standard.

7. COMMENT: The commenter thought that he understood what incidents—accidents, incidents, and mechanical breakdowns—needed to be reported based on the current regulations and felt that the proposed amendments changed his understanding of what is reportable. He stated the following: “Based on the literal reading of the Department’s proposed amendments; a broken finger (stable or simple fracture) or even a broken arm or leg (stable or simple fracture) is not a reportable serious injury/illness; a second or third degree burn may not be a reportable injury/illness; an individual who becomes dizzy after a ride and states they are okay may not be a reportable serious injury/illness; an individual becomes unconscious on a ride may not be a reportable serious injury/illness; and more. Again, based on the literal reading of the Department’s proposed amendments, serious injuries caused by operator error or rider action or act of God are not reportable serious injuries. Only ‘serious injury/illness that can be attributed to an amusement ride’ need be reported. Is this the intent of the Department? Or are patron- and/or operator-driven serious injuries and acts of God to be reported to the Department? Serious injuries should be reported regardless of cause. (Didn’t the Legislation want this?) If an individual breaks a leg (not a compound fracture) getting off a ski lift is that considered a serious reportable injury? An individual who breaks a leg (stable or simple fracture) getting off the sky lift amusement ride is not considered a serious reportable injury? Please explain.”

RESPONSE: The Department disagrees with the commenter’s interpretation of “attributable to the ride” as not including operator- or patron-driven injuries and does not anticipate that those involved in the industry would interpret it the same way. If an operator- or patron-driven serious injury occurs during a ride’s operation, it is reportable to the Department because it is still attributable to the ride.

8. COMMENT: In addition to his prior comments, the commenter asked: “Would all of the following injuries be considered serious? Amputation; Spinal cord injury; Herniated disc; Concussion or cerebral hemorrhaging; Loss of consciousness; Injury to internal organs; Fractured bone or tooth; Cartilage, tendon, ligament, or muscle tear; Dislocation of a joint; Laceration or puncture requiring wound closure; Third or second degree burns; Struck by lightning; Punctured eardrum; Injury to eye; Electric shock; Near drowning; and others. I fail to see how the Department’s proposed definitions changes ensure clarity—please explain.”

RESPONSE: As stated in the responses to prior comments, if a serious injury occurs during a ride’s operation, it is reportable to the Department because it is still attributable to the ride. In accordance with the definition, a serious injury/illness is a personal injury/illness that results in death; dismemberment; significant disfigurement; permanent loss of the use of a body organ, member, function, or system; a compound fracture; or other significant injury/illness that requires immediate admission and overnight hospitalization and observation by a licensed physician. It is also important to note that the definition of minor injury states that it is only applicable if the injury cannot otherwise be classified as serious. With these two definitions in mind, all of the hypotheticals listed by the commenter would be considered serious injuries reportable to the Department if they occurred during a ride’s operation.

9. COMMENT: The commenter stated that the Department’s use of different definitions will lead to inconsistent reporting, which will result in poor data quality. He recommended that these proposed amendments not be adopted, and that the Department resolve the perceived and known reporting problems through further training and guidance. He also stated that the incident report form appears to be a part of the problem.

RESPONSE: The Department respectfully disagrees with the commenter. Currently, the quality of data is affected by the inclusion of non-serious incidents resulting in voluntary transportation to the hospital as a serious injury. The proposed new definitions will rectify this issue and result in clearer, more concise data. Should owners and operators have questions about the applicability of these new definitions, they can be addressed through training and guidance. Additionally, no users of the incident report form have expressed any confusion or difficulty in its use. If any problems are brought to the Department’s attention, the form can be amended.

Federal Standards Statement

No Federal standards analysis is required for the adopted amendments because the amendments are not being adopted in order to implement, comply with, or participate in any program established under Federal law or under a State law that incorporates or refers to Federal law, standards, or requirements.

Full text of the adoption follows:

SUBCHAPTER 1. GENERAL PROVISIONS

5:14A-1. Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise or the term is redefined for a specific section or purpose.

. . . “Illness” means personal discomfort resulting in treatment, including a personal illness, food poisoning, drug abuse, toxic inhalation, insect sting, or other similar occurrence.

. . . “Injury” means sustained bodily harm resulting in treatment, such as trauma, cuts, bruises, burns, and sprains.

. . . Minor injury/illness means injuries and illnesses that may or may not require emergency first-aid or significant treatment, or both, but cannot otherwise be classified as a serious injury or illness. This category includes incidents where treatment is limited to such things as the dispensation of over-the-counter medication or plastic adhesive strips, cleaning, rest, and other similar duties or assistance.

. . . “Serious injury/illness” means a personal injury/illness that results in death; dismemberment; significant disfigurement; permanent loss of the use of a body organ, member, function, or system; a compound fracture; or other significant injury/illness that requires immediate admission and overnight hospitalization and observation by a licensed physician.
SUBCHAPTER 4. OWNER RESPONSIBILITY

5:14A-4.13 Accident, incident, or mechanical breakdown reporting
(a) Shut down and report: When an incident has occurred involving ejection from a ride, failure of a critical structural or mechanical component, or serious injury/illness that can be attributed to an amusement ride that is regulated by this chapter, the owner shall:
1. Report the incident to the Department within 24 hours of the incident by telephone or email;
2. Prepare a written incident report and send it to the Department by email within five days of the incident or by mail at PO Box 508, Trenton, NJ 08625 postmarked within five days of the incident. The written incident report shall be on a form designed by the Department and shall include a description of any planned corrective action and a time frame for its completion; and
3. (No change.)
4. Rider removal due to an area-wide power failure, or at the request of rider, or due to rider misbehavior, shall not be considered evacuation for the purposes of this subsection.
(c) Record: When any incident occurs that is not covered by (a) or (b) above involving any type of ride-related minor injury or illness or complaint that was observed by the owner or operator or reported to the owner or operator by the rider, the owner shall keep a record of such incident, including pertinent information, in a form that is easy to access and read and that is readily available for inspection by the Department.
1. The information shall include at least the following:
i. vi. (No change.)

DIVISION OF CODES AND STANDARDS

Uniform Construction Code

Adopted Amendment: N.J.A.C. 5:23-6.8
Adopted: July 16, 2021, by Lt. Governor Sheila Y. Oliver, Commissioner, Department of Community Affairs.
Filed: September 23, 2021, as R.2021 d.121.
Authority: N.J.S.A. 52:27D-119 et seq.
Effective Date: October 18, 2021.
Expiration Date: April 20, 2022.

Summary of Public Comments and Agency Responses:

Comments were received from Mitchell Malec, a retired former employee of the Department of Community Affairs (Department).
1. COMMENT: The commenter felt that amending N.J.A.C. 5:23-6.8(e)(1) and (h)10i to be consistent with N.J.A.C. 5:23-6.8(h)(13i) and (h)20i is inappropriate, because the subsections address different subject matters and should remain as written. He posits that N.J.A.C. 5:23-6.8(h)(13i) and (h)20i apply to only increases because they address combustion air requirements and noted that, if an existing gas furnace has the required combustion air opening, by deduction, a replacement of the same size or smaller will automatically meet the requirements of the code and would not require calculations. Conversely, N.J.A.C. 5:23-6.8(e)(1) and (h)10i, require the proper sizing of the appliance and equipment. The commenter stated that these subsections should apply to increases and decreases, as “rules of thumb” were used in the past and resulted in improper sizing of equipment. The commenter feels the Department should require load calculations to prevent oversized equipment from continuing to exist. The commenter stated that “a good Heating, Ventilating, Air Conditioning, and Refrigeration (HVACR) contractor should know how to determine heating/cooling loads to size equipment and software programs exist to perform calculations,” and cited Manual J and Manual N calculations, which have been required for new and replacement equipment for decades. He noted that energy savings measures often take place and that changes of use may also impact sizing of equipment.

RESPONSE: The Department agrees that, in the past, “rules of thumb” utilized for sizing were often problematic and resulted in oversized equipment. This rulemaking seeks to remedy that issue by allowing for the replacement of equipment with a decrease in British thermal unit (BTU) input without incurring additional costs. The installation of equipment with reduced BTU input ratings and increased efficiencies (for example, annual fuel utilization efficiency (AFUE)) represents an improvement and mitigates the issue of oversized equipment. The Department disagrees that these replacements should require calculations, which could add expenses to the replacement and discourage building owners from making the improvement.

2. COMMENT: The commenter provided examples related to natural gas furnace sizing and recommended, “the Department look into taking some educational courses on why correct appliance/equipment sizing is important for both new and replacement installations.” He notes that, pursuant to the proposal, if these sections are applicable only to increases, then the replacement of a 100,000 BTU furnace (80 percent AFUE, 80,000 BTU output) with an 80,000 BTU furnace (80 percent AFUE, 64,000 BTU output) would be allowed even though the replacement may result in an undersized unit. The commenter also stated that, as written, the rule would allow for a replacement of a unit with the same size where the original equipment was sized based on “rule of thumb” and was never improperly sized. The commenter asked that, without requiring a sizing calculation, how is an HVACR contractor to determine the size of the unit? The commenter provided examples of factors to be considered when replacing a unit, including new insulation, energy efficient doors and windows have been installed, duct work has been sealed, trees have been removed, and a basement has been changed into a living space, all of which could change the amount of heating needed.

RESPONSE: As stated in the Response to Comment 1, these replacements can be done appropriately without the need for detailed calculations. As the commenter noted, the vast majority of systems were oversized based on rules of thumb, and it is unlikely that decreasing the equipment size will lead to situations where an undersized unit is installed, especially considering that the replacement equipment will be more efficient.

3. COMMENT: The commenter noted that the notice of proposed Summary states that the amendments would mean that replacement equipment having better efficiency ratings will no longer be subject to N.J.A.C. 5:23-6.8(h)(10i). The commenter argued that the proposed amendments have no link to AFUE, nor do they require that the AFUE be equal or better than the unit being replaced. Thus, a 95 percent AFUE could be replaced with a 90 percent AFUE unit of the same input rating without requiring a calculation. He further noted that AFUE does not include heat losses of the duct system or piping and inquired as to whether the Department would allow for an oversized unit knowing that the system is leaking 35 percent. The commenter provided a history of AFUE percentages in equipment over time and stated that the minimum efficiency level was set at 78 percent in 1992. Since then, appliances have been able to achieve over 95 percent AFUE. He stated that if leaky piping is replaced or the energy efficiency of the building is otherwise improved, it may be possible for a 100,000 BTU (80 percent AFUE, 80,000 BTU output) unit to be replaced with an 80,000 BTU (90 percent AFUE, 72,000 BTU output), or smaller, unit. The commenter stated that this should warrant calculations, and the proposed amendments should not be adopted. The commenter also stated that new construction in the State has required heat loss and cooling load calculations for quite some time, and that perhaps, if proper sizing calculations were completed and no changes have been made to the building and system components, then a like-for-like replacement could be allowed without requiring new calculations. He noted that the Manual J load calculations does not tell a user what size heating or cooling system is needed, but how much heating and cooling the system needs to provide. He asked if a calculation is required where an 80 percent AFUE single-stage unit is changed to an 80 percent AFUE