

July 9, 2019

William Koffel
Chair NFPA Committee SAF-HEA

RE: WASTE CONTAINER SIZE TASK GROUP

Task Group members are listed below:

- x Steve Spanbroek
- x Pete Larrimer
- x John Rickard
- x Lennon Peake

Dear Mr. Chair,

The task group on waste container size was asked to evaluate the current NFPA 101 requirements on waste containers to determine if modifications to the Code language was warranted based on the hazards posed by the waste containers. The task group traded several emails in early 2019 and met via conference call on April 19, 2019. The following is a summary of the does language history and task group discussions/recommendations.

Existing NFPA 101 waste container language

18/19.7.5.7 Soiled Linen and Trash Receptacles.

18/19.7.5.7.1 Soiled linen or trash collection receptacles shall not exceed 32 gal (121 L) in capacity and shall meet all of the following requirements:

- (1) The average density of container capacity in a room or space shall not exceed 0.5 gal/ft² (20.4 L/m²).
- (2)* Mobile soiled linen or trash collection receptacles with capacities greater than 32 gal (121 L) shall be located in a room protected as a hazardous area when not attended.
- (3) Container size and density shall not be limited in hazardous areas.

Δ 18/19.7.5.7.2* Containers used solely for recycling clean waste or for patient records awaiting destruction shall be permitted to be excluded from the requirements of 18/19.7.5.7.1 where all the following conditions are met:

- (1) Each container shall be limited to a maximum capacity of 96 gal (363 L), except as permitted by 18/19.7.5.7.2(2) or (3).
- (2)* Containers with capacities greater than 96 gal (363 L) shall be located in a room protected as a hazardous area when not attended.

- (3) Container size shall not be limited in hazardous areas.
- (4) Containers for combustibles shall be labeled and listed as meeting the requirements of FM Approval 6921, *Approval Standard for Containers for Combustible Waste*; however, such testing, listing, and labeling shall not be limited to FM Approvals.

NFPA 101 Waste Container requirement history

The waste container requirement entered NFPA in the 1994 edition. The waste container language was originally proposed to be in the annex base on a code change Proposal (ROP) and ended up in the body of the Code based on a code change Comment (ROC).

(Log # 365)

Committee: HEA

101 - 896 - (31-4.5.5 Exception (New)): Accept in Principle
SUBMITTER: William E Koffel, Browning-Ferris Industries, Inc.
RECOMMENDATION: Add an Exception to 31-4.5.5 to read as follows:

Exception: Medical waste containers not located in patient sleeping rooms.

SUBSTANTIATION: Containers provided for potentially infectious medical waste differ from other waste containers. Medical waste containers are specifically designed and strategically located to minimize the occupational risk associated with handling potentially infectious medical waste. Such containers are often provided in soiled utility rooms, laboratories, pharmacy, operating and emergency rooms and at nurses' stations. As such, access to medical waste containers is either limited or closely supervised.

In accordance with OSHA Regulations, medical waste containers must be closable, labeled or color coded, puncture resistant and constructed to contain all contents and prevent leakage of fluids. OSHA Regulations also prohibit smoking in areas where medical waste is used (29 CFR 1910).

The contents within medical waste containers also varies from other solid waste containers. Much of the combustible contents will be mixed with fluids. Medical waste is regulated by DOT, EPA and OSHA and includes the following cultures and stocks; human pathological wastes; human blood and blood products; sharps, animal waste, isolation waste and unused sharps. Due to the cost associated with disposing of potentially infectious medical waste, it is in the facility's best interest to minimize the amount of waste which is placed in medical waste containers. The health care staff has learned to distinguish between medical waste and other solid waste. Furthermore, due to the nature of the contents, medical waste containers tend to be removed at more frequent intervals than other solid waste containers.

In summary, due to the need to minimize the occupational risk associated with handling potentially infectious medical waste and the fact that the quantity of waste is somewhat controlled and not located in patient sleeping rooms, the proposed exception is warranted.

COMMITTEE ACTION: Accept in Principle.

Delete 31-4.5.5 and A-31-4.5.5.

COMMITTEE STATEMENT: Although the above committee action is not what the submitter requested, the effect of the committee action should meet the submitter's intent. It is the size and the material within the container, rather than the container itself, which is the issue requiring attention. It should, therefore, no longer be

(Log # CP419)
Committee: HEA

101 - 958 - (A-12-3.2.1): Accept

SUBMITTER: Technical Committee on Health Care Occupancies

RECOMMENDATION: Move the current verbiage associated with Appendix Note A-12-3.2.1 so that it becomes a second paragraph. Insert the following as a new first paragraph of A-12-3.2.1.

A-12-3.2.1 Rooms or areas containing soiled linen or trash collection receptacles with an aggregate capacity not greater than 30 gallons should not be considered a hazardous area. Mobile soiled linen or trash collection receptacles with an aggregate capacity greater than 30 gallons should be located in a room protected as a hazardous area when not attended.

SUBSTANTIATION: The proposed appendix wording provides a reasonable approach to help in determining when soiled linen or trash collection receptacles need to be protected as hazardous areas. The mobile carts of the greater capacity, when not attended, should be positioned within rooms that are protected as hazardous areas. The proposed appendix wording clarifies committee intent.

COMMITTEE ACTION: Accept.

VOTE ON COMMITTEE ACTION: AFFIRMATIVE on all returned ballots

101- 683 - (A-12-3.2.1): Accept in Principle

SUBMITTER: Doug Erickson, American Hospital Assoc.

COMMENT ON PROPOSAL NO: 101-958

RECOMMENDATION: Revise text as follows:

A-12-3.2.1 Rooms or areas containing soiled linen or trash collection receptacles with an aggregate capacity not greater than ~~30 gallons~~ .5 gallons per/sq ft with no individual container greater than 32 gallons should not be considered a hazardous area. ~~Mobile soiled linen or trash collection receptacles~~ Rooms or areas with an aggregate capacity greater than ~~30 gallons~~ .5 gallons per/sq ft or individual mobile containers greater than 32 gallons should be located in a room protected as a hazardous area when not attended.

SUBSTANTIATION: A survey of AHA member facilities was conducted and the average aggregate capacity of soiled linens and trash receptacles in patient rooms, critical care rooms, operating rooms, recovery rooms, emergency rooms, soiled utility rooms and suites was between 32-96 gallons. Data collected indicates typical patient rooms from 32 gallons, operating rooms from 64 gallons, soiled utility rooms from 96 gallons, and suites much higher. Rooms within a health care facility with an aggregate capacity of soiled linens or trash less than 30 gallons is almost non-existent.

COMMITTEE ACTION: Accept in Principle.

Do not add an appendix note as shown in the TCR. Rather, add a new 31-4.5.5 to read:

31-4.5.5 Soiled linen or trash collection receptacles shall not exceed 32 gallons in capacity. The average density of container capacity in a room or space shall not exceed 0.5 gallons per sq ft. There shall not be more than 32 gallons capacity within any 64 sq ft area. Mobile soiled linen or trash collection receptacles with capacities greater than 32 gallons shall be located in a room protected as a hazardous area when not attended.

Exception: Container size and density shall not be limited in hazardous areas.

COMMITTEE STATEMENT: The Committee Action should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 18

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 17

NOT RETURNED: Keisler

The ROP proposed mobile trash and soiled linen containers that exceeded 30 gallons to be protected as hazardous areas.

The ROC removed "mobile", 30 gallons became 32 gallons and the .5 gallon density limitation was added. This was determined a "reasonable approach" to determine if the receptacles needed to be protected as hazardous areas.

2012 – Containers up to 96 gallons permitted for recycling clean waste or records awaiting destruction provided container met FM Approval standard 6921

2018 – Provision limiting 32-gallon capacity in 64 sq ft area removed

Task group discussion on existing waste container requirements

1. Many standard patient recycling containers currently in use in health care facilities slightly exceed 32 gallons
2. Unable to locate any patient recycling containers meeting FM Approval Standard 6921 which also comply with HIPPA for patient privacy by providing a securable container. This limits container size to 32 gallons for patient records.
3. A kitchen located in a health care occupancy is not permitted to be provided with a standard size trash can of 50 gallons.
4. NFPA Research Report Structure Fires in Health Care Facilities 2011 – 2015 indicates that trash/rubbish/waste is not a major contributor to injuries related to a fire event. There was no documented instances of fires spreading from one trash can to another. A summary of the data in the report is below:

	Number of Fires	Number of Injuries	Number of Deaths
Hospitals	320	3	0
Nursing Homes	120	1	0
Hospitals and Hospices	100	1	0
Mental Health Facilities	50	0	0
Clinics and Dr. Offices	50	0	0

- a. The NFPA report did not distinguish between trash/rubbish/waste container located outside vs. inside.
5. Modifying the 32 gallon limitation to 64 gallons would make the requirement consistent with the threshold for a room storing soiled linen or trash to be considered a hazardous area is 64 gallons in the Protections for Hazards section.

Waste container requirement modifications recommended for NFPA 101 2021 Edition

18/19.7.5.7 Soiled Linen and Trash Receptacles.

18/19.7.5.7.1 Soiled linen or trash collection receptacles with capacities greater than ~~shall not exceed 32 gal (121 L)~~ 64 gal (242 L) shall be located in a hazardous area when not attended. ~~in capacity and shall meet all of the following requirements:~~

- (1) ~~The average density of container capacity in a room or space shall not exceed 0.5 gal/ft² (20.4 L/m²).~~
- (2)* ~~Mobile soiled linen or trash collection receptacles with capacities greater than 32 gal (121 L) shall be located in a room protected as a hazardous area when not attended.~~
- (3) ~~Container size and density shall not be limited in hazardous areas.~~

Δ **18/19.7.5.7.2*** Containers greater than 64 gallons (242 L) used solely for recycling clean waste or

for patient records awaiting destruction shall be permitted to be excluded from the requirements of 18/19.7.5.7.1 where all the following conditions are met:

- (1) Each container shall be limited to a maximum capacity of 96 gal (363 L), ~~except as permitted by 18/19.7.5.7.2(2) or (3).~~
- (2)* ~~Containers with capacities greater than 96 gal (363 L) shall be located in a room protected as a hazardous area when not attended.~~
- (3) ~~Container size shall not be limited in hazardous areas.~~
- (4) Containers for combustibles shall be labeled and listed as meeting the requirements of FM Approval 6921, *Approval Standard for Containers for Combustible Waste*; however, such testing, listing, and labeling shall not be limited to FM Approvals.

The task group looks forward to further discussion the rational for our recommendations at the second draft meeting.

Respectfully Submitted,
KOFFEL COMPLIANCE, LLC



Lennon Peake, P.E., SASHE
Director
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