

INFORMATIONAL ARTICLE – January 2021

Storing Bulk PPE...Have You Created a Hazardous Area?

Like so many new focus areas and challenges brought on by the pandemic, the emphasis on personal protective equipment (PPE) has created some unintended consequences in regard to Life Safety Code® compliance. With various states mandating significant PPE quantities to be on-hand, some organizations are forced to create new storage locations. This sometime involves the repurposing of existing spaces that were utilized differently in the past. In many cases, this essentially creates “new” hazardous areas.

The Life Safety Code® has long required special protections for “hazardous areas.” Locations commonly considered under this designation are storage rooms, soiled utility rooms, boiler rooms, laboratories and bulk laundry areas. For existing hazardous areas (in place prior to May 2016), the requirements include:

- Enclosure of the space with 1-hour fire resistance rated construction (if the room is provided with sprinkler protection, the enclosure is not required to be rated but should limit the passage of smoke).
- Doors shall be self-closing and positive latching.

In rooms constructed or transformed into hazardous areas after May of 2016, the requirements are similar. However, the 1-hour enclosure of the room or space is required and cannot be off-set with sprinkler protection unless it is a storage space less than 100 square feet.

Historically, if an organization looked to convert an existing space into a storage room, for PPE or any type of combustible storage, the conversion of the space triggered the provisions for “new” construction in the Life Safety Code®. However, such rooms or spaces usually do not have 1-hour rated enclosures.

The 2012 edition of the Life Safety Code® provides some potential relief to organizations who are converting existing spaces into storage areas. The 2012 edition includes a new chapter (Chapter 43 – Building Rehabilitation) that clarifies the requirements applicable when implementing repairs, renovations, changes of use, or even changes in occupancy type. In particular, Section 43.7.1.2(2) provides guidance on the requirements around converting existing spaces into newly designated hazardous areas. Essentially, a 1-hour enclosure of the newly created hazardous area is not necessary if the following criteria are met:

- The area is not greater than 250 square feet
- The room in being converted to a location used for storage
- The building is fully sprinklered

This provision in Chapter 43 provides much more flexibility when reallocating space and developing additional storage locations, a common practice at this moment in time as organizations stock-up on PPE. All door provisions for hazardous areas still apply.

As always, knowledge of the applicable codes and standards is your best tool for ensuring compliance. You can purchase a copy of the Life Safety Code® (NFPA 101) online at www.nfpa.org.