Compressed Gas Policy Development Checklist

The requirements in this checklist are based on Joint Commission Environment of Care (EC) Standard EC.02.05.09: The [organization] inspects, tests, and maintains medical gas and vacuum systems. The elements of performance (EPs) in this standard are based on requirements in Chapters 5 and 11 of the 2012 edition of the National Fire Protection Association (NFPA) Health Care Facilities Code (NFPA 99-2012).

The Joint Commission does not require use of this checklist, but the items in it reflect Joint Commission requirements unless otherwise indicated.

The answers to each question should ideally be Yes. Please explain any No responses in the righthand column.

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| --- | --- |
| Organization:  |   Department/Unit:  |
| Date of Review:  | Reviewer(s):  |

| Joint CommissionStandard | Questions | Yes | No | If No, Explain |
| --- | --- | --- | --- | --- |
| Best practice | Did you complete an inventory of all compressed gas sources in the facility, including the following, for example?* Oxygen and other nonflammable compressed gases
* Helium to fill balloons in the gift shop.
* Cafeteria drink dispensers with carbon dioxide tanks
* Acetylene used for cutting torches in the plant
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| **Compressed Gas Policy Development** |
| EC.02.05.09,EP 3 | Does your compressed gas policy state that containers, cylinders, and tanks must be fabricated, tested, and marked in accordance with the National Fire Protection Association (NFPA) *Health Care Facilities Code* (NFPA 99-2012), Sections 5.1.3.1.1–5.1.3.1.7? |  |  |  |
| EC.02.05.09, EP 4 | Does your policy address the following?* For locations containing positive-pressure gases other than oxygen or medical air, entrance doors must be labeled as followed: “Positive Pressure Gases: NO Smoking or Open Flame. Room May Have Insufficient Oxygen. Open Door and Allow Room to Ventilate Before Entering.”
* For locations with central supply systems or cylinders that contain only oxygen or medical air, entrance doors must be labeled as follows: “Medical Gases: NO Smoking or Open Flame.”

*(Note: Consult NFPA 99-2012, Chapters 5 and 11, as applicable.)* |  |  |  |
| EC.02.05.09, EP 5 | Does your policy state the following?* A precautionary sign readable from 5 feet away is on each door or gate of a cylinder storage room, where the sign, at a minimum, includes the wording “CAUTION: OXIDIZING GAS(ES) STORED WITHIN. NO SMOKING.”
* Storage must be planned so cylinders are used in the order they are received from the supplier.
* Only gas cylinders and reusable shipping containers and their accessories are permitted to be stored in rooms containing central supply systems or gas cylinders.

*(Note: Consult NFPA 99-2012, Chapters 5 and 11, as applicable.)* |  |  |  |
| EC.02.05.09, EP 6 | Does your policy state that if your organization uses cylinders with an integral pressure gauge, a threshold pressure considered empty must be established when the volume of stored gases is as follows?* When more than 300 cubic feet but less than 3,000 cubic feet, the storage locations are outdoors in an enclosure or within an enclosed interior space of non- or limited-combustible construction, with door (or gates outdoors) that can be secured. *(Note that oxidizing gases must not be stored with flammables and must be separated from combustibles by 20 feet [5 feet, if sprinklered] or enclosed in a cabinet of noncombustible construction having a minimum ½-hour fire protection rating.)*
* When less than 301 cubic feet in a single smoke compartment, individual cylinders available for immediate use in patient care areas with an aggregate volume of less than or equal to 300 cubic feet are not required to be stored in an enclosure. *(Note: Cylinders must be handled with precautions, as specified in NFPA 99-2012: 11.6.2.)*
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| EC.02.05.09, EP 12 | * Does your policy address all compressed gas sources identified on the inventory?
* Does the policy address the following?
* Labeling
* Handling
* Transporting
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| EC.02.05.09, EP 12 | * Does your policy define an “empty” cylinder (for example, less than 500 pounds per square inch)?
* Does the policy require that “empty” cylinders be segregated from all other cylinders that are intended for patient care use?
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| EC.02.05.09, EP 12 | Does your policy require “empty” cylinders to be marked as such by either of the following methods?* Individual tagging, as indicated by the integral gauge (and defined by policy)
* Group signage, as appropriate
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| EC.02.05.09, EP 12 | Does your policy prohibit adaptors or conversion fittings? |  |  |  |
| EC.02.05.09, EP 12 | Does your policy require valve protection caps (if supplied) to be secured in place when a cylinder is not in use?  |  |  |  |
| EC.02.05.09, EP 12 | Does your policy require that oxygen cylinders, containers, and associated equipment be protected from contamination, damage, and contact with oil and grease?  |  |  |  |
| EC.02.05.09, EP 12 | * Does your policy require that compressed gas cylinders be kept away from heat and flammable materials?
* Does the policy state that cylinders must comply with the following temperature requirements?
* Cylinders must not exceed a temperature of 130°F.
* Nitrous oxide and carbon dioxide cylinders must not reach temperatures lower than manufacturer recommendations or –20°F.
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| EC.02.05.09, EP 13 | Does your policy prohibit transfilling cylinders in any compartment with patient care? *(Note: For full text, refer to NFPA 99-2012: 11.6.1; 11.6.2; 11.6.5; 11.7.3)* |  |  |  |
| EC.02.05.09, EP 13 | Does your policy outline the following transfilling requirements? * A designated area must be used that is away from any section of the [facility] where patients are housed, treated, or examined.
* The designated area must be separated by a barrier of at least 1-hour fire-resistant construction from any patient care areas.
* Transfilling of cylinders is limited to the same gas (no mixing of different compressed gases).
* Transfilling of liquid oxygen is done only in an area that is mechanically ventilated and sprinklered and has ceramic or concrete flooring.
* The storage and use of liquid oxygen in base reservoir containers and portable containers must comply with NFPA 99-2012: 11.7.2–11.7.4. *(Note: For full text, refer to NFPA 99-2012: 11.5.2.2; 11.5.2.3.1; 11.5.2.3.2; 11.7.2–11.7.4)*
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| EC.02.05.09, EP 14 | Does your policy state that freestanding cylinders must be properly chained or supported in an appropriate cylinder stand or cart? *(Note: For full text, see NFPA 99-2012: 11.6.2.3)* |  |  |  |
| EC.02.05.09, EP 14  | Does your policy indicate that cylinders stored in the open must be protected as follows?* Against extremes of weather and from the ground beneath to prevent rusting
* During winter, against accumulations of ice or snow
* During summer, screened against continuous exposure to direct rays of the sun in those localities where extreme temperatures prevail

*(Note: For full text, see NFPA 99-2012:* *11.6.5.4)* |  |  |  |

*Source: Tenet Health. Used with permission.*