



PS-40—2023

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POSITION STATEMENT

REQUIREMENTS FOR INSTALLERS OF BULK MEDICAL GAS SUPPLY SYSTEMS

Question

Do the training and certification requirements of ASSE 6010, *Professional Qualification Standard for Medical Gas Systems Installers*, apply to personnel who install and maintain bulk medical gas supply systems, such as oxygen storage tanks [1]?

Answer

No; the ASSE 6010 standard does not apply to personnel who install and maintain bulk medical gas supply systems [1].

Reasons

The training and certification requirements for these personnel are found in CGA M-1, *Standard for Medical Gas Supply Systems at Health Care Facilities* or ASSE 6015, *Professional Qualification Standard for Bulk Medical Gas Systems Installers* [2, 1]. The terms medical gas systems, bulk medical gas systems, and bulk medical gas supply systems may appear interchangeable but refer to different equipment and systems found at a health care facility. The similar wording can lead to application of the wrong standard for training and certification requirements.

Medical gas is delivered to a health care facility's patients via two systems connected in series:

- a bulk medical gas supply system, also called a bulk medical gas system; and

NOTE—For the purpose of this publication, it will be referred to as a bulk medical gas supply system.

- a medical gas system.

See Figure 1 for an example of the two systems.

Medical gases are stored in a bulk medical gas supply system, either in liquid or gas form. The medical gas is supplied in gas form through piping and components up to the source valve, which marks the beginning of the medical gas distribution system. The piping and components including and downstream of the source valve constitute the medical gas system and provide the mechanism for supplying medical gases to patients and other use points.

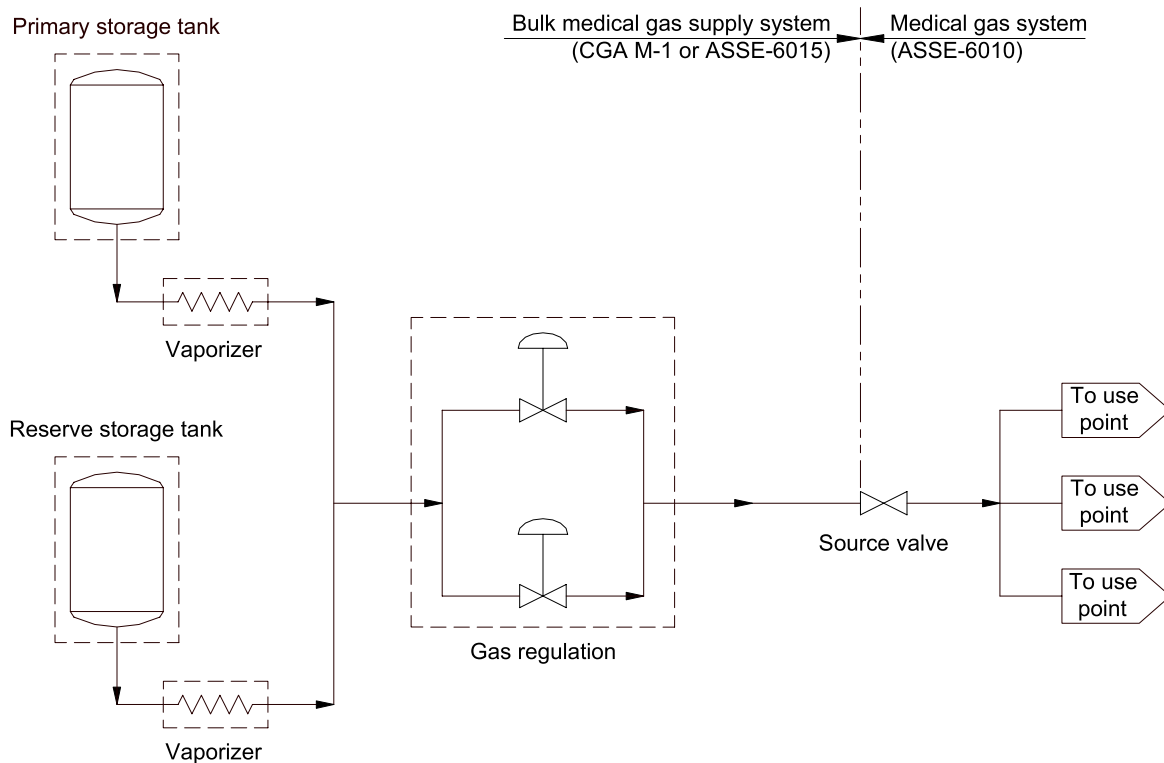


Figure 1—Example of a bulk medical gas supply system and medical gas system

NFPA 99, *Health Care Facilities Code* defines both systems; see the following excerpts [3]:¹

3.3.19 Bulk System. An assembly of equipment for supplying compressed gas (consisting of, but not limited to, storage containers, pressure regulators, pressure relief devices, vaporizers, manifolds, and interconnecting piping) that terminates where the gas, at service pressure, first enters the main line. The storage containers are either stationary or movable and include unconnected reserves on hand at the site, and the source gas is stored as a compressed gas or cryogenic fluid.

3.3.19.1 Bulk Inert Gas System. A bulk system with a storage capacity of more than 566 m³ [20,000 ft³ (scf)] of inert gas.

3.3.19.2 Bulk Nitrous Oxide System. A bulk system with a storage capacity of more than 1452 kg (3200 lb) [approximately 793 m³ (28,000 ft³) at normal temperature and pressure] of nitrous oxide.

3.3.19.3 Bulk Oxygen System. A bulk system with a storage capacity of more than 566 m³ (20,000 ft³) at normal temperature and pressure of oxygen.

3.3.109 Medical Gas System. An assembly of equipment and piping for the distribution of nonflammable medical gases such as oxygen, nitrous oxide, compressed air, carbon dioxide, and helium.

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