We have reviewed the proposed *medical gas system plans* for the project facility. Our review is to ensure compliance with the minimum code requirements related to fire and life safety as set forth in the 2022 California Fire Code, 2022 California Building Code, and 2021 NFPA 99. The following selected comments shall apply to this project:

- The maximum pipe support for copper pipe shall not exceed 7 feet for 3/4-inch diameter pipe and 6 feet for 1/2-inch and 5/8-inch diameter copper pipe. (NFPA 99 5.1.10.11.4)

- All medical gas tube shall be identified by the manufacturer’s markings “OXY,” “MED,” “OXY/MED,” etc. (NFPA 99 5.1.11)

- Provide the following signs and/or labels:
  a. A manual shut-off valve shall be provided on all supply piping and appropriately labeled: i.e., “*Oxygen Shutoff Valve*” or “*Oxygen Main Shutoff Valve*."
  
  b. “*NO SMOKING – OXYGEN / NITROUS OXIDE*” sign posted on medical gas system room door. (NFPA 99 5.1.3.1.9)
  
  c. Each valve, manifold and all piping shall be labeled:
     - Oxygen: *Green* background with white letters.
     - Nitrous Oxide: *Blue* background with white letters.
  
  d. All piping shall have labels indicating contents with lettering at least 3/8 inches high and a direction of flow arrow, including piping in walls and above suspended ceilings. Piping labels shall be provided at the following locations: (NFPA 99 5.1.11.1.4)
     - Each valve.
     - Both sides of each floor, wall or ceiling penetration.
     - Each change of direction.
     - Every 20 feet or fraction thereof.

(CONTINUED OVER)
Secure all compressed gas cylinders from lateral movement and accidental damage. (NFPA 99 11.6.2.3)

Provide permanent and durable NFPA 704 placard identifying the hazards (Health - ______, Fire - ______, Instability - ______, and ______ ) of medical gas (___________) stored and used to be posted on the entrance of the facility and medical gas room door. (CFC 5003.5)

The exterior medical gas system room shall conform to the Fire Code for one-hr. fire-resistive room and ceiling construction, fire sprinklered, one-hr. fire resistive self-closing door (with smoke seals), and exterior ventilation with one exterior vent within 6 inches of the floor and one exterior vent within 6 inches of the ceiling. (CFC 5306.2.1)

Where an exterior wall is not provided for the exterior room above, a 1-hour interior room shall be provided. The medical gas system room shall conform to the Fire Code for one-hr. fire-resistive room and ceiling construction, fire sprinklered, one-hr. fire resistive self-closing door (with smoke seals), and the room shall be ventilated per the Mechanical Code via a 1-hour shaft to the exterior. (CFC 5306.2.2)

In lieu of exterior/interior rooms, approved Gas Cabinets may be utilized in accordance with CFC 5306.2.3

Provide sprinkler protection for exterior and interior rooms. Submit two copies of fire sprinkler plans. Medical gas system room in an un-sprinklered building may be sprinklered - using domestic plumbing piping: copper or steel pipe. (CFC 5306)

Licensed plumbing contractor (C-36) may install domestic sprinkler systems for medical gas rooms in accordance with NFPA 13. Domestic sprinkler pipe shall be equipped with an accessible ball valve shutoff with a hose bib at the end of the piping. Pipe size shall be minimum 1" and according to Pipe Schedule System per NFPA 13.

Penetrations of fire-resistive assemblies shall be protected by an approved penetration fire stop system with the F rating not less than the rating of the one-hr. fire-rated wall or ceiling assembly penetrated. (CBC 714)

Prior to final inspection, copy of the required Third Party Verification Field Report shall be available for Fire District record keeping. Report shall document all inspections passed in accordance with Chapter 5 NFPA 99 2021.

Additional comments: ________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

Contact the Fire District at 925-941-3300 ext. 3902 (minimum two working days’ notice required) to schedule the Medical Gas System Pressure Test and Medical Gas Final Inspection available Monday through Thursday excluding holidays.

On the morning of the inspection, a confirmation telephone call made to the Fire District at 925-941-3300 is necessary between 8:00 and 8:30 AM. Otherwise, the inspection will be cancelled.

Final acceptance is subject to field inspections and tests.

Approval does not relieve the designer / contractor from complying with all applicable fire code requirements, nor does it abrogate the requirements of other authorities having jurisdiction.