Scope:
Whereas glass blowing involves the storage and use of flammable and oxidizing gases, and such gases are defined as hazardous materials in the fire code and since glass blowing is a hot works process, this policy shall provide the requirements necessary to conduct a safe glass blowing operation.

Policy:
All hazardous materials used for glass blowing shall be stored and used in accordance with the provisions of the adopted fire code.

A permit is required to store and use any flammable or oxidizing compressed gas or cryogenic fluids beyond the Maximum Allowable Quantities listed in the fire code. This permit must be obtained prior to the installation or use of any flammable or oxidizing compressed gasses or cryogenic fluids.

Plan review and permit fees shall be based on the fee schedule for Flammable and Combustible Liquid Storage Tanks.

An inspection shall be required to assure compliance with the permit. Other unannounced inspections may occur to verify safe conditions on the premises at all times.

Any changes to the permit conditions without approval by the Fire Marshal’s office shall void the permit.

All piping associated with this process shall be approved prior to exposure of any oxidizing or flammable liquids or gases into it.

Also, the Fort Collins City Code, Chapter 11, Hazardous Materials Transportation shall apply while transporting these hazardous materials into and through the city limits, specifically:

Sec. 11-4 (d) Motor vehicles carrying such hazardous materials which are making local pickups and/or deliveries must be operated over the safest and most direct route to and from the origination or destination point. Such routes shall not pass through residential areas unless
there is no practical alternative. In all instances, such vehicles shall comply with local truck
routing and weight limit restrictions and prohibitions.

Liquid Oxygen (LOX) shall only be allowed in a residential setting after a neighborhood meeting
has been conducted, and the site has been approved.

All piping systems shall be marked with contents name and direction of flow. Bollards shall be
placed to safeguard cylinders and dewars from vehicular traffic. Cylinders and dewars shall be
secured to prevent falling. Cylinders and dewars shall be located in accordance with the
provisions of the fire code in respect to buildings, property lines and combustibles.
Incompatible gas cylinders shall be separated from each other in storage. Compressed gas
systems shall be designed by persons competent in such design.
Application for Glass Blowing Process

Because glass blowing involves hazardous materials and is a hot works process, the following information is required to obtain a permit:

General Provisions: (Other provisions may apply.)

1. Name of owner

2. Address

3. Type of Flammable Gas: __________________________ Quantity (ft³) __________

4. Type of Oxidizing Gas: Gaseous (ft³) ______________
   Liquid Oxygen (total liters) ______________

5. Is this a business? □ Yes □ No
6. Is this a hobby? □ Yes □ No

8. Plans are required indicating the location of all hazardous materials (flammable gas, oxidizing gas).
9. The storage of liquid oxygen (LOX) shall not be allowed in garages (due to contamination potential) but in a detached building.
10. LOX shall only be allowed in a residential setting after a neighborhood meeting has been conducted, and the site has been approved.
11. Ventilation shall be required at a minimum rate of 1 cfm/square foot.
12. Piping shall be installed by certified welder.
13. Piping shall be certified as inspected prior to exposure of any oxidizing fluid being introduced into it.