

Monthly Safety Notice

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National Baromedical Services, Inc.

The Act of Delegating

Background

Chamber manufactures such as Sechrist Industries state in their *User's Manual* that a regular program of inspections, performance verifications and factory authorized preventative maintenance will keep the chamber in optimal condition. Daily, weekly, monthly, and semi annual performance verifications are recommended. They also recommend only factory authorized preventative maintenance to be performed once a year.

The Issue

In certain settings, hyperbaric staff members who are recognized as local experts after hyperbaric training and certification may not always be the ones who conduct these checks. For instance, some hospitals only permit Engineering or Facilities Management employees to undertake inspections on rooftops for safety reasons. Perhaps there are instances where hyperbaric staff feel uneasy about climbing on ladders or walking on roofs.

Staff have been known to make assumptions that these other department personnel are well versed on what they are supposed to be doing and why. Instead, we have seen what appears to be a certain amount of 'pencil whipping' on some hyperbaric facility check off lists.

NFPA 99 provides expectations on how a facility is to be built out and maintained. Proper gas labeling and care for the environment in which a chamber exists are extremely important examples to help mitigate against potential catastrophe.

Below are a few of the examples we have observed, and came as a surprise to involved hyperbaric team members:

Figure 1. Rooftop chamber exhausts missing all signage that should be indicating that oxygen is emitting and no smoking allowed.



Figure 2. Same rooftop as in figure 1, however the air handler next to chamber exhaust piping has both a sign stating it has air AND a lower sign stating oxygen. Obviously this sign was mistakenly placed on the wrong gas exhaust system, which could be very confusing in an emergency. (Note: this was corrected when first noticed but over the course of the year it somehow got posted again on the air handler)



Figure 3. The Sechrist User Manual states: *Do not use wire mesh smaller than 0.5 inch at the cover of the exhaust vent. Lint from the vent system may collection the screen and restricts the purge flow rate.* As you can see in this picture the wire mesh is too fine and therefore debris has collected inside.



Figure 4. Example of the proper size of the wire mesh cover installed on the chamber exhaust pipe; free of potential occlusions.



Figures 5, 6 and 7. NFPA 50 states the liquid oxygen 'farm' should be free of debris and plant life that may represent a fire hazard. Note the excessive amount of greenery and miscellaneous rubbish stored in and nearby the farm.



Figures 8, 9, and 10. NFPA 99 requires all gas to be labeled. This includes the lines coming from the facility wall to the chamber. As you can see from the figures attached they are in various stages of becoming compliant. Figure 10 represents the most ideal sign. Also note the dry wall and piping should be a safe secure junction with a finishing grommet to ensure the gas pipeline does not cause the sheetrock wall to crumble around it.



Figure 11. At some point, the warning sign on this fence was acceptable; however, sun and weather exposure has since worn away the word 'Danger'. Illegible signs should be replaced.



Figure 12. The exhaust pipes here are clearly labeled and covered with an appropriate wire mesh screen. However, the space where the oxygen is emitting is filled with dry flammable dead leaves. This 'collection area' should be inspected and cleaned out frequently to reduce the risk of fire from a spark.



Bottom Line

You are the trained and certified hyperbaric staff member. It is the hyperbaric staff member responsibility to understand the importance of these inspections and to ensure they are completed correctly. Ideally, you should be performing them. However, if you must delegate then you must educate and inspect the work being delegated. Never assume it is being done properly just because you had a conversation about it once. Request photographs from the roof to confirm checks. Make sure the checklists are signed off with date, time and name by the inspector. If there are negative findings, they must be documented and communicated with the hyperbaric safety director. Issues must be corrected as soon as possible and may require temporary suspension of hyperbaric treatments until the issue(s) is resolved.