

ANSI Z358.1 Master Class – February 2025: Questions & Answers

- 1) **How do I order? Dust Covers - Would I need to provide an eye wash type?**
 - a. You'll want to go to the manufacturer's website to determine the correct type, if it's Haws's equipment please go to www.hawscos.com to find the correct part and you can visit our parts website www.hawscoparts.com to order replacements quickly and easily.

- 2) **Is there a way you could send the slides?**
 - a. The slides won't be available but the recording will be shared with you so you can utilize it to revisit the information shared during the live event.

- 3) **Does an inspection sheet need to be posted at the eyewash station?**
 - a. It is not required but that is recommended. Test tags are common but also not required, you can keep your testing records in any form you wish.

- 4) **What can one use to contain water when using a safety shower to avoid excessive flooding in say a teaching lab?**
 - a. The best way to protect the facility and nearby sensitive equipment is to utilize a "booth" type of equipment designed to capture the water that can then be pumped or drained away to your desired location. We offer both, however, many facilities that have no drains and no pumps to move that water.

- 5) **Is the water flow of emergency showers and/or eye wash stations required to be monitored by fire alarm systems?**
 - a. It isn't required to do this. Often there is a relay attached via a flow switch that will alert others locally of the emergency, these can be added to any shower or eyewash unit. It is then the supervisor/manager's responsibility to call 911.

- 6) **Best practice of locking out shut off valve seems to contradict best practice of not having a locking device in place indefinitely for LOTO - is there another option?**
 - a. I hear you, as they are intended to be temporary. Many devices exist outside of a specific LOTO device however there are LOTO practices that ensure a constant ON state to prevent harm. Many valves already include locking capabilities, those should definitely be used but where they can't, a lockout device works nicely.

- 7) **How do you measure this if you are using the sock that is covering the flow?**
 - a. When testing the shower, remove the sock, activate the shower and utilize a tape measure to determine the performance of the spray pattern. If you are in an area where this is not possible, so long as the water in the bucket

meets the 2-gallon waterline and there is no physical damage to the equipment then it can be assumed it is functioning normally as manufacturers are required to make these to conform to that standard.

8) I see some instances where eyewashes are installed at the back of sinks, where shorter individuals may not be able to get their eyes in the flush zone because they cannot bend over the countertop. Is there any specific guidance regarding this setup?

- a. This is quite common, we can only manufacture the product to automatically meet so much of the Z358.1 standard, OSHA standard, or ADA standard. We typically expect the employer to accommodate their employees' needs accordingly, however in the case of an individual that needs to utilize emergency fixtures that is either in a wheelchair or qualifies for ADA consideration due to extremes of physical size then the ADA will have guidance on how that should be installed.

9) Why don't eye washes require a floor drain? Or, in what situation is a floor drain required?

- a. We recommend a floor drain with every installation; local building code (IBC) is typically the authority when it comes to drainage in the facility. This can change from state to state quite a bit, so Z358.1 doesn't touch on it. We suggest looking at local requirements. Though most Architects/engineers will specify one in new buildings, many units missing floor drains were retrofit into place later.

10) What would be the requirements of weekly activation for portable units?

- a. Simply remove the dust cover for the tank and check the water level to ensure the manufacturer's recommended level is met.

11) Do you believe a Safety Shower "Station Mat" will help with running water after a shower is activated to stop slips and trips?

- a. Absolutely, so long as it has tapered edges to prevent tripping. I always recommend adding one to raise safety at the unit.

12) What is the minimum water quality standard required for safety shower and eye wash?

- a. The standard defines this as "Potable Water", so long as it meets that definition then it is good to go.

13) What thresholds are there for triggers that would require full eyewash station vs. wash bottles. IE: if at starting battery for a generator onsite... does that alone trigger a requirement for a full station?

- a. Bottles are only used to supplement primary 15-minute capable equipment. They are not to be used alone as a solution.

14) Do you not have to change-out the water in a gravity or pressure system?

- a. You do need to do this, if it's just water (no preservative) then about every two weeks is necessary. If your are using something like our 9082 preservative then every 4 months, and our 9083 stick is an annual change with the total life of the device being 3-years.

15) What is the best option for a remote location with no means of providing tempered water – ID

- a. Portables like our 7501, 7500, or 7603 units are perfect for these areas.

16) Is this ANSI incorporated into OSHA to stand up in court?

- a. Yes, OSHA clearly states that compliance with their 29 CFR 1910.151 c standard relies on our adherence to z358.1. Though not adopted as an OSHA standard it is still a national standard.

17) Could you expand on how eye wash bottle stations, apply toward compliance with accessing a eye/shower station within 10 seconds/55ft?

- a. Yes, these are only intended to help supplement equipment that is already in place, and can be used as immediate first aid treatment to clear vision and help lessen total injury prior to using 15-minute capable equipment.

18) Are doors considered obstructions?

- a. Yes, but so long as they open in the direction of the equipment, are non-locking, the hazard is non-corrosive, and they use a push bar it is compliant.

19) The tepid water temperature is also the perfect temperature for Legionella to grow - and it can grow within 6 days. These factors would indicate water safety is not reliable under the current requirements - thoughts?

- a. We agree, the standard needs to change to accommodate this as the growth temperature and upper limit overlap.

20) What determines needing a shower? Would Mechanics working on trucks need one?

- a. The SDS sheet, just check the first aid section. If it lists washing of the skin for 15-minutes, then a shower is needed.

21) I know there is no harm in documentation, but is there any requirement to document weekly testing?

- a. Yes, you must keep your records for 3 years. These documents are often one of the first things an inspector will ask for. I think 1910.440 mentions this under recordkeeping.

22) Does a construction truck on a job site need a portable unit?

- a. Construction is one of the industries that utilizes our portables the most, the hazards are frequently dust/particulates and require an eyewash. The 7501 for instance is easy to install and is non-permanent so it can serve the temporary work site.

23) I see a lot of eyewashes and shower station without a mixing valve in facilities. Will they be dinged for compliance failure?

- a. No, unless the temperature is outside of the 60°F – 100°F range for compliance.

24) Do drench hoses have the same annual testing requirements as regular eyewashes? specifically temperature test and time length (running the drench hose for 15 minutes). Again, this is the annual test, not the weekly test.

- a. Yes, they do, they are considered emergency equipment and have their own section in the standard. Annually it must meet the same testing requirements. Though most have an eyewash or eye/face wash head and are tested as an eye/face and drench hose unit. They must be non-injurious, activate in 1-second, etc.

25) Is a curb considered an obstruction?

- a. Yes, this is a tripping hazard. Though I find ramps to be a nice gray area, so long as the incline is slight and not steep then it should be fine.

26) Will weekly testing help avoid legionella?

- a. Other than a recirculation loop where the water is constantly moving, weekly testing is the best protection against legionella.

27) What are the ramifications for a company that chooses to hang portable units vs. avoiding the cost of installing plumbing of combo units?

- a. Not providing the proper equipment can have serious ramifications, knowing or willful ignorance of safety practices can come with a steep cost especially when someone's life is on the line. Including potential incarceration if it can be proved that corners were cut intentionally.

28) Is there a minimum height requirement for the water streams?

- a. They can not spray in a pattern where the top of the flow is under 33" from the floor.

29) What guidance should be given to employees with sewn-in wigs regarding proper rinsing of the head?

- a. This is an excellent question and not something I'd considered before. If it is a removable wig then it must come off, however if it is sewn-in then immediate removal is not an option, and they will need to trust the shower to do it's job effectively. I don't see any other way to safely remove something like this, though it will likely increase the seriousness of the burns.

30) Can the drain for eyewashes in a laboratory be plumbed or must go to the floor?

- a. They can most definitely be plumbed, and we recommend that drain be plumbed as it can create a puddle of the hazard you are washing off, not to mention slip hazards.

31) If I have an old shower and eyewash station not in service, is it better to remove or restore it?

- a. Remove it, best not have someone need it and run to it only to find it not operational. You are also held responsible for it as it is currently installed. Or restoring is also an option, more = better in my opinion.

32) How long will the on-demand webinar be available for reference?

- a. As long as we're in business (ish) and that nearly 120 year and going strong. Or until they change the standard... but I'll just make a new one.

33) Do we need to activate both the eyewash AND the shower weekly? Should we flush each line separately and both simultaneously?

- a. Both simultaneously is necessary, run them together if you can manage it.

34) As 151c is very general, will the SDS information suffice a requirement for an eyelash unit (plumbed)?

- a. Yes, it will, 151 c is very general and quite vague. I always look at the SDS sheets first.

35) What is an estimated timeline for the next revision year for Z358 and do you have insight of anticipated trends with developing/revising the standard?

- a. End of the year 2025 is the hope, again we sit on the board. I can't discuss changes now but there's some good stuff on the way.

36) What is the date for tepid to be added to eyewashes? Is there any 'grandfather' for existing eyewashes?

- a. All equipment must be in alignment with the current standard. There is no grandfather clause.

37) Do eyewash faucet retro attachments meet compliance?

- a. Yes, and often improves compliance, you don't need to meet the manufacturer's original design to meet compliance.

38) What resources do I have when the facilities/engineering staff at my institution refuse to do the annual testing on eyewashes/showers? I don't really want to call OSHA, but also want to make sure the students, staff, and faculty are protected.

- a. Education is always the best weapon, feel free to contact me if you need ideas. I would suggest doing a survey of the equipment so that you can show them (with photos) the potential failings and have a chat about what the consequences can look like. OSHA wagging their fingers can get quite expensive.

39) What is the best practice to do when the pressure drops aka, eyewash streams go very low because of bathroom usage?

- a. If it's tied in then I would recommend dedicating a separate line to the eyewash that won't fluctuate OR retrofit the unit with something like our AX13 kit that utilizes the industry minimum required GPM and PSI to operate, helping to improve performance and maintain functionality during pressure drops.

40) Self-contained eyewash for outdoor setting, what are options?

- a. Something like our 7501T can protect from freezing down to -30°F and we have an option for heat reflection as well.

41) How long can it take for the temperature to reach the required level? In other words, I have an eyewash that it takes 30 seconds to reach 60 degrees F. In my mind, that is unacceptable, the engineers seem to think it is fine.

- a. I agree and I find many facilities don't want to do the extra work to ensure a much more timely delivery of that compliant water range, and we want it to arrive as soon as possible. However, there are no time limits defined in the standard. Their thought process is that so long as it does eventually get there then it's ok, but we think this can force the user out of the equipment at the MOST CRITICAL POINT! Right? Near immediate is the goal and should be for everyone.

42) What is the part number for the 3-year cleansing stick?

- a. That is model #9083.

43) When testing the units, does OSHA look to see that the units are tested using the same time needed for the actual emergency use?

- a. No, they will simply check testing records. They can't actually verify that you've done full 15-minute tests.

44) Do emergency eye bottles become compromised when they are set up and exposed to the sun?

- a. I'm not sure on this one, you finally stumped me. I assume that yes they can be affected by the day to day warming and cooling. The bottles though are sealed and should last to the expiration date, you'll need to check their specifications.

45) Is the Haws 7501 good against freezing?

- a. If used in conjunction with the 7501BL! This is our heat traced jacket, simply attach to the tank and plug it in. They come in a bundle to as the 7501T. Good down to -20°F

46) Would doors be considered an obstruction if the eyewash is outside room?

- a. Yes, anytime the user needs to move through the doors to get from hazard to equipment then those doors must meet the requirements I mentioned.

Thank you everyone for the excellent questions! If you need anything else please let me know.

For additional questions/comments, please reach out to justind@hawSCO.com