



What's it take to be a HazMat Technician?

Adapted from "So you want to join a HazMat Team" by Mark Schmitt, Firehouse.com contributor

Have you ever thought to yourself "I'd like to join a HazMat team, but..."? What are some of the "buts" you used to talk yourself out of pursuing the interest? ? You're no good at chemistry? You could never get into a Level A suit? you're not smart enough? The list goes on and on. These are all valid concerns on your part, but you may have answered them incorrectly.

So, just what kind of qualities does it take to be a successful member of a HazMat Team?

The following are just some of the qualities, abilities and attributes that are required for membership on a Hazardous Materials Team:

Team Player Attitude - While many jobs and volunteer opportunities require teamwork, this is especially important on a HazMat Team. You simply can't be on the Entry Team all the time getting your picture in the paper. There are too many other areas that need to be staffed, such as Decon, Research, Back-Up Team, Logistics, etc. No one can do it all on their own, regardless of what they think. The ideal HazMat Technician fits in with the rest of the team, follows the chain of command as opposed to freelancing and is ready, willing and able to get in, get dirty and get the job done, regardless of their assigned task.

Willingness To Learn - It is impossible to know everything about all facets of a HazMat response. The field is simply too large and complex. Know-It-Alls tend to know less than they think they do and may end up getting someone hurt, or worse. Don't make this mistake and assume you know everything just because you just received your HazMat Technician certification.

Dedication & Commitment - The HazMat Team member must be dedicated to the Team, going above and beyond the minimum requirements. This means investing a lot of time up front for the appropriate and required training often at night and on weekends. It takes several years to gain the necessary training and skills to be a competent HazMat Technician. Training, exercises, and responses can demand a lot of time that might otherwise be devoted to family and work. Be certain you can balance these demands.

Pride - A HazMat Team is a Special Team, like a USAR or Dive Rescue Team. A person should be able to take pride in their unit and their equipment. This doesn't imply that the HazMat Technician is an egotist, just someone who takes care of their unit and equipment, and conducts themselves in a professional manner when working with the team, other responders, and the public.

Self-Motivation - The best HazMat Technicians are those that are self-motivated and disciplined. Don't wait for someone else to ask you if you want to learn a skill or about piece of equipment. You should be ready to go to the truck, pull equipment off of the truck and familiarize yourself with it on your own. The same applies to coursework and other training. Take advantage of the opportunities that are out there in terms of classes, both online and practical. Be willing to approach senior personnel and ask questions. Be willing to admit when you don't know something. During a response is no time to ask for needed training.

Science / Technical Background - You certainly don't have to be a PhD in Organic Chemistry to be on a HazMat Team, but some knowledge of chemistry is desirable. This can be a coursework background in high school or college chemistry or a Chemistry of Hazardous Materials course. Lab experience certainly isn't a requirement, but it helps to know what might happen if Chemical A mixes with Chemical B.

Analytical skills - HazMat incidents don't always fit the norm. What do we do if we have a leak that none of our kits can patch? What happens when Plan A fails and Plan B isn't working like it should? The ideal Technician doesn't panic, but steps back, takes an analytical approach by looking at the entire incident and comes up with a solution by thinking outside of the box.

Planning & Management Abilities - Many HazMat Technicians will progress and become HazMat Officers. You should be able to handle the planning and management of training and equipment programs as they relate to the HazMat Team. This can be much more involved than the planning and management for a fire or EMS company given the increased training requirements and larger equipment caches.

Mechanical Skill - HazMat is not firefighting. Mechanical aptitude is a definite asset due to the tools we use (chlorine kits, Electronic monitors, etc.). Can you work with tools? Are you good with your hands? Can you patch a leak totally by feel? Are you creative enough to design a solution using the tools at your disposal in cases where you don't "the right tool for the right job"?

Computer Skills - Can you navigate through a computer database in order to perform chemical research? Can you input the data in order to plot a plume and interpret the map that the program produces? Are you willing and capable of learning these skills?

Calm, Cool & Collected Personality- HazMat Teams, like other specialty teams, are called upon to handle the incidents that other first responders cannot due to the special training and equipment that are required. These incidents are generally of a higher profile than a routine fire or EMS call. For this reason, a HazMat Technician must be able to remain cool under pressure, maintain the ability to function and be able to direct non-Technician personnel in assisting the HazMat Team in defensive and support functions.

Claustrophobia Concerns - A HazMat Technician may have to perform offensive functions in Level A personal protective equipment (PPE). A potential Technician needs to be made aware of this up front. Working in Level A is nothing like working in structural firefighting gear or even other levels of PPE. Some people are able to work in Level A with no difficulties, some with few difficulties and others not at all. The potential Technician needs to recognize their limitations and be up front about them with the rest of the Team. It is quite possible that through time, training and familiarization, some people will be able to work through their concerns and be able to be fully functional while wearing Level A PPE.

Communications Skills - A HazMat Technician must be able to adequately portray what they have seen and done in the Hot Zone. This communication may be verbally, via radio or face to face. It may also be drawn in the form of a diagram of the area in question. The communication may also be in the form of hand signals in areas where noise prevents verbal communication or where the radio fails, forcing the use of alternative means of communication. Writing skills are also important in order to document the incident in after action and cost recovery reports. Remember, if you didn't write it down, it didn't happen. Verbal communication skills may also be valuable should the Technician be required to testify about their actions in a civil or criminal proceeding relating to the incident.

Jack of all Trades - It helps if the Technician knows a little about a lot of things as opposed being an expert on just one. A working knowledge of chemistry, plumbing, electricity, carpentry, computers, carpentry, etc. will provide a knowledge base to draw from during those times when you are confronted by a situation that wasn't exactly covered in the last course you took.

These are just a few of the qualities that are preferred in a new HazMat Technician. It doesn't take a chemical engineer, chemistry major or rocket scientist to be a HazMat Technician. What it does take is commitment, dedication and a willingness to learn. Don't let the lack of a chemical background or a failed attempt at Chemistry 101 in college stop you from joining a HazMat Team. Go ahead and give it a try. It just may turn out to be one of the best moves you'll ever make.

Want to learn more about HazMat and the Erie County Hazardous Materials Response Team?

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