Frank Burg, CSP, has made occupational safety and health his life’s work. He worked for OSHA for 18 years as a compliance officer, program director and trainer at the OSHA National Training Institute. He was corporate safety director for Fishbach and Moore Inc., a large electrical contractor. For the past 17 years, he has been president of Accident Prevention Corp., an SH&E consulting firm that provides training, loss control and expert testimony for industrial and construction clients. Frank is a member of ASSE’s Standards Development Committee; membership chair for the ANSI A10 Accredited Standards Committee for Construction and Demolition Operations; and chair of the A10.28, A10.40 and A10.49 standards subcommittees. He holds a master’s in Industrial Psychology (Ergonomics) from University of Wisconsin.

PS: Describe your background and your role with the A10.49 subcommittee that oversees the draft standard, Control of Health Hazards in Construction and Demolition Operations (ANSI/ASSE 10.49-200x).

Frank: After more than 35 years in the safety and health profession, including 18 at OSHA, I have been keenly interested in health-related standards as I have found that acute injury standards have received more attention than some of the chronic health effects.

I remember going to factories and telling managers about the then–new HazCom standard and seeing the difficulty employers and workers were having with the concept that it was against the law to have employees suffer health effects from job-related activities. The remainder of my career has been dedicated to preventing safety- and health-related injuries and illnesses.

Over the years, OSHA was not able to update exposure levels to well-known health hazards, such as silica and lead, and was having difficulty promulgating new health standards that were badly needed for employee protection. In addition, I was surprised to learn that ANSI had never proposed a health standard for construction.

As A10.49 chair, I lead the discussion and help resolve conflicts. This means acknowledging differences of opinion on controversial issues. I work for mutual understanding directed at achieving reasonable goals for the standard. Both at the meeting table and behind the scenes, I attempt to get everyone involved thinking about the meaning of our words to the thousands in the U.S. construction workforce. Some compromises are always involved in the process, but for the most part, I have found these dedicated professionals will not compromise on issues involving worker safety and health. As long as we can continue to have fine safety and health professionals on these committees, the goal of having a new standard can be achieved.

PS: Why was the A10.49 standard initiated? What is its current status?

Frank: A10.49 was initiated because significant health hazards are associated with construction, including silica, lead, mercury, coal tar and other chemical exposures both within the construction industry and at facilities where construction takes place. Many construction worker exposures occur at facilities such as chemical plants and refineries considered within the general industry standards. There is a need, especially at the level of small and medium construction industries, to evaluate health hazards and to determine a reasonable approach to prevent illnesses and their associated costs.

We are making significant progress in providing the construction industry with tools to identify potential health hazards and with decision matrices for reasonable and responsible solutions. The tools the standard can provide are expanded as we can produce appendices with Internet links that offer a world of information regarding potential dangers and solutions. The standard should remove the feeling of being overwhelmed by the complexity and detailed nature of health hazards and solutions, and should inform construction employers about simple, inexpensive approaches that, in most cases, may be conducted internally.

Many small and medium construction employers believe that health hazard compliance means big dollars to be spent on engineers and industrial hygienists, while the solution might be as simple as changing materials or wetting the work environment to control the dust.

PS: What health hazards are typically present in construction and demolition operations? Which of these hazards does the draft standard specifically address?

Frank: The hazards are so numerous we cannot address them all, and the list keeps growing. One of the first issues we faced was whether there should be a separate standard for each health hazard, much like OSHA has separate standards for lead, asbestos, beryllium and other substances. There are also side issues on subjects such as ionizing and nonionizing radiation and other topics that may or may not be considered under the health heading. The fact that construction activities take place in most workplaces means that there is potential construction worker health hazard exposure to every dangerous chemical, and construction activities can expose other workers to health hazards on multiemployer worksites.

The health problem is so complex that it requires a performance-based approach. The committee determined that rather than trying to solve every individual health problem in construction, it is more beneficial to create a matrix for the construction employer to determine
what issues are of concern for its particular operations, then provide viable sources of information about potential health hazards.

The standard identifies various construction work activities and potential exposures associated with health hazards such as silica and lead, and it provides tools such as checklists and decision trees that employers can use to get more information; it points them in the direction for the most practical solution and additional expertise. From MSDS and the history of construction activities, we suggest the process of health hazard evaluation, then send employers to sources of the latest information on health hazards so they can make a decision about appropriate steps.

**PS: How is A10.49 unique?**

**Frank:** The performance approach is similar to the approach taken in the A10.40 ergonomics standard. Rather than issue a standard with volumes of technical information, the standard allows employers to investigate individual health hazards and keep up with an ever-changing technology of practical solutions. It addresses the issue with plain language, looks for problem areas that employers will face, then points them in the right direction to find additional help and expertise. An employer can use numerous options and tools, ranging from the well-known hierarchy of controls to enlisting the expertise of a specialist such as an engineer or industrial hygienist.

**PS: Why has there been opposition to standards addressing ergonomics and health?**

**Frank:** The reason many oppose standards development is that they fear the standards will be used for the purpose of litigation against the employer. I believe this is shortsighted because the standard can be used to protect the employer from liability. When an accident, injury or illness occurs, there will be litigation in any case. Without a standard, the process can be left only to the opinions of the experts and the jury. A standard every construction employer has the opportunity to comply with provides an effective defense to litigation.

In addition, compliance with the standard is proactive for safety and health, which will minimize losses and save the employer money. These are reasonable consensus standards where all parties, including the employer, have an opportunity to participate. This is far different from having the government develop and enforce a standard.

**PS: What challenges has the subcommittee experienced while drafting the standard? How has it overcome them?**

**Frank:** One problem is some may wish to have a “cookbook” of solutions to the health problems in construction. Historically, standards have been of the specification type, telling construction employers exactly what they need to do to comply with the standard. In the past, the problem with these specification standards was that they did not allow construction employers the flexibility to initiate unique solutions or alternatives that cannot be included within the body of the standard. A performance-type standard such as A10.49 does not tell employers exactly what to do to gain compliance but allows them to use a systematic approach to the entire worker health issue.

Another challenge is that we have many leading health hazard experts represented on our committee. These are brilliant people, all of whom have different ideas. They come from the private sector, government and unions, and many have made health issues their life’s work. Some of the best ideas and concepts are too academic to be understood and used by the construction industry. The challenge is to develop a standard that includes these academic concepts and can also be understood and used by the superintendent and foreman on the jobsite. This is not easy.

In addition, everyone must compromise, and no one gets everything s/he wants. In the end, we almost always end up with a consensus standard that does not satisfy anyone completely. We know the standard will be updated and improved every 5 years. The way to overcome differences and conflicts is to set objectives and to use team-building with reasonable expectations. We must have an understanding that construction employers are counting on us to keep them updated and informed regarding the modern customs and practices within the industry.

**PS: Why have no federal regulations ever addressed health hazards in construction and demolition operations?**

**Frank:** The HazCom standard is one of the most important standards in OSHA’s history. It requires construction employers to look at MSDS and to make a hazard determination regarding chemicals in the workplace. This was a great start, and now the A10.49 subcommittee is taking the next logical step to help construction employers identify and prioritize potential health hazards and to provide them with information about where to get more guidance.

I see the A10.49 standard as an expansion and extension of the HazCom standard in that, like HazCom standard language, we are not addressing each and every potential health hazard in the workplace; rather, we are giving construction employers the tools to solve the health hazard problem. It is much easier for construction employers to deal with a program for health hazard solutions than volumes of technical requirements for the solution of each health problem.

**PS: If approved, how will A10.49 supplement or enhance the other A10 standards?**

**Frank:** The A10.49 standard is a missing link in the body of what I believe is exceptional standards development by the ANSI A10 Accredited Standards Committee for Construction and Demolition Operations. The ability to collect the best experts in the field, gain balanced consensus and update standards every 5 years is a great benefit to the construction industry. I believe eventually the body of A10 standards will represent the most viable documents for the customs and practices of safety and health within the construction industry. A10 is constantly looking to develop new standards needed by the industry.

One example is expanded use of wind turbines throughout the nation. This is a major change, and A10 is working on a standard to address the new hazards associated with construction of these towers. There is nothing to prevent the development of additional health standards for individual health hazards in the future if it is determined that it is necessary to have a specific standard for hazards such as lead, silica or asbestos.