
COOK PAINT & VARNISH
1412 KNOX
NORTH KANSAS CITY
MO.

Complying With OSHA

By William J. Rothwell

If your firm isn't a manufacturer, you've probably never had to worry about OSHA regulations. But the rules have changed. Many employees who work with such common equipment as cleaning supplies and copying machines are now protected by OSHA. Which of your employees are affected? What kind of training and information should you provide? Learn how to make your company safe and legal.

Poof! Just like that, you may find yourself in the safety-training business if

- you work as a trainer in a nonmanufacturing firm (not in the construction industry);
- your firm has not previously been regulated on chemical safety;
- your company is located in a state that has not enacted a federally approved program regulating hazardous substances.

While safety training has been a concern in manufacturing firms for at least 20 years, it is now a fact of life for many trainers in nonmanufacturing firms. If you train in a nonmanufacturing firm with more than 10 employees and if you are not employed by the public sector, you now must conduct safety training on hazardous substances for employees who come in contact with them.

According to the Occupational Safety and Health Administration's (OSHA) *Fact Sheet No. 87-25*, OSHA "has expanded protection under its Hazard Communication Standard to include all workers exposed to hazardous substances in all industrial sectors, not just those in the manufacturing sector covered under the current law." The new standard had been scheduled to take effect on May 23, 1988. Nonmanufacturing firms gained a temporary reprieve when the Associated Builders and Contractors petitioned the Court of Appeals for the District of Columbia for a stay of the expanded regulation. That stay, however, has since been removed, and OSHA began to enforce the new regulation in September 1988.

What does that mean to you, a trainer in a nonmanufacturing setting, who has had little or no reason to learn about safety training on hazardous substances? To put it bluntly, it means that you now should find out what you need to know—unless you've been able to convince some other unit of your company to meet the training challenges of the new OSHA standard.

Safety training is now a fact of life for many trainers in nonmanufacturing firms

What is the standard?

The *Federal Register* of August 24, 1987, contains the text of the new standard, titled "Hazard Communication." The standard "requires nonmanufacturing employers to establish hazard-communication programs to transmit information on the hazards of chemicals to their employees by means of labels on containers, material safety data sheets, and training programs. This action will reduce the incidence of chemical-related occupational illnesses and injuries in nonmanufacturing workplaces."

Although the new regulations rival the Internal Revenue Code in complexity, they essentially require nonmanufacturing firms to do the following:

- Establish a written hazard-communication policy and distribute it to all employees.
- Remove old state posters on hazardous substances and post new ones printed by OSHA at all commonly used employee entrances and exits.
- Establish a routine way of obtaining material safety data sheets (MDS) from manufacturers of any chemicals purchased by the company. If you have never heard of an MDS, then you should find out from your facilities-management or purchasing department whether the company already receives them from suppliers. If the company does not, it is a good idea to ask the purchasing department to request them.
- Create notebooks containing MDSs, place them in each work area (or at least in several prominent locations), tell the employees where they can find them, and establish a means by which employees may look at the sheets whenever they wish.
- Ensure that every substance designated by suppliers as hazardous has a label defining the hazard and how it affects the body. Again, the purchasing department can request such labels from suppliers.
- Provide training to new employees before they begin to work in areas that contain hazardous substances.
- Make sure all employees who work in areas in which there are hazardous substances have received training.
- Prepare a manual for safety training

Rothwell is management-development director for the Franklin Life Insurance Company, 1 Franklin Square, Springfield, IL 62713.

that can be used by trainers and shown to OSHA inspectors.

Information

Even if most of the employees in your firm are office workers who come in contact with nothing more hazardous than paper and water, you must realize that some parts of your company may need special attention to comply with the standard. Also, some individual workers may require hazardous-substance training if the company has some departments—such as a company cafeteria, printing operation, or maintenance crew—that deal with chemicals classified as "hazardous substances"; or if an employee spends half or more of his or her time on the job dealing with machines, such as photocopiers or data-processing devices, that use hazardous substances.

Where can you get information on the Hazard Communication Standard as it applies to nonmanufacturers? Here are a few steps to take right away if you suspect that your organization is not offering safety training that complies with the new OSHA standard.

■ Call your state department of labor and a local office of OSHA to find out whether your organization is affected by the new standard. Also, ask for a copy of the *Federal Register* mentioned above—it will give you a good idea of whether or not you need to comply.

■ Call your state or city chamber of commerce to get some quick advice about where to start finding out about the requirements.

■ Call the Membership Information Exchange of ASTD and request a list of trainers in nonmanufacturing firms who know about safety training. Call them—they will talk to you for up to 15 minutes without a fee—and ask them what their companies are doing to comply with the new regulation.

■ Ask people in your own company what currently is being done, even if only informally, to track hazardous substances and train workers on the subject.

Communication requirements

The purpose of the standard is to alert employees to hazards they face in the workplace. The employer should at least

■ **inform employees about the existence of the Hazard Communication Standard**—some employers pass out copies of the *Federal Register* and ask employees to sign a waiver indicating that they received it;

■ **inform employees about the company's hazard-communication program and policy**—some employers pass out copies of their firm's written policy;

■ **explain the company's safety procedures** for handling hazardous substances in the employee's department or work area;

■ **tell employees where to get information on company procedures** for the evaluation of hazardous substances; lists of hazardous substances; methods the company uses to communicate with employees about those substances; and the location of MDSs.

Training requirements

Historically, lack of training has been one of the most frequent reasons that companies are fined for non-compliance with OSHA regulations.

If the company has a cafeteria, printing operation, or maintenance crew, it may deal with chemicals classified as "hazardous substances"

The complete text governing OSHA training requirements can be found in the *Federal Register* at 48 FR 53310-12 and 48 FR 53337-38. *Chemical Hazard Communication* (U.S. Department of Labor, OSHA 3084 Revised, 1988) describes them in less imposing language. The latter publication also contains information about government and government-funded organizations that provide training and other services for employers with fewer than 300 employees.

Several publishing and training-film firms also sell or rent excellent off-the-shelf packages. Some are appropriate for briefing managers on training requirements. Others are more appropriate for training employees.

If your company has never trained employees on working with hazardous substances, then you need to plan three kinds of training:

■ catch-up training for all experienced employees who have not been trained on the subject;

■ regular, ongoing orientation on hazardous substances for new workers before they are assigned to their work areas (required by the new standard);

■ re-training when new substances are introduced to the work setting, when new information surfaces about the hazards of a substance currently in use, or when the nature of employee contact with the substance changes due to job redesign or the introduction of new technology.

According to *Chemical Hazard Communication*, employers should cover at least the following issues in their training programs:

■ How the Hazard Communication program is implemented in the workplace, how to read and interpret information on labels and the Material Safety Data Sheets, and how employees can obtain and use hazard information.

■ The hazards of the chemicals in the work area. (The hazards may be discussed by individual chemical or by hazard categories such as flammability.)

■ Measures employees can take to protect themselves from hazards.

■ Specific procedures put into effect by the employer to protect employees. That could include engineering controls, work practices, and personal protective equipment.

■ Methods and observations—such as visual appearance and smell—workers can use to detect a hazardous chemical to which they may be exposed.

Some trainers use the MDSs as the basis for the training content. Trainers should prepare a complete instructional package—containing a description of objectives, content, delivery methods, evaluation methods, and so forth—to show OSHA inspectors. In addition, they should take care to document everything carefully—which employees attended training, how well they learned the material, and what subjects were covered.

Getting on board

The OSHA Hazard Communication Standard imposes new requirements for trainers in nonmanufacturing firms, and they may not even know it. To meet the new regulatory challenge, trainers should find out what OSHA has in store for them, what training exactly will meet the new requirements, and what they have to do to make their companies' work areas both safe and legal.

Assess for Success

By Allison Rossett

Reynaldo, Marge, Brad, Carmelita, Martin, and Wilma have problems. They've all been told to start new training programs, but management isn't clear about what it wants, or doesn't understand the problems that need to be solved. Knowing how to prepare a thorough needs assessment is crucial in each of their situations—and probably in your job, too.

If your job involves training, as most HRD jobs do, you confront two kinds of mandates. In one kind of situation, managers tell you what they want. In the other kind, they don't know what they want—just that they want something to support the professional development of employees.

Here is how it sounds when the broader and murkier mandate is given:

Reynaldo, we need to offer some growth opportunities for our middle managers. I read that some companies are providing as many as 30 hours a year in development for managers. Do some kind of needs assessment, figure out what it ought to be, and let's get some suppliers who can deliver.

I envision a catalog of courses and self-instructional materials available to all our employees, at all levels. You know, something that will enable them to envision a career path and ways to get trained for the next position on the ladder. Marge, do you think you could coordinate that effort? Start maybe with some kind of survey. Then you could check and see what we have here and what we can use at the community college.

Rossett is a professor of educational technology at the College of Education, San Diego State University, San Diego, CA 92182-0311. She is vice-president for research and development of the National Society of Performance and Instruction, and author of Training Needs Assessment.

In such cases, the need is unknown or unspoken. What is known is that the organization wants to provide growth and development opportunities—maybe because management believes that personal development for employees is a positive value for the organization, or because it wants to create a climate that supports and retains employees, or because it wants to attract new ones, or because the business and tools of the organization are changing and employees will have to learn in order to compete.

"I want to be certain that this sandwich is done right everywhere. It has to taste exactly the same in Boise and Boston. That's where you come in"

More often, we operate under the other kind of situation. HRD professionals receive a more circumscribed and frantic request for assistance:

Brad, in six weeks, our new blockbuster sandwich will be available to the public in 2,600 outlets across the country. I want to be certain that this sandwich is done right everywhere. It has to taste exactly the same in Boise and Boston. That's where you come in. Get some training ready so that our people know how to make that sandwich and make it good. Start with a quickie needs assessment.

Carmelita, the marketing people are hysterical because that new "magical money-market account" isn't selling the way they expected, despite all the money they've invested in training. Marketing thinks we can turn this thing around with recommendations about another program.

Martin, I envision something where you send out several hundred surveys. That's where you ought to start this needs-assessment thing. Employees will feel involved, as they should; after all, it is their new performance-appraisal policies and forms that we've constructed.

Wilma, see that huge box over there? It's full of illustrated manuals that pretty much describe how the new computer system will work. Well, actually, that documentation is for a hospital which is a third our size, but the supplier swears that we'll be able to use it here. We need a course and we need it fast. Can you rush this for us—maybe sort of bypass the needs-assessment thing and get right down to writing?

In those four cases, the general domain of the mandate is articulated. Given the request to support a new performance-appraisal system, Martin can't respond with quality circles or a training program for hazardous-waste management.

The distinction between the two kinds of mandates is important. While needs assessments are done in both circumstances, the natures of the assessments are different. The front-end activity includes different kinds of questions.

Macro-assessments

Reynaldo—whose assignment deals with providing growth opportunities for middle managers—and Marge—who has been asked to coordinate career-development information for employees—are confronting macro-assessment situations.

A macro needs-assessment seeks answers to such questions as

- What do employees need?
- What do they want?
- Where are they having problems?
- Where can we get the most impact for our development dollars?
- What are management priorities for employee growth and development?
- What are employee priorities? Why?
- Of all the possible arenas toward which we might direct resources, which ones hold the most promise for the organization and for individuals?

Micro-assessments

Wilma (with the manuals for her hospital's new computer system), Martin (who was asked to survey employees on new appraisal policies), Brad (with the new sandwich), and Carmelita (whose bank's money-market accounts aren't selling as well as expected) are in situations where the realm of possible topics has been narrowed for them. They will conduct micro-assessments.

A micro needs-assessment seeks answers to different questions:

- What do employees need to know in order to make the sandwich or to operate the computer system?
- Of all the skills and knowledge that one might acquire regarding computers or the new appraisal system, which are essential to doing the job?
- Why is the "magical money-market account" not selling? Will training help?
- What other interventions might solve the problem or support the introduction of the new system?
- How do employees feel about the situation?
- They've already been trained on the topic. Why can't we see it in the field?

Needs-assessment basics

The phrase, "needs assessment," is everywhere, and everywhere it means something different. That makes it difficult to learn about, challenging to do well, and nearly impossible to explain to a skeptical or hurried colleague.

Fortunately experts agree on a few points:

1. **A needs assessment comes at the beginning of** any systematic approach to training and development, before anybody is taught anything in any setting or through any technology.

Instructional systems development, a training-development approach espoused by the military and used by most large corporate training enterprises, starts with analysis or assessment. During analysis, questions associated with micro- and macro-assessments are asked and answered. The answers serve as a basis for decisions about the nature of the intervention and related strategies. Better programs are derived from better assessments.

2. **Needs assessments are done to gain understanding about the gap between what is happening and what ought to be happening.** It is essential for trainers to focus efforts on "gap analysis," as Roger Kaufman urges. That means that needs assessment is the systematic search for details about the discrepancy between "optimals" and actuals."

For example, Carmelita will be visiting bank branches to find out what it takes to sell a money-market account and what the bank's salespeople are actually doing. Reynaldo and Marge will seek perceptions about discrepancies between optimal career-development opportunities and what is really happening at their companies. With that information, they can put into place programs that will narrow the discrepancies.

3. **Most challenges confronted by trainers are about the introduction of a new system, idea, or technology,** not performance problems. No gap analysis is needed in such cases, at least not in the way we mean when we talk about performance problems. Consider Brad's sandwich, and Martin's new appraisal process.

Reynaldo and Marge will also try to find new ideas, technologies, and approaches that might be important topics for training and development. Wilma's challenge, as her hospital moves towards automation, is typical of the kind of mandates that present expanding opportunities for HRD professionals.

Needs assessments are done to gain understanding about the gap between what is happening and what ought to be happening

4. **In a macro-assessment, the search is for information in three areas—proficiency, criticality, and frequency.** Reynaldo and Marge must derive an interview schedule or survey that asks how well employees can do *it,* how important doing *it* is for their job, and how frequently they are called upon to do *it.* In macro-assessment, the first challenge is to generate the list of possible *its.* Then, apply questions of skill, importance, and frequency to narrow the possible development options from many to a few.

5. **Many companies and agencies fail to provide enough time and resources** for needs-assessment activities. When people want HRD professionals to help solve problems or introduce innovations, they want it done yesterday. If needs assessment stands between the problem and immediate delivery of a new course, then needs assessment is often shortchanged.

When that happens, stop calling the activity "needs assessment." Instead, focus on the kinds of information that will be gathered and the many sources that will provide that information.

6. **Five tools can be used to gather needs-assessment information:** interviews, surveys, observations, focus groups, and document examination. Those techniques can be compared by examining each on the basis of ease of data analysis, anonymity, opportunity

to follow up on responses, and cost.

Interviews are the most frequently used needs-assessment tool. But don't forget the power of examination, observation, and group interactions as front-end tools. Too often they are ignored in favor of interviews and surveys. Under controversial circumstances, large-scale anonymous surveys are warranted. But if you are seeking information under normal macro- or micro-assessment conditions, interviews and focus groups can be fruitful.

7. **Needs assessments often involve asking in a systematic way about people's feelings.** Focus on the way they feel about the situation, their confidence about it, and what is causing the performance problem.

Robert Mager and Peter Pipe would ask, "Can trainees do it if you put a gun to their heads?" Training resources shouldn't be used on problems that "guns" (better supervision, powerful incentive plans, or whatever) could solve.

Needs-assessment stages and purposes

Needs assessment isn't just one action, such as sending out a survey. It is several stages of assessment, often using all of the information-gathering tools listed above. Each step should bring you closer to knowing what is going on and why.

Each stage of information-gathering permits the trainer to ask better, more targeted questions in later stages. The stages of needs assessment are used to zero in on the performance discrepancy, the context for innovation, or the priorities of respondents.

Here is an example of a five-stage effort to get to what Mager calls "the heart of the matter." Other assessments may involve fewer or more stages. Needs assessments may have any number of stages for which the corporation or agency is willing to pay; each stage costs more because it consumes additional resources.

Some good, old-fashioned performance problems are still caused by messed-up incentives, motivation, skills, knowledge, and work environments

A Case Study in Five Stages

Wilma, an HRD specialist for a large hospital, has been charged with getting office workers up to speed on word processing. She decides to proceed in the following manner:

■ 1. Conduct telephone interviews with randomly selected office workers who will have to use the new system.

■ 2. Interview management regarding selection of the system, its strengths and weaknesses, and anticipated response from employees.

■ 3. Examine documentation and the word-processing system.

■ 4. Meet with four office supervisors, each of whom had a part in choosing the system. They have been trained in its operation.

■ 5. Gather a group of office workers to discuss reactions to the new system and to start training on it.

Why five stages? In this case, Wilma felt she needed that much contact with sources and that much information in order to prepare for introducing the new system. In addition, the hospital was willing to spend time on the needs assessment because the system was costly and its uses were crucial.

What about Carmelita's challenge? How might she begin to address her bank's failure to sell the "magical money-market account?" What stages would she use? What techniques?

Four Purposes

In addition to stages of inquiry, needs assessments are conducted to glean sources' opinions on four purposes or kinds of information:

■ **Finding optimal performance.** All of the professionals described above need to seek certain details. What goes into the performance of a star blockbuster-sandwich maker? What makes a magical money-market-account salesperson? As Wilma discovered, it is especially challenging and not at all unusual to be confronted with a hefty box of paper rather than a helpful human being.

■ **Finding actual performance.** How are the money-market-account salespeople goofing up now? How have employees been doing on the old performance appraisals? Old sales records, account registrations, and appraisals are excellent sources of information on current performance.

■ **Finding feelings about the subject, skills, new system, or new technology.** Will Wilma walk into the hospital training center and be greeted with hostility? What will Martin find out about how people feel about the old appraisal system? Are they confident of their ability to master a computerized, behavior-anchored rating scale?

When seeking information about

Step-by-Step Needs-Assessment Planning

1. **Is this a macro- or micro-needs-assessment challenge?** Is the domain specified (micro) or must I find and select areas and priorities (macro)?

2. **In a macro situation,** focus on inquiries about topics that might contribute to goals of the organization. That will involve listening to leaders and employees, as well as reading documents that reflect strategic plans. Then press for judgments on proficiency, criticality, and frequency.

3. **In a micro situation,** determine whether you are dealing with a performance problem or the introduction of a new policy or technology.

4. **If you have a performance problem,** determine stages, sources, and techniques that will provide information on all four purposes—optimals, actuals, feelings, and causes—with an emphasis on causes of the problem. That should enable you to identify a lean and appropriate solution.

5. **If you are charged with helping to introduce an innovation,** you should determine sources, stages, and techniques that will provide information on optimal skills and knowledge, and on employees' feelings about the change.

6. **Report results throughout.** Don't wait until you have all purpose-based information and have completed all stages of assessment. In informal and formal ways, keep management apprised of what you are learning as you proceed through the stages of assessment.

feelings, you are looking for people's perceptions of the domain, their confidence surrounding it, and whether it is a priority for them.

■ **Finding the cause or causes of the problem.** Some good, old-fashioned performance problems are still caused by messed-up incentives, motivation, skills, knowledge, and work environments, as recent work by Zemke and Kramlinger reminds us. Which is it for Carmelita in the magical-money-market-account example? Needs assessment can tell her what is causing the gap between optimal and actual results. Past analyses must have led someone in Martin's setting to believe that a new appraisal system would diminish a lingering performance problem.

When you find the cause of the discrepancy between optimal and actual performance, you're better able to identify a prudent solution. An analysis that identifies causes helps prevent trainers from squandering training resources in situations where expensive training interventions won't help.

The search for information varies, depending on whether you started with a performance problem or a new task, system, or technology. You may need to learn what optimal performance would be like, what current performance is like, how employees feel about the situation, or what may have caused the problem.

Wilma and Brad are caught up in the introduction of new technologies and products—a computer system and a new sandwich. They will focus their attention on determining optimals and feelings.

Carmelita, on the other hand, is confronting a classic performance problem. Even though employees have been trained to sell the new account, they aren't doing it. She will seek information regarding all purposes—optimals, actuals, feelings, and causes—with an emphasis on the cause of the problem. That should enable her to recommend the "right" solution.

Solid support

If you were to gather 100 HRD professionals and give them one of the challenges confronting Martin, Wilma, and Reynaldo, they would suggest 100 different ways of launching the effort.

That's not creativity or democracy. It's the absence of effective prescriptions for what constitutes a good and useful forerunner to an HRD project.

Often, the decision an HRD specialist wants to make is not the one that managers envisioned when they initiated the effort. Maybe a classroom course won't solve the problem. Maybe job incumbents don't need training; maybe their supervisors do. Maybe the job tools are wrong. Maybe the job classifications are wrong. Maybe something entirely different.

To behave as responsible professionals and to enhance good decision making, we need to have solid support for the popular and unpopular recommendations we make. That foundation comes through needs assessments, and through systematic contacts with people and data.

Our colleagues—Marge, Wilma, Martin, Carmelita, Brad, and Reynaldo—dare not do any less.