

# Industrial Safety

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The most valuable assets held by any company are the men and women who do the work. The job of properly defending these assets equals, or transcends, all other responsibilities of supervisory personnel. Responsible industrial organizations recognize the economics involved in protecting employees and are seeking individuals with ability to promote safety.

Long before State and Federal legislation caught up with industrial practices that were killing and maiming men and women, we had accident free operations. It is very probably true that these safe operations were the exception and not the rule. Where they did exist, we find that employer and employee had one thing in common -- mutual respect. The employer respected his workers and established proper working conditions, fair pay and sometimes even nursing and medical care. The employee, in turn, was proud of his work, happy in his surroundings, and therefore, gave his employer a full measure of skill, loyalty and production.

Modern industry is so complex that the good intentions of employer and employee are not enough to insure an accident free operation. However, the basic ingredients for a successful SAFETY PROGRAM, mutual respect between employer and employee, remain the same. Technology has created industrial giants, and today any one of our oil companies can offer men and women more than 2000 different kinds of jobs. It is obvious that a gargantuan of these proportions requires an orderly process in which to develop skills and knowledge that will permit these jobs to be done without accident. The orderly process is usually called training. When some of us were boys, this was called apprenticeship. The terms have been changed, but the objective is still the same -- to turn out a good day's work and a finished product without mishap.

If industry alone had changed in the past fifty years, our problem would not be so great, but people have changed, too. The changes in people were brought about largely by new environment, increased educational advantages and world conflict. Environment changes and education opened doors to personal achievement and made men impatient with the old order of things. Workers with high school training were appearing on the labor market in greater numbers and felt themselves ready for assignments without long apprenticeship periods.

There are definite hazards involved in putting men to work without adequate training. Therefore, our safety responsibility lies in correcting the conditions that cause men to make mistakes and get hurt. We believe that mistakes of individuals that lead to injury or property damage are manifestations of a lack of training. Training not only in the sense that leads to skill, but training in proper attitudes that lead to safe working habits. Unfortunately, many individuals report for work not only without skill, but without a sense of responsibility toward job or safe operation. It then is up to supervisory personnel to help men to develop the skills and attitudes that will enable them to do a good job and avoid injury.

New employees show little resistance to our training techniques which bring work performance up to minimum standards quickly, but there seems to be no corresponding acceptance of safety principles and practices. It would appear that workmen prefer to learn the hard way about avoiding accidents.

We believe that it should be concluded that there is a great discrepancy in training for safety between the time a

child is seven or eight years of age and the time he shows up on the labor market. It might be well to examine this idea to determine where our safety training has broken down and what must be done to correct the loss.

Let us consider second and third grade school children and their reaction to training for safety. It is a matter of record that these children obey traffic rules better than their parents, and it is obvious that they believe what the teachers tell them. They cross street inter-sections safely and respond to fire drills in an orderly manner. It is regrettable, but children lose this respect for safety in the confusion of growing up. However, we must note that some high schools are returning to the field of safety by adding motor vehicle driver training to the curriculum. Those of you who are members of your local P.T.A. groups might do well to encourage this and other types of safety training in your schools and seek to broaden the training by advocating safety supervision in laboratories and manual training shops.

Grade schools and high schools are not our only educational institutions that are short on safety training. We visited the laboratories of several major universities, and being interested in safety, were appalled at what we saw. We saw grinding operations going on without eye protection equipment, students engaging in unrestricted horse-play and abominable housekeeping. The most startling dereliction that we observed was the careless handling of flammable materials.

Gasoline and naphtha were kept in glass containers; paints and varnishes left where last used, and inexcusable litter on the floors. There were unguarded saws, belts, wheels, pulleys and lathes. We saw blocked exits and little or no fire protection equipment. These conditions were mute evidence that our engineering colleges are not training for safety, nor encouraging respect for other people's property. It just isn't enough to be *cum laude* in thermodynamics or a Phi Beta Kappa in differential equations, and then fall down completely in respect for the health, safety and comfort of one's self and of others. In considering these things we are of the opinion that our colleges fall short in the phase of engineering that seems most important to us -- industrial safety.

If our labor supply is short on safety training, it is obvious that someone must fill the void. It is not the intention here to give instructions leading to the organization for safety training or instructions on how to develop a safety program, but we are interested in discussing means to implement existing programs and methods to combat existing conditions.

It is well established that most, if not all, oil companies have an organized safety program of one kind or another. The procedures to be followed in order to get a job done efficiently and safely have long since been established. We must note, however, that these programs and procedures are successful in varying degree from almost complete success to almost complete failure.

We are certain that men are willing to work hard at their jobs since they pre-suppose that diligence and a demonstration of ability will be rewarded by pay increases and promotions. We are equally certain that men do not want to get hurt, nor do they want to be responsible for injury to others. It is management's expressed desire to direct and control employee activity so as to produce efficiently and safely. It is the employee's demonstrated desire to work for approval and progress. Therefore, it seems to us that the job to be done is to tie these fundamental desires together in such a way that both goals are achieved.

In many cases, management has said, "Yes, we have a

safety program," and having spoken, delegate the responsibility for proving it to a department head, a safety supervisor, a superintendent or a foreman -- or all four. A responsible industrial organization knows that the atmosphere in which a successful safety program flourishes is one in which management and labor see eye to eye on responsibility. It is fruitless to demand safety and not be willing to provide the time, equipment and effort required to nourish it.

The Atlantic Refining Company has, through the years, striven to create the sort of atmosphere that invites new employees to take part in an active safety program. Our efforts produce results as indicated by quotations from reports submitted by employees on our training program and elsewhere, as follows:

Mechanical Engineer: "I think it is significant that stress is placed on safety as well as doing the job correctly. After seeing the company's policy for safety in practice, I can see why Atlantic has a good safety record."

Petroleum Engineer: "I received good instruction from the derrickman, not only on the easiest way to perform each task, but also on the safest way. He had me understand from the beginning that my personal safety and the safety of my fellow workers was of prime importance."

Roustabout: "In my previous work experience, I have never encountered a safety program as active as that which is in effect here. I like it."

We are agreed that workers come to us from homes, schools and colleges with little safety training and little sense of responsibility for safeguarding themselves. Therefore, we are obliged to seek a solution to this problem. The solution lies, we think, in creating an attitude among all employees that will cause them to believe it to be a moral obligation to work safely and because there is personal advantage in doing so. If we can do this we will have little difficulty in getting our people to accept safety training along with job training.

We do not believe that it is difficult to establish SAFETY as an integral part of an industrial activity in any organization. Management has a right, as well as an obligation, to demand that employees subscribe to company policies that protect personnel and operating equipment.

We do believe that it is incumbent upon management to maintain a lively interest in a safety program and to develop safety ideas that have merit and to take advantage of every opportunity to publicize the safety program for the purpose of building morale and to convince employees that management has a personal interest in the welfare of each individual. It is also incumbent upon management to exercise good judgment in the selection of new employees to work in plant, field or other facilities. It is important that employees trust management's efforts to select workers who will accept company safety policy and cooperate in the safety effort. In this connection, The Atlantic Refining Company, at its Neale Field Gasoline Plant in Merryville, La., has recently completed TEN years of accident free operation. This plant was staffed on a controlled basis. Men were carefully selected, tested for mechanical skills, intelligence and safety attitudes. The labor turnover has been maintained at an absolute minimum and the safe operation of the plant speaks for itself.

We are convinced that men will accept good ideas and while there is the problem of overcoming natural sales resistance, men will accept the idea if it has merit.

Our company has just completed a year in which a large fleet of motor vehicles was driven over 300,000 miles per vehicle accident. This was accomplished, we believe, because our drivers accepted an idea. The idea, in their opinion, had merit and it meant much to them personally. The idea -- DEFENSIVE DRIVING ... a technique in which a driver makes

allowances for the lack of skill and knowledge of the other fellow. He is careful to commit no driving errors himself and is defensively alert to conditions that are developing in the road ahead, or conditions that may develop, and is prepared to take evasive action. The defensive driving idea was presented to our drivers in a series of lectures, a driver training program and considerable follow-up in our company news organs. We believe that we presented the idea well and that we created an atmosphere conducive to motor vehicle accident prevention. It was our intention to stress throughout that it is the personal responsibility of the driver to operate without accident just as it is the company's responsibility to provide first class operating equipment, and we have gotten results.

This is an example of TRAINING FOR SAFETY and we see no reason why similar acceptance of all safety activity is not possible. We are confident that the stage must be set with the right properties and that the script must be well chosen. In the first place management must be on record without equivocation that safety is a part of the operating policy of the company. Management must have delegated authority to responsible supervisors right down the line to carry out the safety program.

We believe that the atmosphere best suited for a successful safety program is one in which there is no question about the importance that management places on a safe operation, its willingness to participate in the program, and the value it places on employee well being. This atmosphere will be one in which new and old employees are forcibly struck with the established attitude toward safety. The new employee will get this feeling before he is conscious of other vital company operations. The atmosphere will be one in which visible signs of an active safety program are prominent. All employees will receive safety training along with job training under immediate supervision. Employees will be informed that safety training and job training are synonymous and that performance for both are equally checked.

Men will quicken their step upon hearing the music of a marching band -- it is the natural thing to do. Men will fall into the spirit of a lively safety program for the same reason -- it is the natural thing to do.

Our greatest need being training and education of workers, we are obliged to capture the interest and enthusiasm of all of our people. Having once captured this interest, we must maintain it at a high level to make them aware of responsibility to the job and obligation to work safely with others. This may be done by instilling the idea that it is smart to be safe, that the safe worker makes progress.

In order to insure continuity in training for safety and in the Safety Program itself, we have organized a system of safety meetings which includes all employees. Held at least once each month, the meetings provide a time and place for self expression and workers are encouraged to voice opinions and to make suggestions. These meetings, and the safety program, are recognized as our best vehicle for good management-employee relations. In a rather successful effort to implement the accident program, a series of Supervisor's Seminars-for-Safety has been established. These seminars are generally referred to as Supervisor's Safety Meetings and are held semi-annually. The agenda for these meetings includes all phases of company accident prevention activity. In these sessions new ideas are discussed, accidents are analyzed, solutions for existing problems are sought. Here, supervisors participate in training programs that seek to sharpen techniques which will keep our accident frequency low. In a review of the accidents that have been reported in the previous six months, remedial plans are laid for the months to follow. The members of this group are kept aware that the man-on-the-job is the keystone of our safety success and a concerted effort is continually in progress to find means to buttress our accident program.