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Following Through With Safety

By THEODORE MARVIN

Editor, The Explosives Engineer, Wilmington, Delaware

The speaker said in part: The explosives industry is thoroughly cognizant of the importance of having its products correctly and safely employed, and it expends time and money to develop products capable of utmost efficiency in application, but which also can be handled and used safely. Ordinarily, one considers explosives as one of the greatest potential hazards in mining, quarrying, and construction. Yet, because of the attitude of the explosives industry, that it must do its part to see that explosives are correctly and safely used, the following achievements have been made:

1. In the last six years, two and one-half billion pounds of commercial explosives have been transported on railroads of the United States and Canada, with no loss of life, with no accidents resulting from the explosives, and with total property loss of less than \$100.

2. In 1930 the fatality rate per million man-hours underground for explosives in this country's bituminous coal mines was .048 (or one death every 20,833,000 man-hours). The non-fatal injury rate was .733 (or one injury every 1,360,000 man-hours underground exposure).

3. In keeping with these records for consumers of explosives are the operating and safety achievements of explosives manufacturers themselves.

These achievements in controlling the dangers inherent in explosives did not "just

happen"; they were accomplished only by intensive attention to absolutely every detail involved in the design, making, storing, moving, and use of the different types of explosives and blasting supplies.

Following through with safety for the explosives industry involves many activities, some of which might advantageously be employed by other manufacturing groups. For instance, there is the Institute of Makers of Explosives. Many of its committees are continuously at work on safety subjects such as transportation, explosive containers, fumes, magazine construction, storage conditions, general safety education, and elimination of blasting cap accidents. Approved regulations for moving and using explosives are printed on cards and in booklets for distribution to users.

A number of explosives manufacturers individually publish data on safety in handling explosives. Their salesmen, service men, and technical experts are available at all times to advise customers with respect to selecting the most efficient explosives for a definite job and how to employ it with maximum safety.

I have said that the explosives industry recognizes its obligation to users of its products, and I believe consumers concur that a good job is being done to advance the cause of safety in their properties. But the full force of this effort cannot be utilized unless users of explosives wholeheartedly co-operate; therein is the only obligation of the buyer which explosives sellers ask. To obtain this co-operation many mines and quarries supply capable explosives engineers and safety engineers. Many of these men have been specially trained and are capable of supplying detailed rules for safe and efficient use of explosives in their company's work. In some organizations, instructions for the correct and safe handling of explosives comprise almost a full sized book. For the usual operator, however, single rules of the proper handling of explosives and blasting supplies—practices which would practically abolish explosives accidents if correctly followed—is available in printed form. I refer to the safety rules of the Institute of Makers of Explosives. By placing in effect suggestions applicable to each particular job, most properties can improve their blasting practices and their safety standing.

Discipline—Accident Prevention (Anthracite)

By CADWALLADER EVANS, JR.

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The speaker said in part: The question of discipline naturally divides itself into two parts: (1) Discipline enforced upon officials; (2) Discipline enforced by officials upon the workmen.

The question of disciplining officials is a very important one, and at the same time very delicate. We have adopted no set standard, but endeavor to judge each particular case upon the facts developed. There is, however, an exception to this, of course, in such major offense as neglect of duty, intoxication, etc. In such cases discharge is mandatory. Except for the major offenses just mentioned, our disciplining of officials takes several forms: (1) Placing them on undesirable jobs, such as steady night shifts; (2) demotion; (3) discharge.

Discipline of this nature has been enforced on officials because they allowed unsafe working conditions to exist, or because they failed to properly teach their men to protect themselves, as a result workmen being injured. Discipline has also been imposed because of the failure of the official to find gas, which was afterward discovered