

The Salt Institute Safety and Health Committee

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ABSTRACT

The purpose of this presentation is to illustrate, by narration and 35 mm slide characterizations, the history and function of the Salt Institute Safety and Health Committee from its inception to present.

Basically, the content will be composed of the following:

- *A brief history of the Salt Institute*
- *A concise description of those member companies with representatives on the committee and/or having had representation in the past*
- *The Committee function, with particular emphasis on*
— *purpose*
— *objectives and achievements*

- *safety awards (purpose, categories, criterion and recipients)*
- *actual situations (seminars, visits at properties, meetings with educators and government personnel, etc.) that portray members in the pursuit of information to fulfill their mandate—"To establish and develop programs, teach, inform, influence and persuade management to adopt the necessary principles and programs that will 1) reduce injuries, 2) exceed the requirements of legislation and 3) produce a safe work environment for the preservation of life and property."*

INTRODUCTION

To begin, allow me to turn a page in history and explain the inception of the Salt Institute. On the 2nd of June 1914, a group of salt producers held a preliminary meeting at the Congress Hotel in Chicago for the sole purpose of "obtaining the names and locations of every purchasing concern making unfair claims for damage; discount or arbitrary deductions, or refusal to take shipment for any reason whatsoever after same had been made."

In July, this body became the Salt Producers Association located in Detroit, then later, Chicago. The Association was dissolved in 1963 and the name changed to the Salt Institute. Mr. William Dickinson was appointed President and Treasurer. The office was relocated to Alexandria, Virginia two years later.

Four of the original fifteen companies, Carey Salt, Diamond Crystal Salt, International Salt and Morton Salt, were charter members of the Salt Producers Association and are today members of the Salt Institute. International, Diamond Crystal and Morton had representation on the original executive committee under the president, E. C. Turner of Colonial Salt Company, Akron, Ohio.

Salt production between 1914 and 1982 increased 605%, as Table I shows.

TABLE I

Salt Production, North America

	1914	1982
Rock Salt	1,060,804	14,364,971
Solar Salt		4,585,315
Evaporated Salt	2,159,094	3,734,496
Total	3,219,898	22,684,782 Tons

At present, there are 17 North American and 14 overseas companies under the Salt Institute umbrella.

THE SAFETY PROGRAM

And now to my topic—The Salt Institute Safety and Health Committee. The purpose of our business is to produce a product that will generate a profit; therefore, when invited to make this presentation my first reaction was what can I possibly say the Safety Committee has successfully accomplished over the years that will justify our existence and illustrate our contribution to the business venture.

Unlike buying a new or modernized piece of equipment, safety programs that will show an immediate return on investment cannot be purchased, nor are there pack-

aged programs on the market that will, by themselves, effectively reduce injuries and show a decrease in cost.

Safety, then, is an intangible. Perhaps it can be compared to an organic plant. Regardless of how acquired, it will usually wither and die in an uncontrolled environment.

But, to get back to the Safety Committee. In 1968, Mr. Frank Wood, the Salt Institute's Technical Director, attended a manufacturing chemist association luncheon where a National Safety Council speaker advised industry that considerable money could be saved by the reduction of accidents. This generated some strong thinking at the Institute, and the National Safety Council was consulted to give guidance on the formulation of a safety program.

Initially, a questionnaire was prepared and circulated within the salt industry. Results confirmed that a safety program was definitely required.

Over the next five years, surveys were conducted and semi-annual accident statistics and disabling injury analysis issued. By the end of 1973, the injury frequency rate had risen 16% over 1969 and days lost, or severity rate, decreased 11%. The injury index, a combination of frequency and severity, increased by 2%. (Figures 1, 2.) Figures 3 and 4 show the compensable injuries, days lost and the combined injury index through 1982.

Safety concerns at this juncture were reviewed by a sub-committee of the then Production and Safety Committee. That year the sub-committee met in Chicago to formulate a plan that became the foundation of our existing program. Topics covered were

- Monthly reports
- Safety Contest
- Seminars
- Consultant Services
- Safety contacts or tailgate sessions
- Safety Data Sheets
- Standards.

It was immediately realized the Salt Institute staff could not handle all work contemplated, so a recommendation was made to add a safety coordinator.

Because most companies had a corporate safety officer, or an incumbent performing these services, the Executive Committee considered it advantageous to utilize volunteer safety coordinators from member companies rather than create a new position. This procedure was adopted and is currently a practice.

In 1974 Cargill's Salt Division volunteered the first safety coordinator. Immediately things began to happen. For

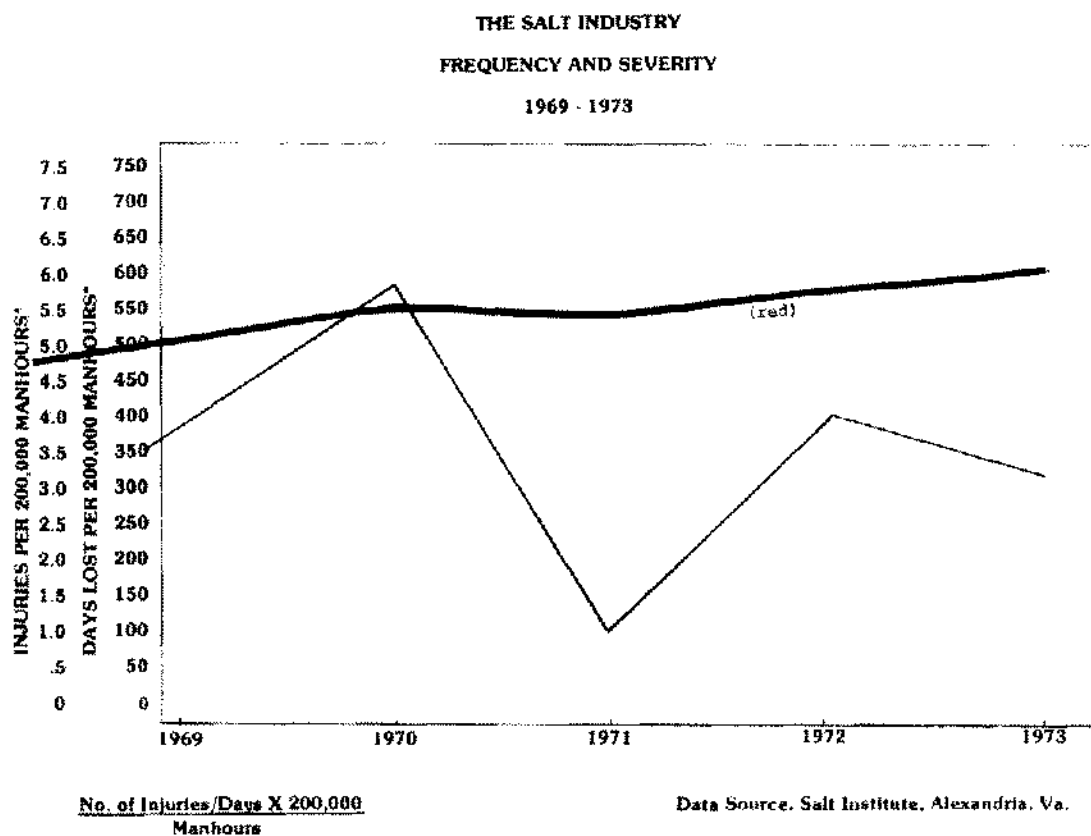


Figure 1. Frequency and severity of injuries in the salt industry of USA and Canada.

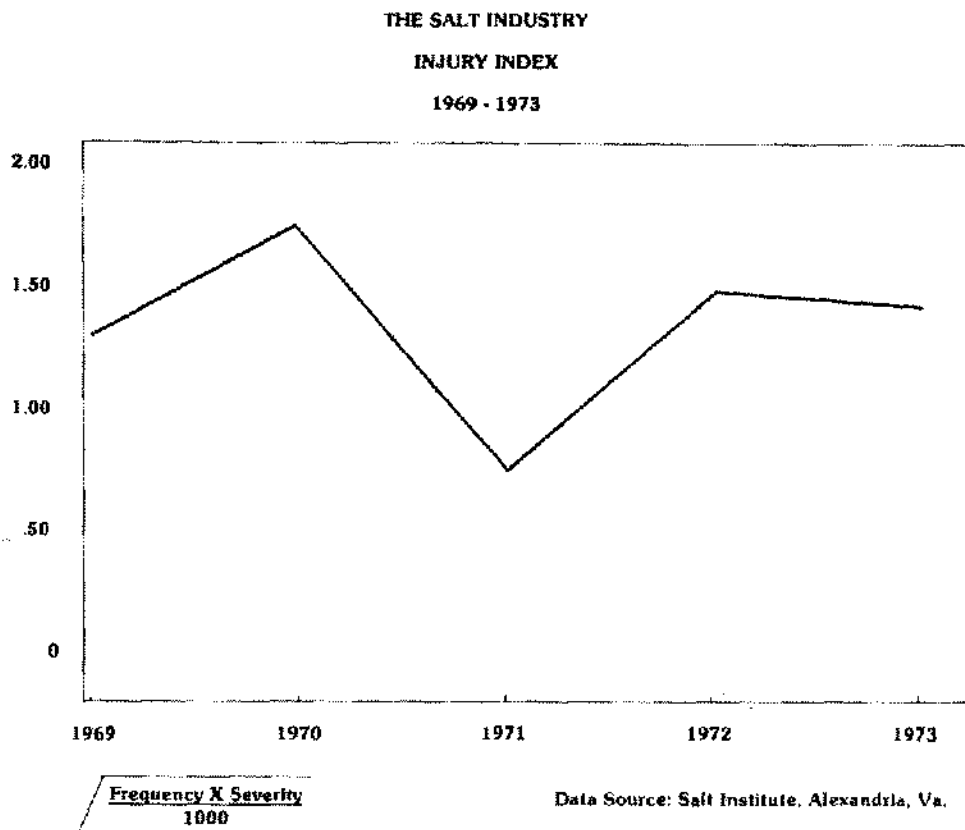


Figure 2. Salt industry: injury index.

statistical purposes, operations were categorized as mining, evaporating, solar and terminals/warehouses. Then a Salt Institute Safety Contest Accident Summary form was developed.

To encourage submission of the report, but more importantly to recognize and honor outstanding performance, the first annual safety contest commenced with 57 facilities participating. Recognition was given as follows:

- A trophy to the company with the lowest injury index experience in all four categories.
- A plaque to the leading facility in each category.
- A 10-day, all-expense-paid Caribbean trip for the top safety foreman in the winning company—a one-time award.

Diamond Crystal's Long Island Bahama's Solar Plant won the trophy and plaque for top operation and best facility within the solar category.

The Safety & Health Committee can be invaluable in the development of safety programs, provided there is active participation and cooperation among companies and other committees. Over the years, this committee has been successful in establishing programs, disseminating information and formulating training sessions.

TRAINING

Training is a critical element in any successful venture. It is our responsibility to recognize training needs and motivate senior management to endorse the programs put forth.

Over the years, courses were conducted at various locations to acquaint all levels of management with their safety responsibilities and influence human behavior to create a safe work environment within the salt industry.

Following are some of the more significant seminars held.

Management Training

In 1974 the Mining Enforcement and Safety Administration now the Mine Safety and Health Administration (MSHA), in conjunction with two private companies specializing in loss control and human behavior, conducted safety seminars for chief executives, plant managers and first-line foreman. The purpose was threefold as follows:

1. Enlighten executives on total cost of accidents and injuries and describe motivational methods for safety performance

2. To inform plant managers of MSHA regulations
3. To instruct first-line supervision on their safety responsibility and legislation.

Regional safety seminars for industrial managers and supervisors were conducted by the Safety & Health Committee to familiarize first-line supervision with government regulations and provide instruction on motivating employees toward safety. Two-day sessions were presented on five occasions during 1980 and 1981. Chief executive officers or their representatives keynoted each seminar, emphasizing executive/management commitment to safety.

Motivational Training

President Dickinson signed a \$299,296 cost-sharing contract with Dr. Thomas Falkie, Director, Bureau of Mines, to conduct a two-year motivational study within the U.S. salt industry. The Salt Institute's contribution consisted of company personnel time. Five locations were selected as test facilities. Each test facility was offset with a control operation to measure results.

Scientists from the Human Potential Development Corp. in California conducted the study. Four of the five plants participating in the program showed marked improvement in their safety performance.

SAFETY COMMITTEE TRAINING

Committee members have varied backgrounds and expertise ranging from safety, personnel, industrial relations and production. Most safety training is acquired through on-the-job training, safety associations such as the National Safety Council or specialized courses. This combination of expertise is included in our safety program.

The National Mine Health & Safety Academy, Beckley, West Virginia, sponsored a specialized training course for committee members consisting of safety programming, psychology, management and fault tree analysis.

This seminar apparently had the most impact in forecasting a direction to concentrate our efforts within both the committee and our companies.

Tours of other salt locations in conjunction with committee meetings afforded the opportunity to discuss principles and view safety programs in place.

Meetings with the Occupational Safety and Health Administration (OSHA) and MSHA officials provided an understanding of legislative procedures and created an opportunity to offer our cooperation in the development or assessment of legislation pertaining to our industry.

CONSULTANT SERVICES

To keep current with new developments in the field of instructional training, educational companies were invited to attend safety committee meetings and describe and show programs available on the market, for example:

National Photographic Laboratories, Inc., Houston, Texas

A full service audio-visual production company presented a program in interpersonal relations titled, "Working With People." Although directed toward the coal industry, considerable success has been acquired in the steel and chemical industries.

Bendix Corporation, Englewood, Colorado

A private firm contracted by the Bureau of Mines is at present developing a training program for underground salt mines. Simulation exercises and role playing are some of the methods used to instruct. Recently, we had the opportunity to review and critique a draft program.

COMMUNICATION

Output of committees are of no value unless properly communicated. To this end, minutes of meetings are circulated to what is now the Safety and Health Subcommittee and the Production Committee. Other effective means of communication utilized are as follows:

Posters

To announce safety contests, campaigns or general safety practices. Two years ago a successful campaign was organized using 16 posters illustrating safety in a positive light characterized by "Critter." The winner of a contest to name Critter was a Hardy Salt Company employee, who won \$500 for her submission of "Dooby Safe." Results of the campaign were favorable.

Safety Newsletters

A newsletter published in 1975 was introduced to stimulate action among member companies, the purpose being to exchange ideas, problems and experiences to the benefit of all concerned. After the fourth issue, it became apparent interest had decreased, since employees in a particular plant could not identify with a generalized safety presentation of this nature. The newsletter was discontinued in favor of placing safety related articles in the Salt Institute Report.

Accident Investigations

Copies of accident investigations and MSHA fatalograms are distributed in an effort to prevent recurrence of similar accidents.

Safety Manual

Recognizing a need for a reference book particular to our industry, the Safety Committee in 1977 compiled a 130-page safety manual. The manual covers major aspects of safety, including

- General Plant Safety Guidelines
- Material Handling Safety Recommendations

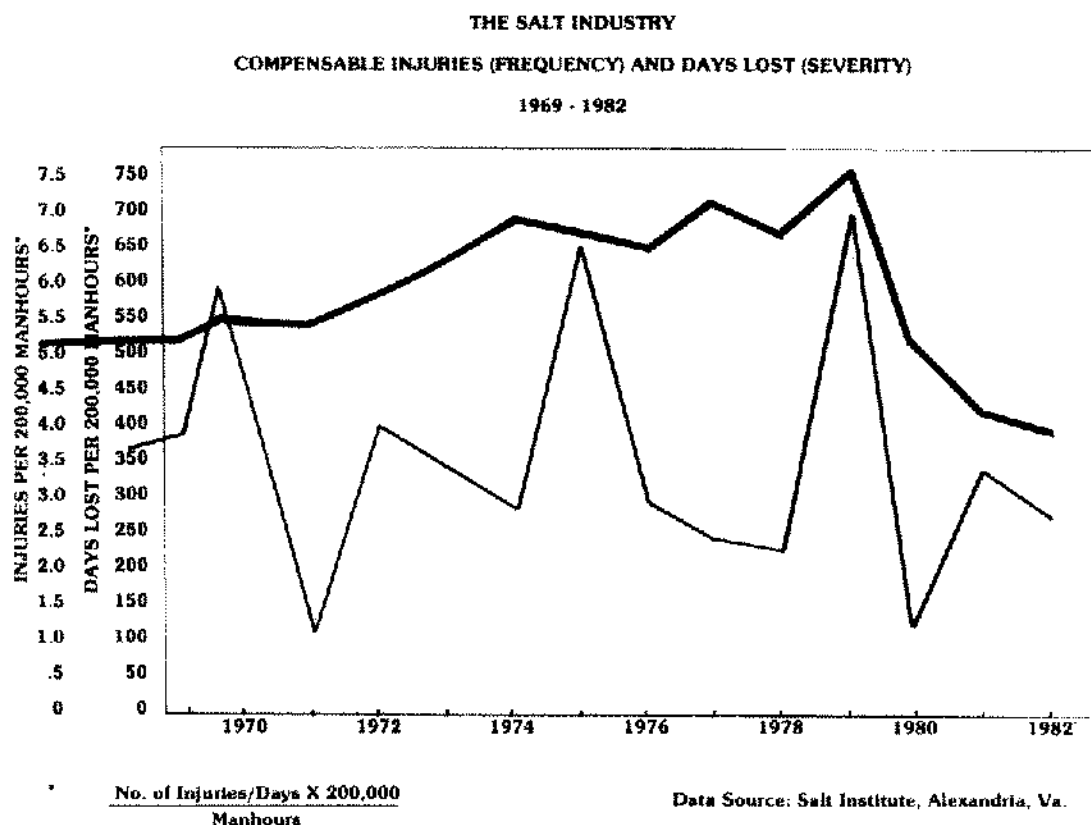


Figure 3. Illustrates compensable injuries including fatalities and the number of days lost in the salt industry over the last 14 years.

Safety Control Reports
Property Conservation Programs
Potential Hazards and Suggested Corrective Procedures.

This material remains current with present day work procedures.

COMPUTER

Information from a punchcard system, adopted to record and retrieve injury statistics from accident summary forms, was computerized in 1979. This process has been useful in determining categories with high injury rates and pinpointing occupations and types of injuries experienced. Reports are prepared and disseminated to member companies annually. Printouts are provided on a confidential basis to individual locations.

SAFETY AWARDS

Our safety award system has been beneficial in motivating employees to be safety conscious by recognizing their achievements in monthly statistical reports and at annual executive meetings. The system is designed to pro-

vide an overall company award and recognize facilities for safe work performance.

Decals, a certificate and pennant are presented to managers of facilities accumulating 100 and 500 thousand man-hours without lost time injuries. A total of 164 One Hundred Grand Awards have been presented. So far, four operations have received Five Hundred Grand Awards—Morton's Fairport Mine, Painesville, Ohio, International's Cleveland Mine, Ohio, United's Hockley Mine, Texas, and more recently, Canadian's Pugwash Mine, Nova Scotia.

A silver Revere bowl inscribed with the company name is presented annually to the company with the lowest injury index.

Plaques are presented to facilities that complete the year without lost time accidents and have the lowest injury index in mining, evaporating, solar and terminals/warehouses.

A competitive spirit has been evident since these programs were initiated.

GENERAL

Today most companies have well developed safety programs that satisfy both moral and legal obligations. It will

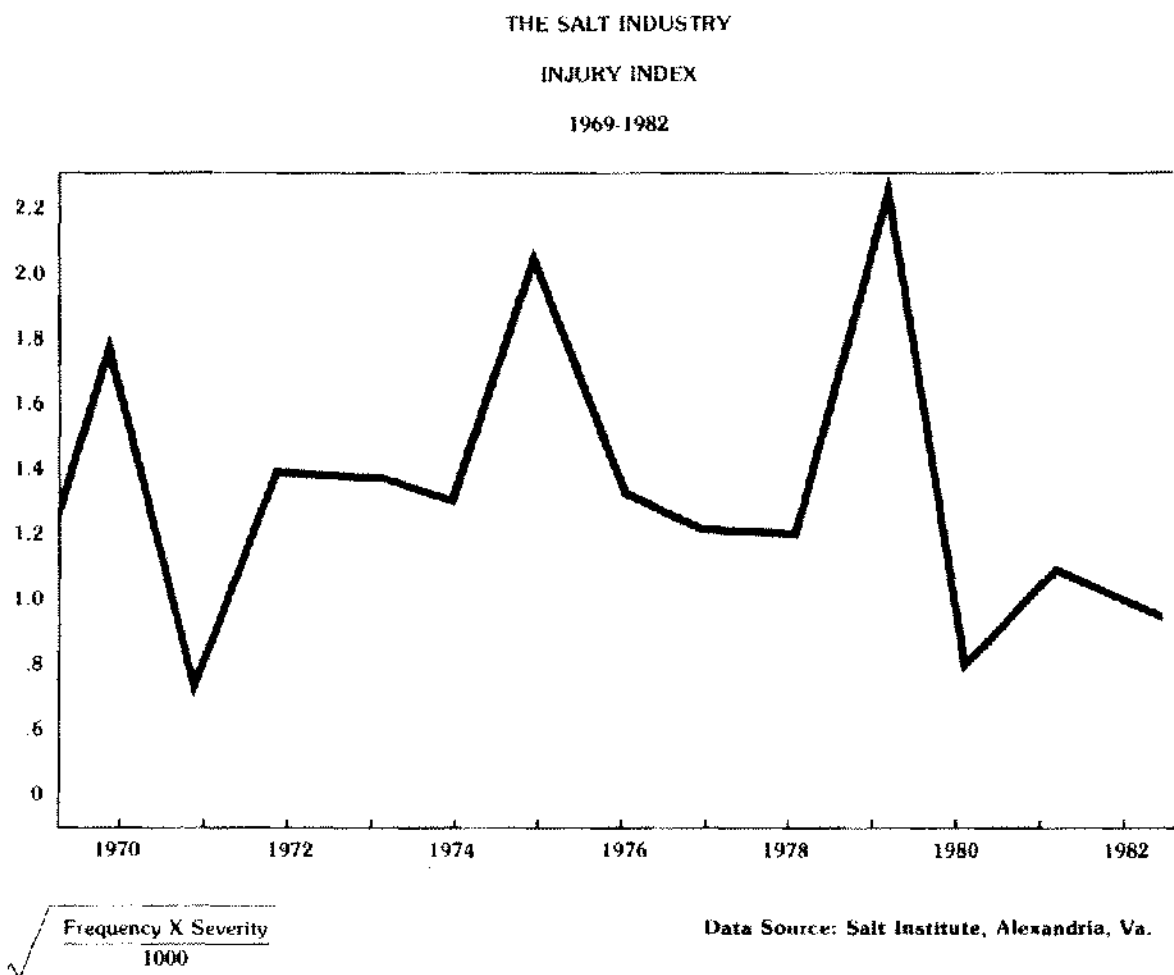


Figure 4. The injury index—a combination of injuries, fatalities and days lost—over the same period, representing a 27% decrease from 1969, but more notably, a 55% decrease from the highest recorded injury index of 1977, when seven fatalities occurred, compared to two in 1982.

now be our responsibility to work closely as a team and share our knowledge and experience toward the betterment of our industry by

- Persuading management to accept those policies that will eventually eliminate injuries
- Monitoring legislative developments, regulations and laws that effect our environment
- Maintaining liaison with medical and legal professionals
- Continually communicating safety and health oriented information derived from accident investigations, unusual occurrences and the most advanced developments in safety.

CONCLUSION

We feel the Salt Institute Safety and Health Committee has been successful in providing member companies with

the necessary information, programs and training to increase safety awareness within their respective operations.

Although we cannot state categorically that any one specific action has led to a reduction in the overall injury experience, we do take satisfaction that the rate has decreased. This improvement may be attributed in some part to the programs developed and to more enlightened and knowledgeable safety professionals within our organizations.

The Safety and Health Committee I have described will be successful only within the framework of mutual respect and cooperation among companies and standing committees and the dedicated involvement of all members of what is now the Safety and Health Subcommittee.

We believe that with continued support of our member companies our objective, "to improve the safety situation and produce a safe work environment for the preservation of life and property" will be attained and the salt industry will lead the way in occupational health and safety.