

S  
NESS  
ICAL SERVICES



JOHN E. RUPERT  
Director

DEPARTMENT OF EMERGENCY SERVICES

48 West Third Street, Williamsport, Pennsylvania 17701 (717) 323-9811 Ext. 2447

August 14, 1980

Maryland EMS News  
Maryland Institute for Emergency Services System  
University of Maryland at Baltimore  
22 South Greene Street  
Baltimore, Maryland 21201

Attn: Beverly Sopp, Editor

In reading your July 1980 issue of Maryland EMS News, I came across an article entitled "Butane Lighters Present Risks." I would recommend that your source for that article be checked. In referring to the enclosed pages from the NFPA's Fire Command, (February 1980, March 1980) you will find that the deaths attributed to butane lighters were totally erroneous. Also please note, the idea that a butane lighter is equivalent to three sticks of dynamite is refuted in the March 1980 Fire Command, Letters. (See marked pages)

While very few persons would dispute the idea that butane lighters could be dangerous, they are certainly not dangerous to the extremes given in your article. I believe that when a publication presents an idea as factual it has an obligation to research the material more thoroughly than was done in this instance.

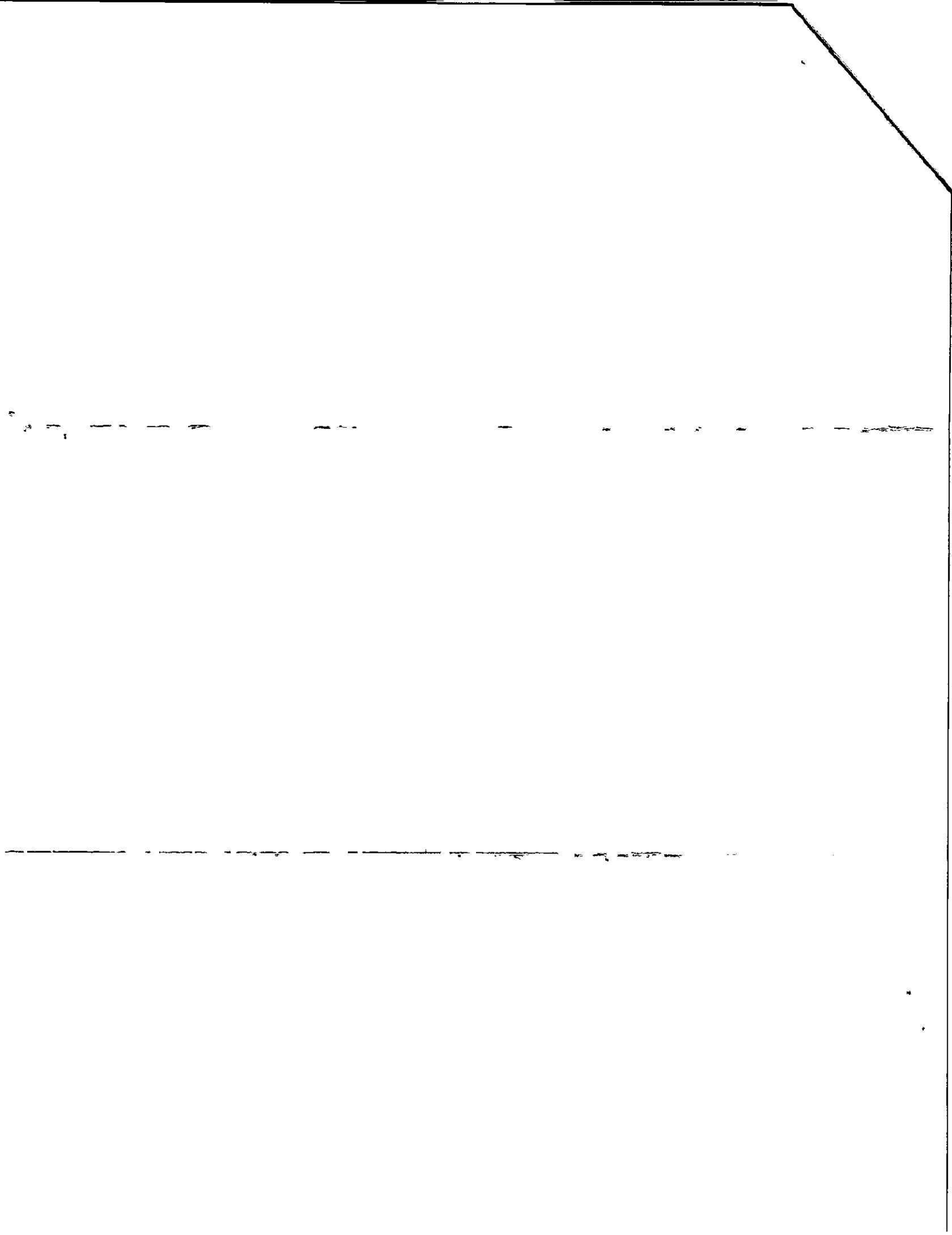
Your publication appears to be very well done, however; articles such as I mentioned will place the validity of other articles in question. This is especially true when a major publication has had to refute their own article almost four months earlier.

Sincerely,

Barry C. Hutchins  
Training & Education Coordinator  
Dept. of Emergency Services  
Lycoming County

Enclosure  
BCH:slh

cc ✓ Judy Krouse



# Letters

Readers share facts and opinions

## Loss of life in prison fires

To the editor:

The enclosed news item (on the prison fire in Lancaster, S.C., on 27 December 1979) describes another grim example of the needless loss of life in prison fires — again reminding of the 42 deaths in a Tennessee jail in June 1977. According to the best available records, between 60 and 85 percent of the fires in prisons and jails are deliberately set. Such statistics should lead to even greater diligence in fire prevention and life safety measures than is normally required in so-called unlocked facilities.

In the most recent jail fire, 11 men were locked in five cells on the second floor of the 156-year-old building when the fire broke out. The discovering officers were unable to open the cell door when the lock failed to function. When the key was handed through the bars to the trapped prisoners, they too were unable to open the lock. Time was running out. When the fire department arrived "a few minutes later," fire fighters quickly cut the padlock and dragged the victims from the smoke-filled cell block, but it was too late. Were these deaths unavoidable? How many times will this scenario be played and replayed?

In antiquated jails, the minimal safety requirements should include a simple means of opening doors in the event that locks fail. Bolt cutters similar to those commonly used by fire departments are one answer. No weakening of jail security is caused by providing training, knowledge, and appropriate emergency equipment on the premises. Adequate emergency equipment can be kept under lock and key, with the key in the possession of the watch commander or other designated official.

Each year, jail fires kill over 300 human beings in this nation. On 28 December 1979, the *Los Angeles Times* featured an excellent article on jail and prison fires. It stated, in part, "Despite occasional warnings

from fire safety authorities, punctuated by jail fires in the last three years that have killed as many as 42 persons at a time, many of the nation's 5300 correctional facilities still provide inmates with flammable plastic foam mattresses and lock unstable prisoners in cells padded with the same hazardous material."

Reasonable, practical fire and life safety suggestions often clash with institutional security practices. Unfortunately, arrogance too often shields ignorance.

HARVEY M. FRENCH  
Fire Consultant and  
Investigator  
Santa Ana, California

## Shame on us

To the editor:

Shame on *Fire Command* for the article on butane-type lighters in the December "Watch Desk." Have one of your staff people compute the quantity of butane required to explode with the equivalent force of three sticks of dynamite. Then tell us how they were able to put that much butane in one of those small lighters.

LAWRENCE E. BEAUFORD  
Director, Safety Services  
University of South  
Carolina  
Columbia, South Carolina

To the editor:

The December 1979 issue carried an article in "Watch Desk" concerning the hazards of butane cigarette lighters. I know this information has been published by many organizations; however, if you had bothered to check out this rumor, you would have found it to be false.

Another error is the comparison of available energy in the small amount of butane in a lighter with three sticks of dynamite. An expert on the NFPA staff could have pointed out the fallacy of this comparison.

With as fine a publication as you have, please do not undermine its credibility by publishing material such as this without checking first.

J. J. BRENNEMAN, P.E.  
Fire Protection Engineer  
United Airlines  
San Francisco International  
Airport, California

Editor's note: We asked NFPA Flammable Gases Field Service Specialist Wilbur L. Walls and Senior Chemical Engineer Robert P. Benedetti to comment on the statement that a butane cigarette lighter contains the same explosive force as three sticks of dynamite:

"In every case, the notices state that the contents of a butane cigarette lighter have the same explosive force as three sticks of dynamite. This statement is totally erroneous. The fact is, there are no universally acceptable methods for deriving such an equivalency. One common, but still incorrect method is to compare the heat of combustion of dynamite with that of another combustible — in this case, butane. Even with this method, the equivalency is only about 10 grams of dynamite (about 1/4 of a stick). This method totally ignores the rate of the reaction and the rate is the major factor controlling the effects of the combustion. In other words, dynamite is an effective explosive because it burns extremely rapidly. To equate the effective energy of butane to that of dynamite, it would be necessary to burn the butane much faster than it is possible to do.

"Basically, the major hazard would be burn injuries and searing of the lungs due to a fireball. Based on some tests conducted by the Rockford Fire Department, Illinois, and reported in the Gannett News Service, the fireball is about 2 feet in diameter."

## A rallying point

To the editor:

Your "Viewpoint" and the article, "Contributing factors to residential fire deaths" (*Fire Command*, January 1980), were a definite rallying point for me.

I do not see how anyone could fail to be touched by the picture of the fire fighter carrying the lifeless body of a small child. As the father of a five-year-old daughter, and having carried people out of a smoke-filled building, I fully agree with your thoughts. For years now, I have had smoke detectors and fire extinguishers in my home.

I was employed at the Ellisville State School in Ellisville, Mississippi, on 15 June 1971. On 9 December 1978, we had a tragic fire in which 15 of our mentally retarded residents lost their lives. (See *Fire Journal*, July 1979, p. 68). That tragic fire created the job I now

## Letters

a policy is unlikely to eliminate the causes of the unnecessary deaths of fire fighters that have occurred at recent fires (Syracuse, Brooklyn, and now Lubbock). Isn't it time for someone to blow the whistle?

At the Syracuse fire, the unnecessary deaths were attributable mainly to a lack of supervision and communication, and hence coordination; at the Brooklyn fire, the unnecessary deaths were attributable to allowing personnel to work on the roof under conditions that clearly should have prohibited such an assignment; and at Lubbock, according to your article, the unnecessary deaths were attributable again to a lack of supervision and communication, and hence coordination. It may be noted that the best masks in the best condition are not going to eliminate these causes.

As a final note, it is simply incomprehensible that no attempt was

made to vent the roof over an area in which smoke conditions were bad enough to take the lives of three fire fighters long after the fire was allegedly knocked down.

CHARLES V. WALSH  
*Deputy Chief, Retired*  
*New York Fire Department*  
*New York*

### No deaths caused by butane lighters

Editor's note: The following letter to NFPA Senior Chemical Engineer Robert P. Benedetti is reprinted with the permission of Mr. Mayer in an effort to squelch the rumor concerning the deaths of two railroad workers in accidents caused by butane lighters. *Fire Command* regrets that it promulgated the rumor in a December 1979 Watch Desk item.

Dear Mr. Benedetti:

With respect to the report of fatal accidents caused by butane lighters: This is nothing more than a rumor which has been circulating for the past several months and which has absolutely no foundation in fact. At the Union Pacific, we have had no one killed or injured in any way with butane lighters.

We have checked with the Federal Railroad Administration, the Interstate Commerce Commission, and the Association of American Railroads and have determined that no employee of any American or Canadian railroad had any accident of any kind with butane lighters.

I appreciate your calling this to my attention and hope that you will do everything you can to stop this rumor from spreading.

C. D. MAYER  
*Director of Safety*  
*Union Pacific Railroad*  
*Company*  
*Omaha, Nebraska*

### Hazardous materials training utilized

To the editor:

I attended the NFPA seminar on "Handling Hazardous Materials Transportation Emergencies" last September in Denver, Colorado, and the seminar training has already been put to the test.

Within 14 days, this city had two hazardous materials incidents. The first involved three anhydrous ammonia tank cars and one LP-Gas

car, all on their sides but with no leaks, thank God. This department received a letter of commendation from the railroad for quick, correct procedure in handling the incident. The second incident involved two anhydrous ammonia tank cars that stayed upright and were not punctured or damaged.

These two incidents also motivated city hall to set up a city-wide disaster plan.

WILLIAM BROUILLET  
*Captain*  
*City of Grand Forks Fire*  
*Department*  
*North Dakota*

### Wanted: training ideas

To the editor:

The Lakewood Volunteer Fire Department, New York, serves a combined urban and rural area with a population of 8000 in the southwestern part of the state. Our 75 members answer nearly 500 fire and EMS calls annually.

One of our key problems is training; specifically, planning and executing interesting, informative drills. Somewhere among *Fire Command* readers there may be a chief or training officer in a similar department with an excellent, smooth-running training program. If so, please write to me (at 20 West Summit St., Lakewood, NY 14750). Any ideas or suggestions that have solved training problems will be appreciated.

In addition, I suggest a "Drill of the month" column in *Fire Command*, with readers describing particularly successful drills their department has held.

DANIEL R. ANDERSON  
*2nd Assistant Fire Chief*  
*Lakewood Fire Department*  
*New York*

Editor's note: No sooner said than done: See page 32 for our first drill of the month. We invite fire service authors to send in material for a "Drill of the month" feature, either as a full-length article or as a short summary.



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Write for Details  
ATLAS SAFETY EQUIPMENT CO. INC.  
1 Johnson Ave., Matawan, N.J. 07747

Circle No. 1 on Reader Service Card



September 8, 1980

Judy Krouse  
Public Affairs Office  
31 Green Street  
Baltimore, Maryland 21201

Ms. Krouse:

In reference to our phone conversation on September 2, 1980, on the Disposable Butane Lighter, I am enclosing all information I have at the present time on them. If I get any more information which I think you can use, I will forward a copy to you and I would appreciate any information you could give me.

Sincerely,

Paul T. Anders  
Safety Committee Chairman

enclosure

PTA:mt

# News

United States  
Department  
of Labor



Office of Information

Washington, D.C. 20210

## OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

USDL -- 79-930

Contact: James F. Foster  
Office : (202) 523-8151  
After Hours: (703) 573-2786

FOR RELEASE: IMMEDIATE  
FRIDAY, JANUARY 11, 1980

Contact: Akio Konoshima  
Office : (202) 523-8151  
After Hours: (301) 657-3509

## OSHA RETRACTS MEMORANDUM CIRCULATING AN ALERT ON THE SAFETY OF DISPOSABLE BUTANE CIGARETTE LIGHTERS

The Department of Labor's Occupational Safety and Health Administration today retracted a memorandum it circulated last May drawing attention to a report of two alleged serious accidents involving disposable butane cigarette/cigar lighters. Later detailed investigation by OSHA could not confirm the reported accidents.

OSHA, on May 8, circulated among its regional administrators a safety alert on the lighters issued by the Chicago and Northwestern Transportation Company. That alert stated that a welder with the Canadian Pacific Railroad was killed when a butane lighter exploded in his vest pocket and that in a second case, another CP employee was severely burned when a butane lighter in his trouser pocket was ignited.

Sparks (from a "welder's torch" in the first case and from a "nearby torch" in the second) were the cause of both accidents, according to the Chicago and Northwestern alert.

In its memorandum retracting its earlier one last May, the agency said, "...investigation by OSHA into the accuracy of the information contained in the Chicago and Northwestern Transportation Company's safety alert revealed that the alert was based on hearsay and that no one could confirm that the two reported accidents took place."



P. O. Box 2218 Framingham, MA 01701

Tel: (617) 872-3636

13 February 1980

Mr. Paul Anders  
OWENS-ILLINOIS, INC.  
1801 Clark Road  
Havre de Grace, MD 21078

Dear Paul:

As regards the problem outlined in your letter of November 28, 1979 -- the dangers of small pocket butane lights -- I just came across a news release from the U.S. Department of Labor which directly relates to that problem.

A photocopy is enclosed.

Sincerely,

for DAVID LEE & ASSOCIATES, INC.

David S. Goldman, P.E.  
President

-Encl.-



P. O. Box 2218 Framingham, MA 01701

Tel: (617) 872-3636

21 January 1980

Mr. Paul Anders  
OWENS-ILLINOIS, INC.  
~~1801 Clark Road~~  
Havre de Grace, MD 21078

Dear Mr. Anders:

Thank you for your letter of November 28, 1979. I have been traveling during December and this is the first chance I have had to reply to your query.

In my reading and travels I have not come across any information with regard to small pocket butane lighters. I do not, at this point in time, have an opinion as to whether they are indeed dangerous or not. However, there are two sources that you may find of help in this matter: The first is the Consumer Product Safety Commission in Washington, DC, and the second is the National Fire Protection Association, 430 Atlantic Avenue, Boston, MA.

If there is anything else that I can do to provide help either now or in the future, please feel free to contact me.

Sincerely,

for DAVID LEE & ASSOCIATES, INC.

David S. Goldman, P.E.  
President



**OWENS-ILLINOIS**

Plastic Products  
Division



November 28, 1979

David Lee & Associates  
P. O. Box 2218  
Framingham, Mass. 01701

Sir:

As Chairman of the Safety Committee in our plant I have received conflicting reports that the presence of butane lighters is highly dangerous. All the reports have been hearsay. However, since some have indicated that the little lighter has the explosive power of three sticks of dynamite, I felt obligated to seek some valid information.

If you have any information refuting or supporting such statements or if you know where I can obtain information concerning the safety or danger of butane lighters will you please convey it to me.

Sincerely,

Paul Anders  
Owens-Illinois, Inc.  
1801 Clark Road  
Havre de Grace, Md. 21078

PA:mt

# News

United States  
Department  
of Labor



Office of Information

Washington, D.C. 20210

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October 12, 1979

TO ALL EMPLOYEES:

DANGER CONNECTED WITH BUTANE CIGARETTE LIGHTERS

(Source of Information: Air Co. Industrial Gasses, Boston Mass.)

In the last thirty (30) days, the Union Pacific Railroad has experienced two (2) fatal accidents caused by disposable Butane cigarette lighters. These accidents occurred in Welding areas while employees were welding with Butane lighters on their person.

A spark from the welder landed on the Butane lighter, burned through the case, exposing the liquid Butane which exploded.

One lighter was in a shirt pocket and killed the individual instantly. The other employee had a lighter in his pants pocket. The explosion blew the man's leg off--he died a short time later.

There is the same amount of force in a Butane lighter when it explodes as there is in approximately three (3) sticks of dynamite. HARD TO BELIEVE, BUT TRUE!!!

ALL EMPLOYEES SHOULD BE WARNED OF THE DANGER PRESENT WITH THESE LIGHTERS IN AREAS WHERE WELDING AND FLAME CUTTING OPERATIONS ARE PERFORMED, ALSO, ANYWHERE WHERE THERE ARE OPEN FLAMES.

Employees should be requested to advise their families and friends of this also.

*Dave Martinson*

D. J. Martinson  
Manager, Health & Safety

*Busy*  
*Acton, MA*  
*617 282-*  
*6119*  
*- Al Dumas*