## Going Home Safe and Sound



....at Lago



in 1954....

XX				injuries
VV	6	had	1054	injuries

Included were 1040 minor injuries

14 disabling injuries

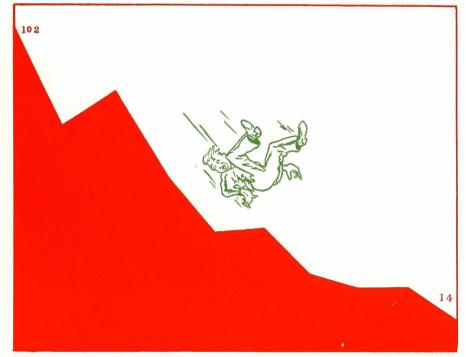
and no fatalities

Employees who had disabling injuries lost 815 working days



"Working as a team to prevent accidents we had fewer disabling injuries......"

1945

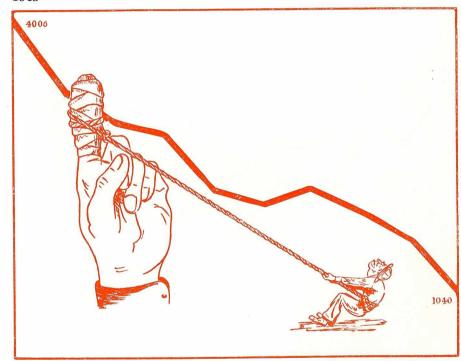


1954

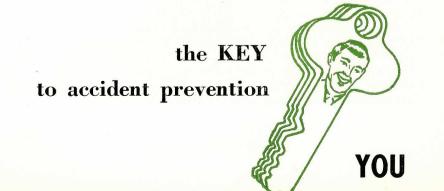
"Disabling injuries have declined steadily year by year."

"..... and fewer minor injuries than any other year."

1945



1954



## Accident Rates - 1954



## An Accident Rate What's That?

Accident rates are used to measure accident experience. By the use of these rates, we are able to compare our performance from year to year. We can also see how well we are doing in comparison with other companies. The types of accidents, the number of employees and the number of hours worked by each employee are all considered in evaluating our efforts in accident prevention.

## Frequency Rate

Frequency Rate = no. of disabling injuries x 1,000,000 manhours worked

The frequency rate is the number of disabling injuries per million hours worked.

## Severity Rate

Severity Rate =  $\frac{\text{total time charges x 1,000}}{\text{manhours worked}}$ 

A uniform system for measuring the seriousness of disabling injuries was developed by the American Standards Association. It includes the actual number of days lost from the job, fixed time charges in days ranging from 15 days for the loss of a toe to 6000 days for the loss of a life, the number of employees and the number of hours worked by each employee. The severity rate is, therefore, a measure of the seriousness of disabling injuries experienced by employees during any given period.



## Mr. Horigan

sent us

this letter



#### LAGO OIL & TRANSPORT COMPANY, LTD.

ARUBA, NETHERLANDS WEST INDIES

CABLE ADDRESSES

MANUFACTURING DEPARTMENT
"ESSOLAGO"

MARINE DEPARTMENT

February 28, 1955

To All Employees:

Mineteen fifty-four was a remarkably safe year for Lago. Not only was it the safest in a quarter century of operation, but it was a year in which Lago was one of the safest refineries in the world.

We who worked here in 1954 had fewer injuries, minor and disabling, than in any previous year. We received awards from the National Safety Council for twice working more than three million consecutive man-hours without a disabling injury. We ended the year in first place in an international safety contest sponsored by the Council among major refineries.

These are gratifying accomplishments, but numbers and awards were not the leading characters in Lago's 1954 safety story. That role was played by people - men and women who put safety first.

Your team-work showed that, despite a yearly decrease in the accident record during the previous decade, the number and severity of michaps could still be reduced in 1954.

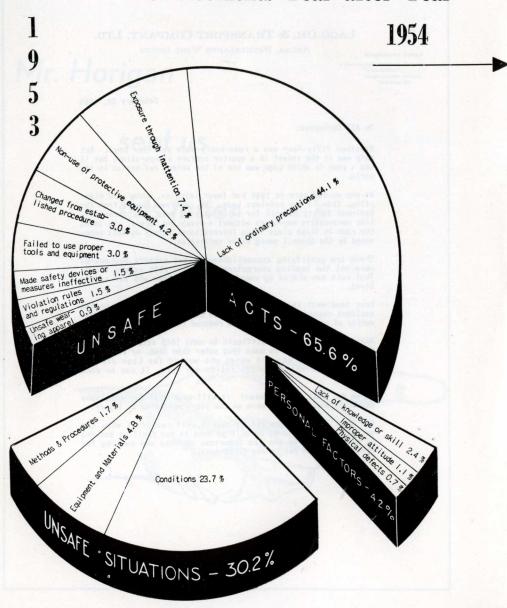
Admittedly, it will be difficult to make 1955 safer than 1954. But it was difficult to make 1949 safer than 1948, or 1946 safer than 1945. The men and women who worked for Lago did it. Through cooperation, concentration and care, it can be done again.

If we do, what will it mean? It will mean full pay envelopes earned by employees who were on the job - not idled by injury.

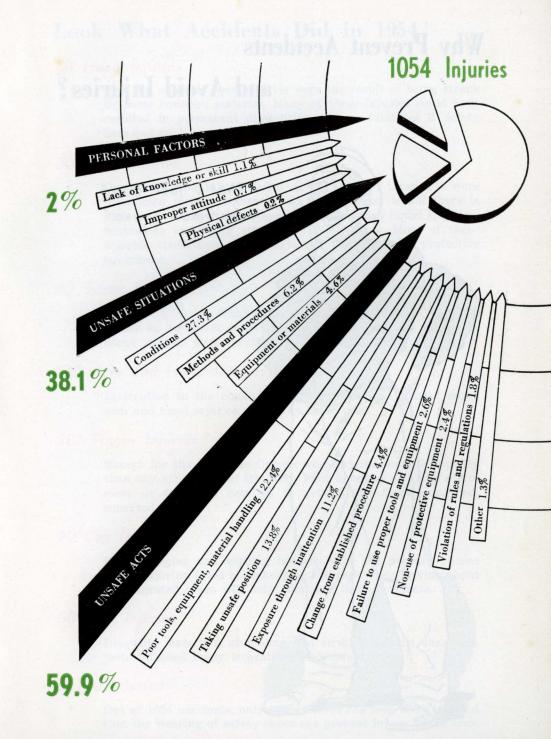
And most important to all of us, it will mean that when the quitting whistle blows, we will go home to our families knowing we will be back on the job tomorrow, working and carning for them, because we put safety first today.

J.J. Horigan

These Are the Leading Causes
of Accidents Year after Year



1375 Injuries



## Why Prevent Accidents

## and Avoid Injuries?



"That's just good common sense."

## Look What Accidents Did in 1954!

#### 64 Head Injuries

Two out of three head injuries were the result of being struck by some common material. Many of these injuries could have resulted in permanent disabilities or even fatalities if safety hats had not been worn.

#### 304 Eye Injuries

One out of four injuries affected the eyes. Of these, 248 were windblown foreign bodies in the eye, against which there is little or no control. Other eye injuries included liquid splashes, contusions and being struck by flying chips. Most of these injuries could have been prevented by using eye protective equipment.

#### 82 Trunk Injuries

Two out of three trunk injuries could be attributed to being struck by materials, tools or chemicals. Many of the remaining trunk injuries were sprained backs caused by improper lifting.

## 173 Arm and Hand Injuries

Inattention to the conditions of the work area caused many arm and hand injuries, primarily lacerations.

#### 281 Finger Injuries

Except for the eyes, the fingers were injured more frequently than any other part of the body. Poor handling of tools, equipment or materials resulted in getting the fingers mashed, squeezed and cut.

#### 90 Leg Injuries

Falls, tripping and slipping hazards were the primary causes of leg injuries. Good housekeeping and care when moving about in congested areas will help eliminate these accidents.

#### 58 Foot Injuries

Dropping materials, stumbling and striking against sharp objects inflicted many lacerations and sprains.

#### 2 Toe Injuries

Out of 1054 accidents, only two affected the toes. Here is proof that the wearing of safety shoes can prevent injury to the toes.

## Accident Prevention ....

Safety is not a matter of statistics. It is very nice to be able to say that we have broken an old record or set a new one — but, have you ever stopped to consider why our company has a good safety record?

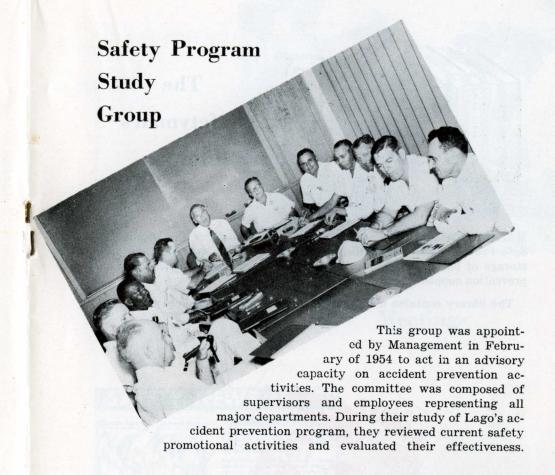
There are many things which are done to make this refinery a safe place to work. Modern engineering methods have eliminated many physical hazards associated with machines and equipment. Supervisors are continually reviewing work procedures with their men to make sure that each job is performed in the safest possible manner. How well all this has worked out is illustrated in the previous pages. Only four out of 10 accidents could be traced to equipment failure or unsafe conditions.

What about all the other accidents? Almost two-thirds of all accidents were the result of unsafe acts which we, as employees, are responsible for. Poor handling of tools, equipment or materials, as well as inattention on the job, still account for the largest percentage of accidents. Until we individually do our best to work safely, these unsafe acts can never be eliminated.

Our accident prevention program is designed to make us continuously conscious of safety. At first, awareness comes from signs, instructions and safety meetings. In time, those become mere reminders — safety consciousness has become a part of us. It is evidenced in our attitudes towards our fellow workers and every job.

Here are some of the main features of this accident prevention program.

## **Know Your Accident Prevention Program**



- Jumbo posters
- Indoctrination for new employees
- Safety training
- Accident scoreboard
- Investigation of minor injuries







# The Safetyman's Library

MANUAL OF SAFE PRACTICES — A supplement of the Manual of Safe Practices containing rules and suggestions for safe handling and storage of hazardous chemicals was distributed. Specific craft accident prevention supplements are under development.

The library contains many publications for use throughout the plant.



## Visual Aids

An effective visual aids library comprised of locally-made material is being assembled. Safety graphs, slides, pictures and movies are available for use by all departments. In the near future a centrally located visual aids building will be available for presenting visual aids, lectures and demonstrations to all employees.



Meetings

#### SAFETY NEWS LETTER



IRE IS A GOOD SERVANT BUT A POOR MASTER

ignty-tures years ago this month, if off; three very disasterous fires occur of the United States. One was the restOfficage Fire that claimed 250 lives second was a forest fire that result of the country of the count

These are grim reminders from the past of the terrible destruction of life and property that can result from fire.

int is why every year, one week during the month of October is set aside and is known as FIRE FREVENION MERK. The purpose of Fire Prevention week is to arouse of Fire Prevention week is to arouse in the prevention of the prevention of the seek, the cities would be used to be

#### MARINE DEPARTMENT EMPLOYEE HIT WITH CAR

on October 7th an employee of the Marine Department was struck by a car while he may crossing the refinery road in front of the Marine Office Annex.

Due to rainy conditions he did not see the approaching car and the driver failed to

ip and head injuries necessitated this mployee being hospitalized.

OF REFINERY PIPELINES

t has been decided to change the color depainting of acid lines and their card covers from red to brown through the refinery. All such lines are e marked "Acido", stencilled in red leters. This will apply to all weak actrong acid lines which require protectve measures against acid.

This change in color coding was brought about by the installation of extensive fire sprinkler systems in some areas. These sprinkler systems will be painted red as are some of the fire lines at the present time in the Frocess Department.

The color will be applied as the line need repainting, and also on issuance of J.R.O's. so as to complete the project within a one-year period.

camples of other color coding that are in meral use throughout the refinery, are follows:

Buff Brown Yellow Blue Red Orange Oreen Caustic Acid Foam System Foam System Fire Equipment Heavy Aromatic Safety Showers

Fire Equipmed Heavy Aroma Safety Shot Inert Gas

Don't risk an accident over poor memor

Safety Topics Prepared by Safety Division

## News

SAFETY NEWSLETTER

A weekly Safety
 Newsletter on timely
 topics is distributed to all
 supervisors.

## News

#### ACCIDENT BULLETIN

— The publication of this bulletin was started in 1953 to inform all supervisors of circumstances surrounding disabling accidents or near misses. Information contained in the Safety Newsletter and the Accident Bulletin serves as material for 5-minute safety talks.



DATE: February 24, 195

PLACE: Snow Pile Tank Farm Road

IME: 11.55 p.m.

& Shipping received a fractured leg when

beschifting an employee of Receiving a Shipping received a fractured leg when he was thrown out of a jeep which overturned on the Snow Pile Tank Farm Road.

The injured, together with two fellow workers, was going from the Receiving & Shipping office to the Tractor Fuel Pumphouse. He was stiting mext to the driver while the third man sat in the rear. In the act of making a left hand turn, the jeep skidded and turned over on its right side. The injured was throw out and pinned between the body of the jeep and the ground; the other two employees received only minor injuries.

This accident could have easily resulted in more serious injuries to the occupants. As stated in the Manual of Safe Practices, the driver is responsible for the safety of the vehicle and its passengers. He must obey all Company traffic rules, Covernment regulations, and be in possession of a valid Covernment drivers' license.

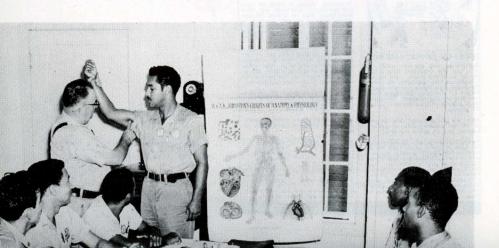
Violation of the above stated regulations was the cause of this accident.

Prepared by Safety Div. - I.R. Dept.

Date: February 26, 1954

## First Aid

A basic first aid course was given to some employees in the Process, Mechanical and Lago Police Departments. In addition, approximately 50 men were trained as first aid instructors.



## **Know Your Signs**









## Inspection

Safety Inspectors are on duty 24 hours a day to make sure that equipment is safe for maintenance work.

## Fire Fighting



Employees are given training in the use of fire-fighting equipment.



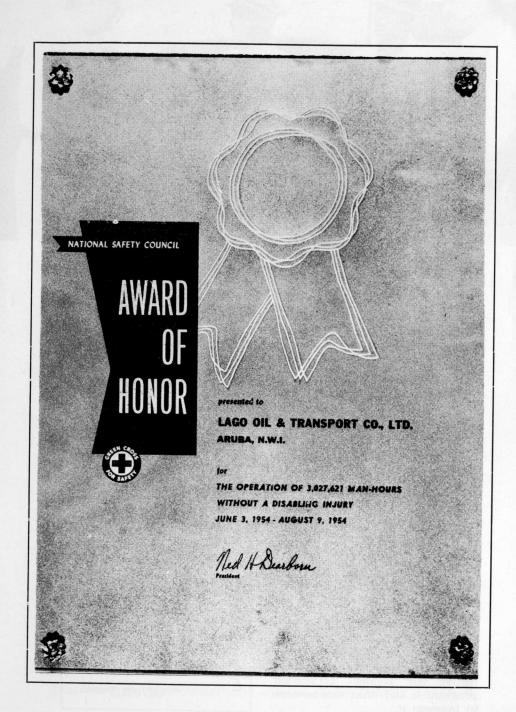
## Safe Driving

Approximately Fls. 7000 was paid out in 1954 in the form of quarterly awards to an average of 176 contestants in the Safe Driving Incentive Program.

## **Ever Alert**

How well are we doing? This questionnaire is being submitted to supervisors at various locations in the plant to determine how effective our accident prevention program is and what can be done to improve it.





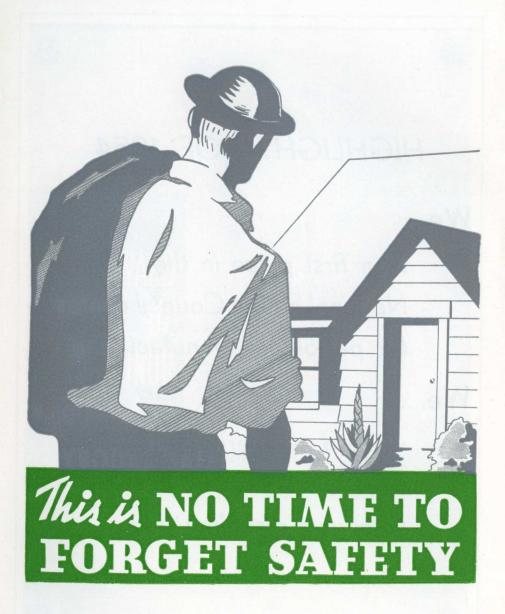
## HIGHLIGHTS OF 1954

We....

won first place in the National Safety Council contest for petroleum manufacturing

We....

worked six periods of over 1,000,000 manhours without a disabling injury



## Safety in the Home ....

Your welfare is of prime importance to Lago — whether you are at work or at home. Strangely enough, far more accidents occur at home than at work. Your house can be as safe as your job. So, won't you do your part?

## Don't

- Smoke in bed
- Take shortcuts when making repairs
- Forget to disconnect electrical appliances after use
- Let gas accumulate around your stove
- Store oily rags, rubbish, paint, etc., in your house
- Drive after drinking
- Install make-shift electrical connections
- Go swimming in rough water or immediately after eating

Drive safely and live longer. Speed will get you to the hospital or grave in the shortest possible time.

We're interested in

EVERYBODY'S SAFE

eanecially

especially 1951

Thanks for your cooperation and support of the accident prevention program.