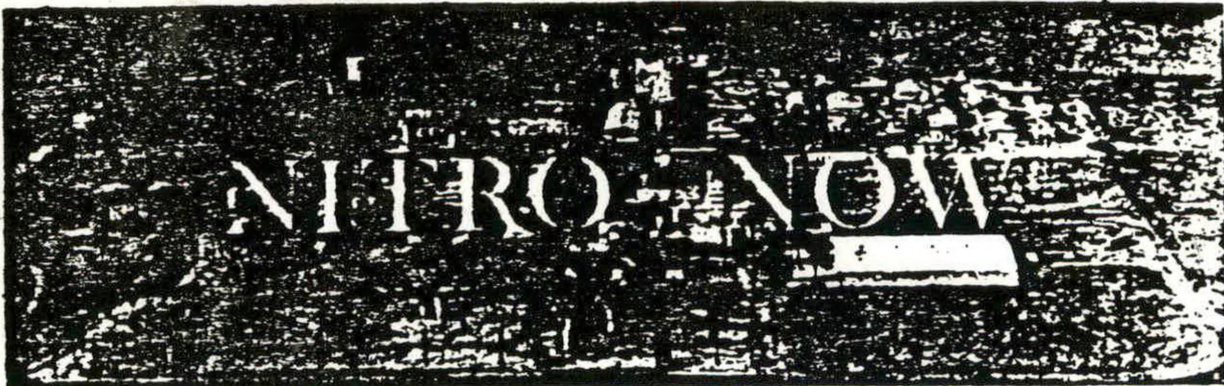




Monday, March 19, 1979

What's a Health Hazard? WATCH THIS SPACE

There have been several articles in the papers, and a number of reports on television recently, about proven or suspected health hazards in chemical plants in the Kanawha Valley. Certainly the possibility of working with a material which is a health hazard is one which probably has crossed the mind of most people working in the plant.

"How much am I exposed to?" "How hazardous is it?" "What kind of materials are hazardous?" "What does 'hazardous' really mean?" "What kind of things are being done to protect me?" "What if something I'm working with now ends up being proven to be a health hazard fifteen years down the road?" "How safe is safe?"

These questions and many others may be the kind of thing you have wondered about during the time you have worked here.

You may also have heard that the Nitro Plant is going to be involved in something called a "health study" beginning during the first week in April. You may have wondered what that's all about.

For these reasons, we will be examining several areas in a series of articles over the next few weeks. We will look at industrial hygiene, and the kinds of things going on in industrial hygiene in the Nitro Plant. We will take a look at the "health study" to find out what its purposes are, what it is and what it isn't, and what will happen to the results of the study. We'll look also at specific areas of the plant, to see what our exposure is to different materials, to examine some of the equipment used in the plant to measure worker exposure and to protect employees from even a nuisance level of exposure to different substances. We'll see what happens in follow-up on an accident. And we'll keep you posted on who's involved in both the health study and in various phases of industrial hygiene in the Nitro Plant.

So, if you've ever asked yourself any of the questions we've looked at in this article -- WATCH THIS SPACE. Here's where the answers will be coming out over the next few weeks.

SAFETY MEETINGS TOMORROW 8:15 AM and 3:15 PM. TOPIC: ALCOHOLISM/DRUG ABUSE

Monsanto Company

Nitro, West Virginia

8322315

EX 75



Wednesday, March 21, 1979

I. H. — WHAT IS IT?

WHAT IS INDUSTRIAL HYGIENE (IH)?

Industrial hygiene is the continuous examination of working conditions and environmental factors which could potentially have an effect on worker health or safety. Throughout Monsanto, employee health and safety are day-in, day-out tasks that take the full-time effort of hundreds of professionals. At one time, these professionals were primarily concerned with preventing falls, fires, and other sudden dangers. More recently, however, there is an increasing concern about the possible long-term effects of exposure to workplace conditions and some chemicals, including small concentrations of materials that until recently were almost impossible even to detect and measure. As a result, IH now becomes involved with a variety of activities, such as measuring chemical and noise exposure levels, evaluating job procedures for safety/health hazards, and working with production, maintenance, and engineering personnel to change or repair equipment that could pose a health hazard. The goal of IH is a simple one: to create and maintain a safe and healthy workplace for all Plant employees.

IS THIS SOMETHING NEW? No. Industrial hygiene has been a major concern at the Nitro Plant for many years, with even more emphasis and changes since 1976.

WHAT'S BEEN HAPPENING SINCE 1976? During 1977, IH surveys were conducted throughout the Plant. Their purpose? To identify areas of potential or actual health concern. (Since 1977, an IH survey of each building is done at least once each year, both to keep an eye on changes in the levels of chemicals and to ensure compliance with OSHA and Monsanto guidelines.) This survey program has resulted in action being taken in several areas to improve working conditions.

WE HEAR THAT, BUT WHAT'S REALLY BEING DONE?

We'll look at just a few of the projects begun and completed in 1978 as a result of the 1977 survey:

- Enclosure of the filter in B-47 to reduce Tertiary Butyl Amine exposure levels in that building
- Installation of a new catalyst handling system in B-46N, to reduce hydrochloric acid and pyridine exposure levels
- Ventilation improvements in B-91 and the Maintenance shops
- Changing solvents in B-42 to reduce exposures to these solvents

WHAT KIND OF THINGS ARE GOING TO HAPPEN THIS YEAR?

In 1979, we look for (among other projects):

- Improvement in dust levels in B-45 prior to the new expansion project
- Rehabilitation of B-46S to reduce solvent and noise levels
- An intensified hearing conservation program directed at all Plant employees

8322117

Monsanto Company

Nitro, West Virginia



Friday, March 23, 1979

"What is safe?" - A Tough Question to Answer

WHAT IS SAFE? That's a tough question to answer, because, as our ability to measure chemical and physical stresses and exposures improves, the answer continues to change. For this reason, we continue to reduce exposures to meet the best available standards of safety. In this framework, then, the job becomes to protect our people to the best of our ability, measuring against the most recent standards of what is accepted as safe.

HOW ARE THESE STANDARDS SET? Limits for "safe" exposures are usually designated as Threshold Limit Values (TLV's), or as Permissible Exposure Limits (PEL's). These limits have been established for most chemicals and physical stresses by the American Conference of Governmental Industrial Hygienists (ACGIH), while Monsanto and OSHA set the limits for still others. (And Monsanto's standards for "safe" exposure are often much tighter than those set by the government.)

SO WHAT? HAVING LIMITS DOESN'T MAKE THE PLANT SAFER. No, it doesn't-- it is only a starting place. Now comes the enormous job of measuring actual exposure levels within the plant.

Our ability to measure substances has improved so greatly over the past few years (using lab tools such as gas chromatography, mass-spectroscopy, and computer-directed tests that we can now get measurements as small as one part per trillion. That's 0.000000001 percent (as opposed to trying to measure 1.0% as little as 20 years ago). What does that really mean, though-- "one part per trillion"?

One part per million is the equivalent of one bad apple in 2,000 barrels of apples; one part per billion is the equivalent of one second in 32 years; one part per trillion could be compared to one pinch of salt in 10,000 tons of potato chips! As a result of this greatly improved ability to measure exposures, we are much better able to define "what is safe?"

SO YOU CAN MEASURE HOW MUCH WE'RE EXPOSED TO. HOW DO WE KNOW IT'S SAFE?

The "safe" limits are determined by evaluating the effect(s) of known levels of a component, and then identifying the level at which no detectable adverse effect takes place. Then, as a further safety factor, the limit for "safe" exposure-- the TLV-- is established at some fraction (usually 1/100) of that "no detectable effect" concentration. All TLV's are reviewed by ACGIH every year, to be sure (in light of new knowledge and better measurement tools) that they are still appropriate.

So when we measure what you are exposed to in the plant, we are evaluating it against a standard of safety generally 1/100 of that which is known to have any negative effect. At this time, that is the answer we have to "what is safe?" As technology advances past today's level, the answer to "what is safe?" may change, and Monsanto will continue to meet its commitment to provide a safe and healthy workplace, in light of the most advanced information available.

8322319

Monsanto Company

Nitro, West Virginia

NITRO NOW

Monday, March 26, 1979

'What is a health study, anyway?'

What is a health study? In light of the health study beginning at the Nitro Plant in the next week or so, you may have become curious. Let's look at some answers.

What is a health study? Just what the name implies—a study of people's health. Health studies are used to obtain information on the effects on human health of various stresses from the environment in which those humans live and work. Health studies can be concerned with diseases or with simple changes in health of any kind. Some health studies are designed to look at a specific cause of a known effect on humans, while others attempt to discover possible health effects by looking at a large number of people.

WHY HAVE THEM?

The reason health studies are conducted is because these studies often detect a trend in health effects that medical people have no way of detecting when looking at any one person individually. Therefore, by looking at groups of people, medical personnel can get more sensitive results than if they looked only at individuals.

HOW DO THEY WORK?

Health studies can be conducted in many ways. Some studies involve interviews and medical examinations with specific clinical tests. Other studies involve investigating medical records. Almost all health studies involve a "study group" (a group exposed to an environmental stress), and compare this

"study group" with a "control group" (which has not been exposed to the stress). The more common approach to a health study is to look backward from a particular illness or health effect, in order to attempt to find its cause. This is a retrospective study, and it was a study such as this that uncovered the link between rubella (measles) in women in early pregnancy, and a resulting high incidence of blindness in the infants born to such women. (Health studies can also examine a group of people and then follow them throughout their entire lives. This is known as a prospective study.)

WHAT DOES A HEALTH STUDY SHOW?

A health study may show a definite link between a particular illness or health effect and a given stress (chemical, physical, or whatever). But it may also prove inconclusive, or show no relationship at all between a health effect and any possible causes examined in the study.

If a health effect and its cause or causes are found in a health study, what is done with the results? The first use of these studies is that they identify a particular group that should be examined and followed closely thereafter. These studies can also lead to better preventive measures. A health study looking at a certain level of work stress and health effects it may produce can tell us if the level of that stress is safe enough to work with. These types of studies thus lead to increased safety on the job for all workers.



8322321

Monsanto Company

Nitro, West Virginia



Friday, June 1, 1979

A Note from Dr. Suskind

To All Monsanto Employees:

I am encouraged by the response to the invitation to participate in the University of Cincinnati Health Study which I will conduct at Putnam Health Center beginning on June 11. Obviously, the more people who participate, the more complete and scientific the study can be. For this reason, I would encourage those who have not yet responded to participate.

The physical exam involved in this study will be a complete and thorough one, and will not duplicate previous studies in which you may have been involved. The site chosen for the examinations was designed for medical purposes. Your exams are being scheduled in such a way that they should not require more than two hours of your time.

I would like to take this opportunity to stress again that my responsibility is to the individual worker/patient, and no one else. This is an independent study conceived and conducted by the doctors at the University of Cincinnati. Monsanto is involved only in financing the study and working out the details of scheduling the examinations. Their objective, like ours, is to determine possible health effects due to 2,4,5-T and its contaminants.

Raymond R. Suskind, M.D.

WHY GIVE BLOOD? HERE'S WHY.

Once again the Red Cross Bloodmobile will be coming to the Nitro Plant, on June 26. Why give blood? The letter below gives the best reason in the world:

May 24, 1979

To Monsanto Chemical Co., Nitro, W. Va.

Mr. and Mrs. William E. Warner wish to express our heartfelt thanks to the members of the Putnam County Chapter of the American Red Cross and the Monsanto blood bank for their efforts in supplying eleven units of white blood cells to the St. Francis Hospital to be administered to Mrs. Warner, which saved her life.

I have donated over thirty pints of blood to the Red Cross and I feel it was a very small price to pay for the life-giving blood furnished by the Red Cross when my wife was so near death.

Please extend our thanks to the donors for their unselfish efforts in our behalf.

Sincerely yours,

(signed) William E. Warner and
Nabel E. Warner

Broadside



8322345

Monsanto Company

Nitro, West Virginia

CONGRATS!

* Congratulations to Brent Bass, Ed's son, who in a recent Little League game completed an unassisted triple play— something that doesn't happen too often.

* Congratulations and best wishes to Cathy Burford and Sesie Shrewsbury, two of the Nitro Plant high-schoolers, for their graduation from Nitro High School.

* Congratulations to Bill D. Lett, who last month completed a lot of years of work by finishing his work toward a B. S. degree in Business Administration from West Virginia State College.

TRAVEL BUREAU



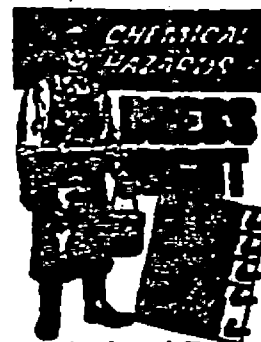
"Is there someone to take our vacation and just do nothing?"



"You don't need to worry 'bout Daddy and me... we're being in a hand over that the thought heater came and pulled the beam."

8322346

Safety Clips



YOUR BEST PROTECTION
IS TO PROTECT YOURSELF.

We have had two dermatitis cases at the Nitro Plant so far this year. How can you protect yourself from this?

1. Avoid skin contact where at all possible.
2. Use your protective equipment.
3. Use protective creams. (They work!)
4. Practice good personal hygiene.
5. Make this statement an active part of your workday:

INJURIES WILL DECLINE WITH SAFETY IN MIND!

KEEP BATTERIES OUT OF BABY

If you have small children or grandchildren, you should be aware that the button-shaped batteries used in watches and cameras can be dangerous if swallowed. The very young are tempted to put the tiny "energy pills" in their mouths. If swallowed, the batteries can block the esophagus, preventing the passage of food. If chewed, they can be poison. (One two-year-old died after having a violent reaction to a battery he swallowed.) If inhaled, they can block the airway and prevent breathing. So if you have extra batteries on hand, store them out of children's reach. And throw out dead batteries promptly.

IS YOUR WATER TOO HOT?

Eighty percent of homes tested in a recent survey had water heaters set higher than 130 degrees F., according to a report in the scientific journal Pediatrics. Water that hot can cause a burn within 30 seconds. To avoid scald burns, especially to children (and a temperature comfortable to your touch may be hot enough to scald children's more sensitive skin), take a temperature reading at the tap closest to the heater. If the water is hotter than 120°, turn the heater down.

H'Question of Cancer - Part V

-TOBACCO AND CANCER-

More than one-third of all the cancer deaths in the United States may result directly from cigarette smoking, according to the National Cancer Institute.

Cigarette smoking has long been known as the primary cause of lung cancer. It has also been linked to cancer of the upper respiratory tract, the upper gastrointestinal tract, the mouth, the larynx, and some types of bladder tumors.

There is a demonstrated dose-response effect to smoking: that is, the more cigarettes a person smokes, the more likely he or she is to contract cancer, and the sooner it is likely to appear. However, there is also a reversible effect: people who stop smoking are less likely than smokers to contract cancer.

Many doctors fear that the public emphasis on chemicals as a cause of cancer may draw attention away from this larger issue.

Frank J. Rauscher, Jr., senior vice president for research at the National Cancer Society, says: "The public...simply will not take advantage of the available information. Prevention, notably abstinence from tobacco, requires doing something for oneself continuously."

Birthdays

Happy birthday this week to 14 employees:

May 28- Cathy Burford

May 29- James D. Jividen, Paul R. Hill, Philip L. Sutherland

May 30- Phyllis Wallace

May 31- George F. Eggleston, Jackie G. Woodall, Rex R. Currey

June 1- Kathleen L. Morris, Dana B. Witt

June 2- John J. Mattea

June 3- Everett Rowsey, Wayne B. Asbury, Mildred A. Casto

COME SAY GOODBYE

Tomorrow marks the retirement party for Gordon Harrison. Come say goodbye at 2:00 P.M. in the B-57 Conference Rooms.

A Gift of Life - Leave Part of Yourself

Ever think about leaving eyes, heart, kidneys to someone else if something should happen to you? To obtain a donor card, or for further information, write to P.O. Box 6725, Houston, Texas 77005. Please enclose a long, self-addressed, stamped (15¢) envelope for the reply as they are a nonprofit organization.

DRIVING TIPS

As we go into the long, hot summer months and people start vacations, some of the tips Trooper Smith gave last week in the safety meetings bear repeating:

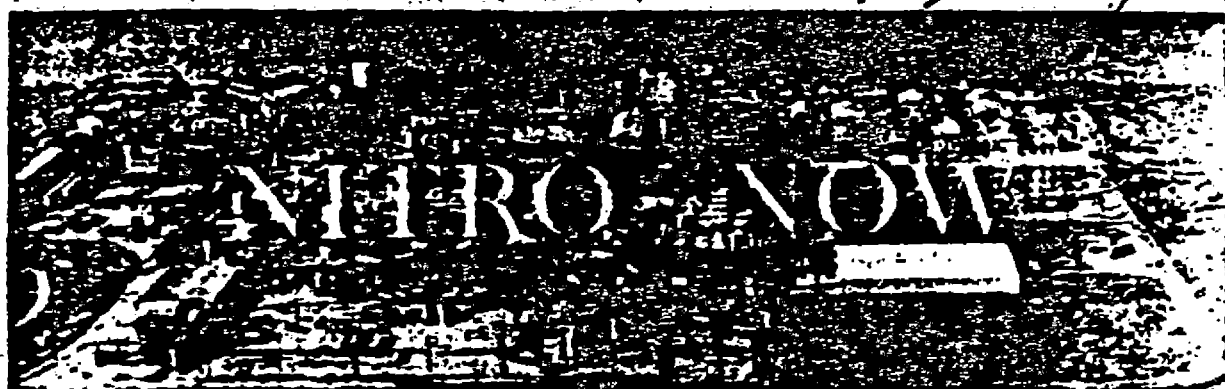
- The most dangerous mile you'll ever drive is the one directly in front of you. You can only drive one mile at a time.
- Interstates are potentially the safest of roads- but most accidents occur there, not only because most driving is done on them, but also because of complacency.
- Make no assumptions about what the other guy is going to do. For example, even when you have the right of way, check both directions at an intersection. Check to the left first, because that traffic is closer and would be the first source of an accident.
- Use control, courtesy, consideration in driving.
- **USE YOUR EYES.** Shift your eyes every two seconds in looking ahead. Check your rearview at least once every five seconds.
- In night driving, if blinded by the lights of oncoming traffic, it takes six seconds for your eyes to completely recover-- during which (at 60 MPH) you travel 616 feet! Don't look directly at the lights of oncoming traffic.
- Remember, this year 1000 people per week will die on the nation's highways... 5000 more than in Vietnam in six years of war. Please, don't be one of them.

Ever Notice...

...the length of discussion of any item in a proposed budget will be in inverse proportion to the amount of its cost. (Example: a decision to spend \$8 million on real estate will be reached within three minutes or less. A \$2000 difference in the type of wastebaskets will be argued for five hours.)

A MAN WHO IS
ALWAYS DECLARING
HE IS NO FOOL
USUALLY HAS HIS
SUSPICIONS!





Wednesday, May 30, 1979

QUESTIONS ABOUT THE HEALTH STUDY

Scheduling is underway for the health study to be conducted by Dr. Suskind of the University of Cincinnati. The study will begin June 11 at 8:00 A.M. and will run through June 18 (including Saturday and Sunday). A reminder: we need your response cards indicating the dates you prefer for the physical as soon as possible, to help in scheduling everyone.

On May 18, we answered several questions about the health study. However, some people have asked other questions which a number of you may have wondered about:

1. If I have had X-rays taken recently, do I have to be X-rayed again?

NO. If you have had chest X-rays (side/front) within the last few months, Dr. Suskind can, with your permission, obtain these from your physician or hospital.

2. Will I get a report of the results of my physical exam?

YES. Dr. Suskind will furnish each individual with a summary report of his/her exam. If you request, a detailed report will be sent to your physician as well.

3. How long will the examination take?

Normally, two hours; almost never more than two and one-half hours.

4. What tests will the doctors perform?

A complete analysis of your blood
Urine analysis
Vital signs (temperature, weight, blood pressure, etc.)

Ophthalmology- eye exam by a specialist
Dermatology- skin exam by a specialist
Chest X-ray (if none done recently)
EKG- a check of your heart
Pulmonary (lung) function, by a specialist
Nerve conduction exam (for as many as time permits)- a test of how rapidly a signal travels along a nerve
General over-all physical- 30 to 45 minutes by a physician

5. When will participants be advised of the scheduled time for their exam?

Beginning of Monday, June 4. (Physicals begin June 11.) To aid in scheduling, please return your response card as soon as possible to Owen Dolin or Sara Anthony, or call Owen (ext. 213) or Sara (ext. 208).

Americans Living Longer

In the course of this century, more than 25 years have been added onto the life of the average American.

Life expectancy for the general population rose from 47 years in 1900 to 73.2 years in 1977, thereby adding a whole new generation of living people to American society.

The quarter century has been added to the average life at a time when great social, educational, and scientific advances were taking place. As a result, America now has the richest talent pool of older citizens that it or any other nation has ever produced.

For information on programs and services available to older citizens in this area, contact Mrs. Connis Kayser, Community Council of Kanawha Valley, Inc., 342-5109.

8322343

Monsanto Company

Nitro, West Virginia

A QUESTION OF CANCER—PART II

The question today is: ARE MAN-MADE CHEMICALS A LEADING CAUSE OF CANCER?

The answer: The leading known cause of cancer is probably cigarette smoking, although at least one study suggests that it is American dietary habits. Both of these are controllable environmental factors.

In 1969, Dr. John Hingston of the International Agency for Research on Cancer in the World Health Organization first referred to "environmental" factors as causing the majority of cancers. He used the term "environmental" factors to mean that these cancers resulted not from genetic characteristics but from external influences such as diet, smoking, solar radiation, alcohol, pollution, sexual habits.

Dr. Hingston's statement has been widely misinterpreted-- and misused-- to imply that pollution and occupational hazards, especially chemicals, cause most cancer. At this time, air pollution has not been related to cancer. Chemicals in the workplace are responsible for a relatively small percentage of the total cancers. The World Health Organization says that occupationally-related cancers represent between 1 and 5 percent of the total.

That anyone should contract cancer from exposure to man-made chemicals is a cause of concern to manufacturers. A great deal of research time and money is being spent in industry, in universities, and in government research facilities to deal with this situation.

One of the most disturbing accusations to reach the public in recent months came from U.S. Secretary of Health, Education and Welfare Joseph Califano. Last September, Secretary Califano charged that in the next three decades, 20 percent of all cancers-- and possibly up to 40 percent-- will develop from exposure to chemicals in the workplace.

The HEW paper from which these estimates came has yet to be published in a scientific journal or exposed to critical peer review. But many reputable scientists who have seen the paper say that it is marred by obsolete data, inflated estimates, erroneous assumptions, worst-case determinations and both statistical and logical flaws. Generally, scientists believe that no new data were offered in the study to warrant the increased estimate of work-related cancers.

Regardless of the accuracy of the HEW paper, many experts worry that it will turn public concern away from the major causes of can-

cer. Hingston has stated that the report may be "detrimental to the best interests of cancer control."

John Weisburger of the American Health Foundation also says that the HEW paper has overstated the issue of occupational cancers while not properly emphasizing the major factors of smoking, drinking, and diet.



I'll go first, son, so you can walk in my footsteps.

INFLUENCE

Drop a pebble in the water,
And its ripples reach out far;
And the sunbeams dancing on them
May reflect them to a star.

Give a smile to someone passing,
Thereby make his morning glad;
It may greet you in the evening
When your own heart may be sad.

Do a deed of simple kindness;
Though its end you may not see,
It may reach, like widening ripples,
On a long eternity.

I have made a study of
world finances, and
have now concluded that:

- (1) the most expensive per-mile vehicle to operate is a supermarket cart;
- (2) money in the bank is like toothpaste in a tube--easy to get out, but hard to get back in;
- (3) the best way to get your old car to run better is to ask the price of a new one.



8322342

NIERO

Wednesday, May 16, 1971

HANDICAPPED: What Does It Mean?

Yesterday we identified a "handicapped person" as "one who has a physical or mental impairment that is a barrier to initial employment or subsequent placement in jobs, or which substantially limits one or more of such a person's major life activities; has a record of such impairment; or is regarded as having such an impairment."

But what does that mean? There are a number of terms in that definition that are kind of confusing. For instance, what does "substantially limits" mean? What are "major life activities?" Let's look at some of these terms.

"Substantially limits"-- this means the degree to which the impairment-- whether physical or mental-- affects employability. A handicapped person who is likely to experience difficulty in securing, retaining, or advancing in employment would be considered substantially limited.

"Life activities"-- may be considered to include communication, ambulation, self-care, socialization, education, employment, transportation, adapting to housing, etc. Primary attention is given to those activities that affect employability.

A qualified handicapped individual, then, is a person who is capable of performing a particular job with reasonable accommodation to his or her handicap.

LETTERS WILL BE COMING TO YOUR HOME WITHIN THE NEXT FEW DAYS ASKING YOU TO IDENTIFY YOURSELF AS A VIETNAM-ERA VETERAN, A DISABLED VETERAN, OR HANDICAPPED. Your response is invited.

Monsanto Company

2, 4, 5, T, 12

NOW

979

Don't Forget....

...the wrap-up session of the Pre-Retirement Course tomorrow evening at 6:30 P.M. in the office building conference room. If you have attended any of the sessions of the course, you may enjoy this final session.

Sportsman's Club Needs Help

Workers are needed for this Saturday at the Sportsman's Club, to get it ready for use this summer.

If you can't make it yourself, but have teenagers, they would certainly be welcome to come out, too.

If you need directions about how to get to the Club, check with Kelley Clendenin.

And the Winners Are....

Winners in the April Housekeeping Inspection were:

Accounting	Safety Supply
Waste Treatment	Garage
43 Warehouse	B-8
B-47	B-37
B-80	Electrical Shop
B-63 Shop	Instr. Shop

Honorable mention went to:

Lab	B-25 Warehouse
Storeroom	Pump/Machine/
	Oil Shop

Congratulations to all, and happy munches!

Nowadays, a rare steak
is one that's the same
price as last week.



8322341

Nitro, West Virginia

Safety Meetings This Week

REMEMBER THE SCHEDULE OF SAFETY MEETINGS FOR THIS WEEK:

Tuesday, May 16 8:15 A.M.

Thursday, May 17 3:15 P.M.

Topic of the meetings: highway safety. Featured speaker is Trooper Don S. Smith of the West Virginia State Police.

How 'Controllable' Is TART Charity?

Have you ever been curious about some of the charities that ask you for donations? How they disperse money, for example, and what percentage of your dollars goes for administrative expenses? If so, you can find the answers in a brochure called "Give But Give Wisely," available now from Conde Martin, Diane Friedberg, or Helen Eggleston in the Personnel Department.

The brochure lists those charitable, educational, and religious organizations that do not meet the Better Business Bureau's standards for charitable solicitations-- and indicates which standards each fails to meet. And it includes the names of charities that do meet BBB standards.

EVER NOTICE HOW THE WILDEST PERSONALITY SEEM TO CHASE THE STRONGEST WINDS?



Safety Clips



We know a Meridian, Mississippi, farmer who goes over his field the day before he starts plowing and kills all of the rattlesnakes he can find. When we asked him if it wasn't a dangerous thing to do, he replied, "I reckon so, son, but if I don't kill off the critters today when I'm looking, they are apt to get me tomorrow when I ain't lookin'."

This old farmer was never known to have been bitten by a snake. Why? He eliminated them. He took time to remove the hazard. He cleared the way so it would be easier and safer to complete his job. That was smart business then, and it is good business now.

If we don't keep our eyes open for hazards and make it a point to remove them when we see them, then one of those accident "snakes" may get us tomorrow-- when we "ain't looking."

--Safe Foreman magazine, Feb. '79

The Question Is: HOW LONG WILL YOUR BONDS DRAW INTEREST?

You may have heard reports of changes in Savings Bonds. To clarify those changes: ALL SERIES E BONDS YOU NOW OWN ARE STILL EARNING INTEREST. The U.S. Treasury states that E Bonds bought between May 1941 and April 1952 will earn interest for a full 40 years after their respective issue dates. A bond will stop earning interest before May, 1981, at earliest. To help you determine the maturities of your bonds:

Date of Issue	Date of Maturity	Current Life of Bond
May 1941- April 1952	May 1981- April 1992	40 years
May 1952- Jan. 1957	Jan. 1992- Sept. 1996	39 years, 8 months
Feb. 1957- May 1959	Jan. 1996- April 1998	38 years, 11 months
June 1959- Nov. 1965	Mar. 1997- Aug. 2003	37 years, 9 months
Dec. 1965- May 1969	Dec. 1992- May 1996	27 years
June 1969- Nov. 1973	Apr. 1995- Sept. 1999	25 years, 10 months
Dec. 1973- Dec. 1979	Dec. 1998- Dec. 2004	25 years

This simply indicates how long your bonds will continue to draw interest if you hold them. It does not indicate when you can cash the bond in, nor when you would get the full face value of the bond if you did cash it in.

8322340

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NITRO NOW

Monday, May 14, 1979

A Question of Cancer - Part III

Today's question: IS THE UNITED STATES THE COUNTRY WITH THE HIGHEST DEATH RATE FROM CANCER?

Answer: The country with the highest age-adjusted cancer death rate per 100,000 population is Scotland for men and the Netherlands for women. In this contest no one went to "win," the United States ranks far down the list. We are number 22 in cancer deaths for men, and number 21 in cancer deaths for women, according to the World Health Statistics Annual.

At the turn of the century, a person who developed cancer in this country had little hope of survival. By the 1930's, one person out of five survived five years after treatment for cancer. The ratio of cancer survivors rose to one in four in the 1950's, and stands at one in three today.

Of the more than 100 different forms of cancer, 11 are controllable and curable if diagnosed early. Another 11 have greatly improved survival rates as a result of new therapies. The American Cancer Society says that in 1979, about 128,000 people will die from cancer who might have been saved by earlier treatment which is now available.

Birthdays

Happy Birthday this week to thirteen:

- May 14- Robert E. Hamilton, David M. Gibson
- May 15- Robert J. Morton
- May 16- Carl L. Cobb, Robert A. White
- May 18- Earnest C. Sheffer
- May 19- Donzil F. Hess, Harry R. Delaney, Gregory L. Witt, John Arcoe, David Henry
- May 20- M. H. "Bob" Robinson, James R. Stricklen

ARE YOU HANDICAPPED?

Within the next week or so, a letter will be coming to your house from Monsanto, giving you the opportunity to identify yourself as handicapped, a disabled veteran, or a Vietnam Era Veteran (VEV).

Section 503 of the Rehabilitation Act of 1973 and the Vietnam Era Veteran's Readjustment Assistance Act of 1974 requires government contractors to take affirmative action to employ and advance in employment qualified handicapped individuals, disabled veterans, and VEV's.

We need to take a look at what these terms mean, before the letter comes.

A Vietnam Era Veteran is defined as an individual who served on active duty for a period of more than 180 days, any part of which occurred between Aug. 5, 1964, and May 7, 1975, and who received an honorable discharge. YOU NEED NOT HAVE ACTUALLY SERVED IN VIETNAM TO BE CONSIDERED A V.E.V.

A disabled veteran is an individual entitled to disability compensation administered by the Veterans Administration for a disability rated at 30% or more, or a person whose discharge or release from active duty was for a disability incurred or aggravated in the line of duty.

A handicapped person is one who has a physical or mental impairment that is a barrier to initial employment or subsequent placement in jobs, or which substantially limits one or more of such a person's major life activities; has a record of such impairment; or is regarded as having such an impairment.

This last definition has a number of terms in it which are rather confusing. In the next paper, we'll define the terms better.

Monsanto Company 8322339 Nitro, West Virginia

A QUESTION OF CANCER - PART II

Yesterday, we looked at the fact that cancer is a disease that just plain scares a lot of people, because it seems to strike anyone, anywhere, with little or no warning.

He also suggested that there are a lot of misunderstandings about cancer, and that we would be looking at some questions and answers in a series of articles. This is the first.

Question: IS THERE A CANCER EPIDEMIC IN THE UNITED STATES?

Answer: The United States is not in the throes of a cancer epidemic, according to medical authorities.

The belief that there is a cancer epidemic going on has come about through confusing total number with rate statistics. The American Cancer Society reports that except for lung cancer, the death rates-- that is, the number of deaths per 100,000 population-- from cancer are actually leveling off in the U.S. and for some cancers they are even dropping sharply. In total numbers, however, cancer incidence and deaths are increasing-- as is the general size and general age of the U.S. population. This must be considered when comparisons are made because a population with more of its members over age 60 will-- all other things being equal-- have more cancer deaths than a younger population because cancer is particularly a disease of the older person. So, while there has been an increase in the absolute number of cases of cancer reported, the combined, age-adjusted incidence for all cancer sites in both sexes-- except for lung cancer-- has either remained the same or has declined during the period for which we have reasonably reliable statistics. In some cases, the decrease has been dramatic: for example, the incidence of cancer of the stomach in men and women has fallen 50 per cent since 1950, according to government statistics and independent studies. The incidence of cancer of the uterus in women has also fallen by about the same amount over the same period.

On Monday, we'll take a look at the question: Is the United States the country with the highest death rate from cancer in the world?

Bleeding! What to Do Now?

The ball game was about to start. Gary L. grabbed his bat and ball and ran out the glass sliding door to the terrace-- but the door wasn't open! When it shattered, he suffered a severe cut on his arm. His mother, hearing the crash, came running. But what should she do?

Would you know what to do in a case like this?

The correct thing: press a clean cloth firmly over the wound and maintain constant pressure, while holding Gary's arm up-- then take Gary to the doctor for treatment.

A bandage alone is not enough. Constant pressure on the cloth over the wound, plus holding the arm up, would help control the bleeding.

By the way-- a strip of brightly-colored tape or some decals on the glass sliding door would have warned Gary that the door was closed.

'Show Me'

I'd rather see a sermon, than hear one
any day;
I'd rather you would walk with me, than
merely show the way;
The eye's a better pupil, and more willing
than the ear,
Fine counsel is confusing but example's
always clear.
And best of all the preachers, are the
men who live their creeds,
For to see good put in action is what
everybody needs.
I soon can learn to do it, if you'll let
me see it done;
I can see your hands in action, but your
tongue too fast may run.
And the lectures you deliver may be very
fine and true;
But I'd rather get my lesson observing
what you do;
For I may not understand you and the high
advice you give.
But there is no misunderstanding how you
act and how you live."

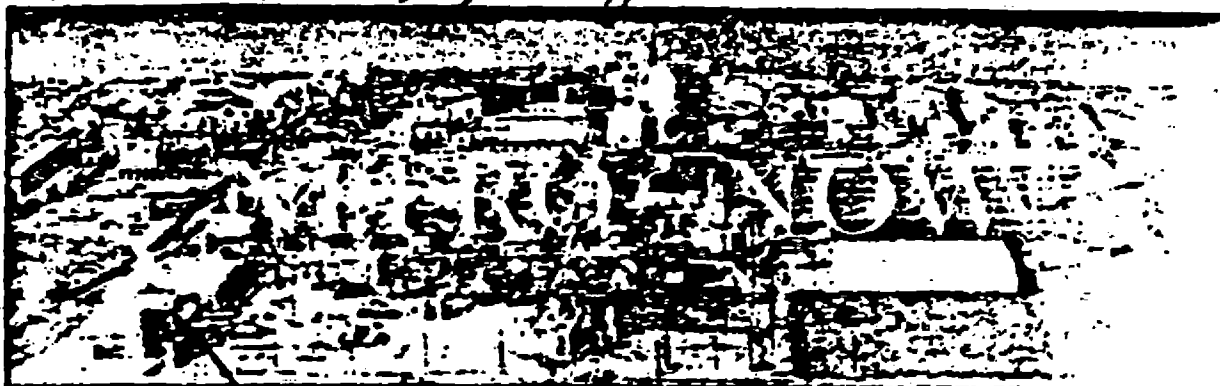
--Author Unknown

really is a
 wonderful thing -
 but it is made -
 if you can make a
 little of it.



842245

2, 1, 5 T file - then make



Thursday, May 10, 1979

SAFETY MEETING CANCELLED

The plantwide safety meeting originally scheduled for this afternoon has been cancelled, due to the unavailability of Trooper Smith.

This meeting will be made up by a meeting on Friday, May 25 at 8:15 A.M. The complete schedule is therefore

Tuesday, May 15	8:15 A.M.
Thursday, May 17	3:15 P.M.
Tuesday, May 22	8:15 A.M.
Friday, May 25	8:15 A.M.

Cards Available Monday

Four discount cards are available to Nitro Plant employees. They are:

Disney World- good for discounts on ticket books at Disneyland in California and at Disney World in Florida, as well as a variety of other discounts.

King's Island- good for a discount on admission to King's Island (Cincinnati) and a variety of other discounts.

Sea World- good for a discount on admission to any Sea World (located in San Diego, Cleveland, and Orlando, Florida), and a variety of other discounts.

Opryland- one dollar discount coupons for use on admission.

These cards are available from Diane Friedberg or Conda Martin in the Personnel Dept. beginning on Monday, May 14.

Lois Hall Wins Scholarship



Lois Ann Hall, daughter of Bob Hall (B-41) and his wife Mary Lois, and the granddaughter of Karl Angell (Tall Oil), has received a Monsanto Merit Award Scholarship.

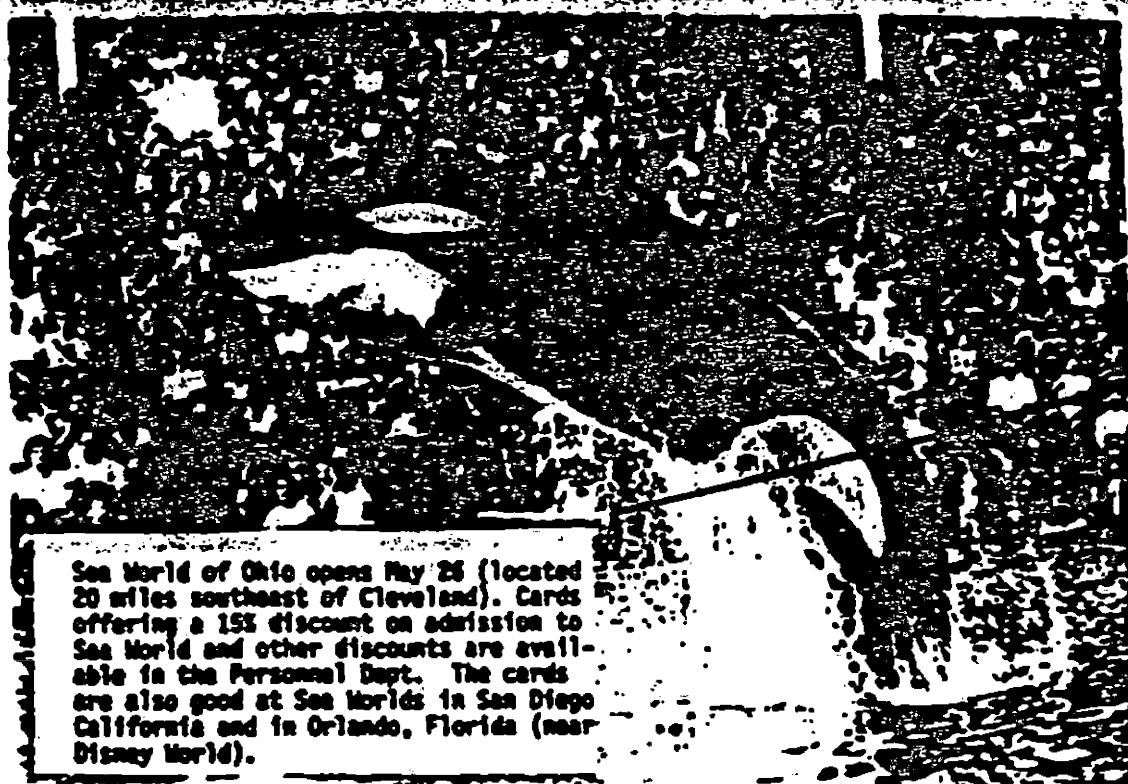
Shown in the picture above being honored by Marie Miller (Personnel Dept.) at the Nitro High awards assembly this morning, Lois Ann will be graduating from Nitro High this spring.

Lois Ann has had 4 years in the National Honor Society, was a 1978 representative to Girls' State, has been a Student Council member. She has been awarded a Spanish medal and was elected President of the Spanish Club at school. She has also been a member of the band throughout junior high and high school, and was named to the All-County Choir and Band. Her hobbies include singing, reading, and dancing.

Lois Ann will be attending Harvard University this fall, majoring in pre-law.

Our congratulations to Lois Ann, and best wishes for a continuation of her fine record of accomplishment as she goes on to college!

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Sea World of Ohio opens May 26 (located 20 miles southeast of Cleveland). Cards offering a 15% discount on admission to Sea World and other discounts are available in the Personnel Dept. The cards are also good at Sea Worlds in San Diego California and in Orlando, Florida (near Disney World).

A QUESTION OF CANCER - PART I

Tuberculosis, pneumonia, typhoid, smallpox-- most of the diseases which used to kill people in this country-- have been brought under control or conquered by modern medical science. Americans are healthier and living longer than ever before: a person born in the 1970's can expect to live 30 percent longer than a person born 50 years ago. But for most Americans, that is not good enough.

Because the threat from other maladies has decreased, the shadow of cancer hangs even more grimly over the country with one of the richest life-styles in the world. In our society of "instant" causes and cures, a still-not-understood disease seems not just larger-than-life but even larger than death in the minds of the American people.

The public is frightened. They fear a disease that seems to strike anyone, anywhere with seemingly no warning. They are further confused by hundreds of conflicting statements and statistics that they see and hear every day. And by accusations that seemingly everything they eat or drink or wear-- and all chemicals-- have been known to cause cancer.

This issue of cancer is so emotional and so frightening that people have difficulty dealing with it in a face-to-face way. However, some of the confusion about cancer, its causes and cures, can be erased by the answers to a few basic questions.

We'll be looking at some of those questions and answers in a series of articles over the next several issues of this paper.



5322336

Nitro 2,4,5T Collection



Monday, May 9, 1979

Safety Meetings Begin

The May safety meetings will begin tomorrow. Topic of the meetings this month is highway safety. Trooper Don R. Smith of the West Virginia State Police will be the featured speaker. Included in the meetings will be a short film and a talk by Trooper Smith.

Note that there will be only four meetings total in May, due to Trooper Smith's limited availability. The schedule is as follows:

Thurs., May 10	3:15 P.M.
Tues., May 15	8:15 A.M.
Thurs., May 17	3:15 P.M.
Tues., May 22	8:15 A.M.

Workers Needed

Workers are needed at the Sportsmen's Club this Saturday, for a general cleanup of the grounds, in preparation for opening of the Club.

If you need directions on how to get to the Club, see Kelley Glendenin (pipefitter).

Do You Know Anyone Like This?

The personnel manager, checking the job references of an applicant, asked the man's former employer if he was a steady worker.

"Steady?" came the reply. "Why, he was practically motionless!"

Would You Know How to Write a Will?

Would you? How about taxes after retirement— do you know in what ways your tax situation might change? What about the best way of setting up your estate so that your heirs can benefit most? How much do you know about these things?

Well, if your knowledge is limited and you would like to know more, tomorrow night is the night.

Legal issues after retirement is the topic of the Thursday night session of the Pre-Retirement Seminar. Originally scheduled for Thursday night and Monday, May 14, this topic will now be featured only this Thursday.

The class will begin at 6:30 P.M. on Thursday evening. It will be held in the Main Office Building conference room. All employees and retirees and their spouses are welcome.

GOOD WORK, SHIPPING!

(The following is from Hank Redner, Office Manager for Rubber Chemicals in Akron.)

To: Howell Kirtley, Shipping Dept., Nitro

Your boys in the shipping group have done another nice job in the first quarter on service complaints— holding them to but two, which was the same as you had in the fourth quarter of last year. Likewise, the packaging complaints were held at two— again similar to the last quarter.

With the number of rubber chemical shipments you make for our group in a quarter, your boys are doing a real good job.

Please tell your crew thanks for the Marketing Group at Akron.

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Monsanto Company

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A Note from Royce

I'm sure that many of you saw the article in the Daily Mail on Thursday, April 12, 1979. In regard to that article, I'd like to make a few comments as follows:

I invited Mr. Mullins to the plant on Wednesday, April 11, 1979, in hopes of giving him a good information base on which to write. Why? Because he had written two articles which were terribly confused and inaccurate. I felt that if I could help him understand the last 30 years of our plant's history, we could help him to write more factually and accurately.

Unfortunately, what I had hoped to accomplish failed, and the article printed in the April 12 edition gave a number of inaccurate and out-of-context quotations leaving the reader with, at best, a distorted perspective.

I personally regret that this happened, as it reflects on Monsanto Company, the Nitro Plant, and most importantly, on each of us within our plant family. Despite this bad experience, I intend to continue to handle our "outside" communications as I have in the past-- as honestly and directly as I possibly can. I can only hope that we will find that honesty is truly the best policy.

Thank you.

--R. M. Scott

BIRTHDAYS

Happy birthday this week to eight Nitro Plant employees:

April 16- Kenneth A. Baldwin, John M.

Natale

April 17- Charles E. Arthur, Daniel B.

Pauley

April 19- G. Ray Dudding, Willard W.

Forbes, Jr.

April 22- Robert L. Bailey, Darrell L.

Moore



Tonight marks the third session of the 1979 Pre-Retirement course.

Beginning at 6:30 P.M. in the Main Office Conference Room, the session tonight will deal with "Being a Consumer: Issues and Answers," as it affects retirees and their families.

If you have missed the previous sessions of the course, that will not affect your understanding of tonight's session; all sessions of the course are independent of one another, and do not build on one another (except in cases where two sessions are held on the same topic, as will occur later in the course).

All interested employees and their spouses are invited to attend tonight's session.

DCAT Deadline Is April 25

A Reminder: to those of you with sons or daughters who are graduating from high school this year, and who are planning to go on to college.

The Drug, Chemical and Allied Trades (DCAT) Association is granting \$2000 scholarship awards -- \$500 per year for four years-- to qualifying students. The awards will be made on the basis of scholastic achievement as indicated by SAT or ACT scores, demonstrated leadership qualities, and extracurricular accomplishments.

Applications and instructions are available from Helen Eggleston, Conda Martin, or Diane Friedberg in the Personnel Department.

ALL APPLICATIONS MUST BE RECEIVED BY DCAT BY APRIL 25, 1979.

Some Basic Laws

The following are some basic laws of life:

1. Chisolm's First Law of Human Interaction: If anything can go wrong, it will.
2. When things are going well, expect something to explode, erode, collapse, disappear.
3. When you've come to the conclusion that things can't possibly get any worse, you will be proven wrong.
4. Your motives for doing whatever good deed you have in mind will be interpreted differently by somebody.
5. If you explain something so clearly that nobody could possibly misunderstand, somebody will.
6. Once a job is fouled up, anything done to improve it will only make it worse.

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NITRO NOW

Monday, April 16, 1979

MEHI - What Is It?

(In last Wednesday's issue of Nitro Now, we mentioned the Monsanto computerized health information system, MEHI. This article is intended to provide further information on MEHI.)

WHAT IS MEHI?

MEHI is a computerized information system set up by Monsanto, designed to link chemical and noise exposure data with work history, medical records, and toxicity data, to produce a system that can be used to determine over the long term any possible health effects of exposure, as well as provide information that can be used by Monsanto in responding to government regulatory agencies.

WORK HISTORY

A record of where each Monsanto employee works is being kept on a weekly basis, beginning this month. (Previous records from past years were stored in the MEHI system on a yearly basis.) Because of the amount of mobility from job to job that occurs at the Nitro Plant, it is a big task to keep up with everyone in the plant. An even bigger job is involved in keeping track of Maintenance personnel's work histories. To do this, the Accounting Dept. has set up a system to produce a weekly record of the departments each Maintenance employee charges his time to. In doing this, a record is produced of the individual, the departments he worked in, and the amount of time worked in that dept.

CONFIDENTIALITY

The MEHI system that Monsanto is using
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is one of the most extensive and complex systems in use today to keep track of employee health data. While storing all the information, it allows reports to be presented without identifying employees, shows long-term health trends, and helps medical people identify a potential health problem before it becomes a definite concern.

In an extensive system like this, an individual may question whether his privacy is being maintained. This system is designed to provide only certain information to certain, carefully screened people. For example, medical records are only available to a few, carefully selected physicians and are not available in any form to any other person. This assures that private medical information stays private. The MEHI system also provides only essential information to a site's industrial hygienist. For example, it will not identify an employee and his or her exposure, but it will tell the industrial hygienist what type of sample was taken (personal sample or area sample).

A Sad Announcement

It is with great personal sorrow that I pass on to you the news of Bob Howard's death this morning.

Bob had been at the Nitro Plant since August 16, 1951, serving as an engineer, operating supervisor, and manufacturing superintendent before becoming Superintendent of Personnel in 1967.

We ask for your prayers for Bob's family and friends in this time of mourning.

-- R. M. Scott
Plant Manager

Monitoring (cont.)

Every industrial hygiene survey is written up in report form, and copies are distributed to the supervisor and first line supervisor, who then can discuss the results with hourly employees. The industrial hygienist, Bill Brooks (ext. 234) will go over the results with any employee if there are further questions.

So what's the point of monitoring? Monitoring has three goals:

(1) to maintain a healthy and safe work environment by keeping tabs on the chemical, dust, and noise levels in a particular area, and initiating control procedures when necessary;

(2) to provide information to employees concerning their exposure, if needed;

(3) to provide information for Monsanto's computerized information system that links industrial hygiene data, work history data, and medical records. (More information about this information system, MEMI, will be coming out in later issues of Nitro Now.)

Housekeeping Winners

Congratulations to the March House-keeping winners:

Bldg. 42	Waste Treatment
Bldg. 8	Safety Supply
Bldg. 25	Purchasing/Services
Bldg. 14	Electricians/Instr./
Bldg. 80	Scales

Honorable mention (for improvement since last month) went to:

Bldg. 47	Boiler House
Bldg. 41	Area Maintenance: SM/Weld./
	Pipe

Tall Oil Bldg. 66/63/B.H.
Stores/79/90

Both groups were awarded doughnuts.

Monsanto Testimonials Find Way to Burn Burns

Two polymer chemists with Monsanto have provided new insights into the treatment of burn and deep wound patients. Using techniques usually associated with polymer materials research to measure the mechanical properties of human skin, Dr. Allen Kenyon and McClinton Rayford have identified what kinds of materials make the most effective covering for burns or deep wounds, and how to determine the degree or severity of burns. The covering must be of just the

Burns (cont.)

right flexibility, in order to mold itself around the damaged area of the body and maintain the body's contours while healing takes place.

HIGHWAY HALLUCINATIONS

Going away for Easter? The following might be of interest to you. (From the U.V. Safety Council newsletter, Nov. 1978)

Long-distance, nonstop highway driving on bright sunny days can induce dangerous hallucinations in tired drivers-- and drinking too much coffee or taking "stay-awake" pills actually aggravates the situation, says a researcher.

But you can reduce the risk of suffering highway hallucinations, which resemble schizophrenia, simply by wearing sunglasses and stopping to rest when necessary.

One of the most dangerous times to experience this frightening condition is driving in the spring when the sun is reflecting from the new green leaves "because the leaves reflect more light when they are new than at any other time. The other especially bad thing is to have a nice good road where you drive steadily for long periods of time," said Dr. Humphrey Osmond, a U. of Alabama psychiatry professor who has studied the effects of long-distance driving on motorists.

"Any stimulant will tend to increase the probability of perceptual changes... long periods of sleeplessness can produce a whole host of symptoms that are almost like schizophrenia."



8322332



Retirement Benefits, Employment

The second session of the Pre-Retirement course will be held tomorrow evening from 6:30 to 9:00 P.M. The meeting will be held in the Main Office Conference Room in Bldg. 1 (the office building).

Topic of this session will be (1) Monsanto benefits after retirement, and (2) Post-retirement employment opportunities.

All interested employees and their spouses are welcome to attend the session.

Monitoring—A Big Job

A major part of the industrial hygiene program at the Nitro Plant is involved with monitoring the environment. Chemical, dust and noise levels are measured in each process throughout the plant at least once a year, and many processes have industrial hygiene (IH) assessments done twice a year. Building 47 is currently being surveyed as part of this continuing program. In addition to regular monitoring of each process, Maintenance Dept. personnel are currently being monitored for exposure. Previous IH surveys were always conducted on hourly employees only; this year for the first time, supervisors are also being monitored.

How is the sampling done? A known amount of air is pulled through some type of collecting device. Analyzing this device then determines how much of a chemical or dust was collected. By knowing the amount of chemical collected, and the amount of air that was pulled through the collector, the industrial hygienist can determine the average concentration that the worker was exposed to.

Chemicals in gaseous form (vapors, fumes, etc.) are usually collected using a glass tube filled with a granular material vapors can stick to. Dusts are collected by pulling the air through a filter. By determining the difference in weight of the filter before and after pulling the air through, the weight of the dust can be figured and a dust concentration calculated.

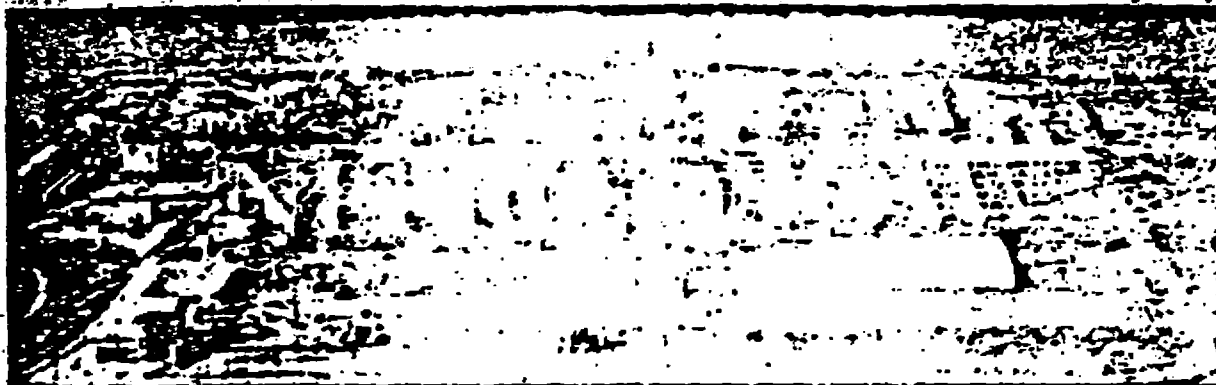
The most accurate way of determining a worker's exposure is to measure the air near his breathing zone during the time he is on the job assigned. This means that a worker must wear the sampling tube for the entire shift and carry it with him wherever he goes during that shift.

After all the measurements have been taken (and it often takes several measurements to get an accurate idea of a worker's exposure, as it may vary somewhat from day to day), the values calculated are compared with standards that are considered safe. These standards are set by OSHA, Monsanto, and the Conference of Governmental Industrial Hygienists. How the values actually found in the plant stack up against the standards determines whether control measures should be taken in the plant.

Sometimes a standard is not being violated, but because of higher than usual levels in the plant, the industrial hygienist may recommend control measures. In general, if a chemical level is greater than one-half the Threshold Limit Value (the maximum considered safe), the industrial hygienist will recommend some type of action to lower the chemical levels.

Often the hygienist may feel that the exposure is higher than he likes to see it, but doesn't know how it can best be brought under control. This is when he talks with manufacturing, engineering, and maintenance groups to find a solution to the problem.

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Monday, April 9, 1979

PRE-RETIREMENT COURSE BEGINS TONIGHT

This evening marks the beginning of the Pre-Retirement Planning course, being held every Monday and Thursday evening for the next six weeks.

The course will be held in Conf. Rooms A and B, Building 57, from 6:30 to 9:00 PM. Topic for tonight: "How Well Are You Prepared for Retirement?"

All interested employees and their spouses are welcome to come to the course.

Milk Intolerance

Over 30 million American adults are unable to drink milk. These people lack the enzyme used to digest lactose, the nutritious milk-sugar. They often experience gas, stomach cramps, or diarrhea after ingesting milk or other dairy products. It is common for individuals to become deficient in the enzyme as they mature. For those who are willing to pay a little bit extra, commercial products such as a powdered supplement or acidophilus-treated milk are now available that will enable many to drink milk without intestinal upset.



Monsanto Company

MT. SINAI VISITORS TOUR PLANT

A group of 23 visitors representing the Mount Sinai health study and the United Steelworkers made a complete plant tour at the Nitro Plant last Thursday.

The Mount Sinai health study physical exams were held at West Virginia State April 6 through April 8, and involved some 250 Nitro Plant employees and retirees, according to Dr. Marion Moses, a leader of the 35-member Mt. Sinai research team.

The areas toured included the warehouse area, the MBT areas (Buildings 41, 47, 48, 49, 78/79), Maintenance Shops, and the Control Lab area, with an auto tour of the rest of the plant. These areas included high-worker density, and both old and new areas of the Plant.

Birthdays

Happy birthday this week to 12 Nitro Plant employees:

April 10- Johnny B. Goodall, Howard F. Kelly,
Harold R. Null, Frances C. Hicks
April 11- Steven K. Kniceley, Scott Goodall
April 12- Joe Ray Brewer
April 13- Gordon W. Withrow, Harry L. Geiger
April 14- Otto J. Drescher, Emmett E. Bowen
April 15- Clarence J. Berry

To Think About

The greatest good you can do for another is not just to share your riches but to reveal to him his own.

- Benjamin Disraeli



83223 Nitro, West Virginia



Friday, March 30, 1979

"Who will be involved in the health study?"

You may have wondered whether or not you would be involved in the upcoming health study, to begin next week. It is a legitimate question, as some 250 or more employees and retirees will be a part of the study.

Who will these people be? First, all active and retired employees, wage and salary, who were exposed to dioxin in 2, 4, 5-T related departments, or through occasional or accidental exposure, as determined by the development of chloracne (acneform) symptoms.

Other, non-exposed workers will be examined in sufficient numbers to establish a well-matched and suitable control group so that valid comparisons of health data can be made between those exposed to the dioxin and those not exposed. (This matching will be done on the basis of such factors as date of hire, time worked in the plant, salary/wage composition of the group, age, and so on.)

The resulting data will be analyzed by Dr. Suskind, the Director of the Institute of Environmental Health at the University of Cincinnati, who will be directing the study as a follow-up to a study he did on dioxin exposure in 1949-1953. He will examine the data to determine whether any chronic, long-term health effects related to dioxin exposure have occurred. If any such effects are demonstrated, appropriate treatment and continuing health surveillance programs will be instituted to identify and treat individuals at the earliest possible stage of symptom development, if any.

Dr. Suskind had been considering a follow-up study on his 1949-1953 work. The World Health Organization (WHO) became interested in such studies after dioxin exposures occurred in Nitro, in Germany, the Netherlands, the United Kingdom, Italy, and Czechoslovakia, with chloracne symptoms appearing in each of these places. Dr. Suskind agreed to do a follow-up study and to pass his results on to WHO as well as publishing them in a reputable medical journal. Monsanto agreed to fund Dr. Suskind's study at Nitro, but the study will be under his control from start to finish.

We will introduce Dr. Suskind more fully in Monday's paper.

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Monsanto Company

Nitro, West Virginia

Introducing (Cont.)

Dr. Roush taught in the Dept. of Occupational Medicine at the U. of Pittsburgh from 1957 to 1963, and at the Dept. of Occupational Medicine at the U. of Cincinnati from 1963 to 1968, before going to Tulane University School of Medicine as Professor of Internal Medicine.

Before joining Monsanto, he was Medical Director for Ethyl Corporation from 1963 to 1973.

Certified by the American Board of Preventive Medicine, Dr. Roush has authored many articles for medical and scientific publications, and is a member of many medical and public health organizations.

Birthdays

Happy birthday this week to 21 Nitro people:

April 2- Lonnie R. Hurley, Charles E. Farley,

Keith L. McClanahan, Lance Koontes

April 3- Harold Grant, Charles E. Whittington,

James R. Smith, Lucille "Pat" Doss

April 4- Earl E. Westfall, Steve Lai

April 5- Marshal R. Johnson, Bennie G. Crigger,

Cheryl D. Bailey

April 6- Lester H. Hudnaught, Jr., Gregory T.

Salmons

April 7- Arthur E. Hurley, Keith A. Houston

April 8- Harold E. Bailey,

Lonny V. White, George Y.

Bang, John David Flowers

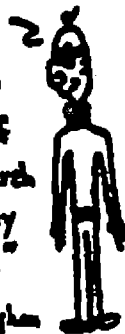
A Thought

"Die when I may, I want it said of me by those who knew me best, that I always plucked a thistle and planted a flower where I thought a flower would grow."

-Abraham Lincoln

"Money won't buy happiness, but it will pay the salaries of a large research staff to study the problem!"

-Bill Taylor



A reminder: the April plantwide housekeeping inspection is scheduled as follows:

Wednesday, April 4- department inspections

Thursday, April 5- Housekeeping Committee inspections

Particular emphasis this month will be on temporary and sub-standard pipe hangers and obsolete piping. Rusty pipe hangers, or those "repaired" with wire, rope, etc. will be particularly noted.



AN EXERCISE
GUARANTEED
TO RUIN
YOUR HEALTH

4. The Free Fall

Everyone has their own style when slipping and falling. Running down steps is a good way to begin this exercise. Or climbing on furniture and equipment. Or reaching for objects too high for you. Once your balance is gone, the rest is easy.

For good health, get your exercise some other way!



Monday, April 2, 1979

INTRODUCING DR. SUSKIND



SUSKIND

Dr. Raymond Suskind, Director of the Institute of Environmental Health at the University of Cincinnati, will be in the plant tomorrow to begin work on his health study on possible long-term effects of dioxin exposure.

Born in New York City, Dr. Suskind received a B.A. from Columbia before getting his M.D. from State University of New York. He took a residency in dermatology at Cincinnati General Hospital, was later a Research Fellow for the Dept. of Preventive Medicine and Industrial Health, and is board-certified by the American Board of Dermatology.

He has served as an Associate Professor of Dermatology at the Univ. of Cincinnati (1948-62), Research Fellow



ROUSH

in Preventive Medicine and Industrial Health, U. of Cincinnati College of Medicine (1948-62), Professor and Head of the Division of Environmental Medicine, U. of Oregon Medical School (1962-69), Professor of Dermatology, U. of Oregon Medical School (1962-69), Professor of Environmental Health and Director of the Dep. of Environmental Health and the Kettering Laboratory, College of Medicine, U. of Cincinnati (1969-present), and Professor of Medicine, College of Medicine, U. of Cincinnati (1969-present). He is also an attending physician at University Hospitals of Cincinnati Medical Center (1969-present).

Dr. Suskind is a principal investigator for the NIEHS Center for the Study of the Human Environment, and for NIOSH's Educational Resource Center for Occupational Safety and Health, among others. Primary areas of research interest for Dr. Suskind include (1) the role of environmental factors in skin reactions; skin responses to irritants; (2) environmental problems of chemical origin; and (3) percutaneous absorption: the nature of the skin's defenses and the mechanism of penetration; physical and chemical factors which influence penetration of specific molecules.

Accompanying Dr. Suskind in his visit to the Nitro Plant will be Dr. George Roush, Jr., director of Monsanto Company's Dept. of Medicine and Environmental Health. Born in Fort Wayne, Indiana, Dr. Roush received an M.D. from Washington University, and a Master's in Public Health from the University of Pittsburgh.

8322327

Monsanto Company

Nitro, West Virginia



Thursday, March 29, 1979

SOME RESULTS OF THE EARLIER DIOXIN STUDY

Next Tuesday, April 3, Dr. Raymond Suskind will arrive to begin a follow-up health study on the long-term effects of dioxin exposure.

Dr. Suskind, now Director of the Institute of Environmental Health at the University of Cincinnati, was one of the first physicians to become interested in the effects of dioxin exposures which occurred during production of the chemical trichlorophenol at this plant between 1948 and 1969. As a consulting dermatologist, he, with his associates, carried out hygiene surveys and health studies during the 1949-1953 period (with one health study lasting until 1956). During this time, appropriate treatments and recommendations for reducing exposures through engineering and work practice changes were made.

Thirty-six of the more severely affected workers (of over 200 exposed) were examined and treated over this four-year period, with symptoms characterized by acneform skin lesions, and, in a few, by peripheral nerve involvement (sensory changes, pain, and weakness) and transient liver dysfunction. With treatment, the acute symptoms improved with time, and in most cases steadily decreased in frequency and intensity.

Tomorrow we'll take a look at who will be involved in the upcoming health study.

HOW'S YOUR BUSINESS I.Q.?

1. The average business makes less than 10¢ profit on each dollar of sales. True- average business profit is only 5-6¢ on each dollar of sales.
2. A subsidiary is a company owned by another company. True. Monsanto, for example, owns several subsidiaries, either totally or partially.
3. A vertically integrated company centralizes most of its operations in one building. False. Vertical integration refers to the scope of the company's activities with regard to producing and selling its product.
4. One share of stock entitles its holder to 1% ownership in a company. False. While a share of stock represents ownership, it is not one percent.
5. A dividend is a form of payment to stockholders. True. In 1976, Monsanto paid a total of \$100.7 million in dividends to stockholders.
6. The profits of a company are divided each year among its owners or placed in the bank. False. Profits not paid to stockholders in dividends are retained earnings.
7. In 1976, wages, salaries and benefits were over a billion dollars for Monsanto's worldwide employees. True- \$1,041.6 billion or nearly 25% of each sales dollar.
8. The Federal Reserve is a branch of the National Guard designed to help businesses in disaster areas. False- it is a system of 12 district banks; the Board of Governors of the system set U.S. monetary policy.

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Nitro, West Virginia