

Interoffice Communication

To R. A. Darling

From J. V. Uptain

Date November 17, 1975

Subject Status Report - Safety Program Requirements
for Conoco Chemicals Manufacturing

I. ORGANIZATION AND ADMINISTRATION

A. Policy

A written statement of Plant Safety Policy was accepted on September 9, 1974 and communicated to all employees by the end of the following month. This written policy has not been revised.

B. Objectives

Specific objectives are established for the Aberdeen Plant in that definite goals are set to help control the number of injuries and illnesses. These goals are continually revised, based on changing circumstances, such as reduction in force. Further, definite department goals are set and performance compared against these goals. The action taken as a result of these comparisons are those concluded as appropriate to the circumstances.

The goals are not always continually and fully communicated to all employees. In addition, the comparisons and actions mentioned above are not always satisfactory.

C. Program Planning

A safety program was written and begun on January 6, 1975. This program is currently assessed as inadequate for current needs and is being revised. It is being planned by all Safety Department personnel and will be reviewed with all plant departments for input and commitment prior to reaching its final form.

D. Performance Evaluation

There is no formal program, as such, established for evaluating the effectiveness of the total plant safety program. As noted above, the safety program is being redefined and should have provisions for evaluation.

E. Emergency Plan

Emergency plans are established and include the "Aberdeen Plant General Emergency Procedures" and the "Vinyl Chloride Monomer (VCM) Emergency Plan". These procedures are reviewed and updated as needed.

Emphasis has been placed on VCM related training as required

by regulations, with training "drills" being supplanted by several actual emergencies. Other types of emergency training, such as fire drills, have suffered as a result, although training has been restarted at writing.

F. Security Plan

A security plan was completed and proposed to plant management on July 8, 1975, and is still being reviewed for final approval at writing.

G. OSHA Compliance Plan

An "OSHA Compliance Level Review" plan was completed by the Aberdeen Engineering Department and submitted to plant management for review and approval on May 5, 1975. This plan has not been given final approval at writing.

H. Mutual Aid

Relations with local government agencies are excellent. Informal agreements are in effect with the city police, the city fire department, the sheriff's office, and state police. These agencies are routinely and willingly involved in emergencies when required.

No classic mutual aid organization, as such, exists in this area, in which industrial experience has been, and is, limited.

II. HAZARD CONTROL

A. Proposed, major or significant changes in equipment and process
are reduced to writing and circulated to all affected departments, including safety, for comment and approval. This is normally done by either Mechanical Engineering or Process Engineering with the process frequently including a formal review session. The system is not strictly formal and does not include a hazardous survey, as such, on a routine basis.

B. Process Safety Reviews

Such effort is limited to that noted in "A" above. No formal, established program exists which is designed to accomplish the intent of this requirement.

C. Inspections

1. Safety Equipment

Procedures for routine inspection (includes check lists) are established and followed for control of critical equipment.

A partial list includes:

- a. Emergency alarms
- b. Perimeter gates and locks
- c. Sprinkler alarms and valves
- d. Fire hose systems, including hoses, racks, houses, and valves
- e. VCM area "deluge" systems, including monitor/sensors, fire pumps, and block valves

- f. Fire doors
- g. Emergency devices such as safety showers, eyewashes, Scott Air-Paks
- h. Fire extinguishers

2. Safety Controls

Inspection and controls are established on the following items:

- a. Relief valves and rupture discs
- b. Vessel and piping wall thickness - done annually by MED
- c. Large reactor electrical and air backup systems
- d. Honeywell VCM continuous monitor alarms

3. Tools and Equipment

- a. No program is established for inspection of hand tools.
- b. Programs, involving routine inspection, maintenance, and record keeping are established on:
 - (1) Hooks, hoists, cranes
 - (2) All rolling stock, including vehicles and lift trucks
 - (3) Jacks
- c. Slings, wire rope, etc. are inspected as used.

D. Permits

A work permit is now established that satisfies the intent of this requirement. Established several months ago, the results were initially poor due to lack of understanding and little commitment and follow through. This situation has been corrected with increased emphasis, education, and followup and the program is now showing results, although refinements and improvements will continue to be needed.

E. Contractor Safety

Policy regarding contractors is set, is essentially the same as that with respect to Conoco employees and is administered and controlled primarily by the Mechanical Engineering Department. Monitoring and training policies and procedures have been prepared and approved and are now being implemented.

F. Safety Suggestion System

There is no formal system established for encouraging and utilizing safety suggestions from employees.

G. Housekeeping

Housekeeping standards and responsibilities are established for all areas. Inspection and evaluation are formalized via:

- 1. Plant Safety Committee Inspections - Monthly inspection made by a committee comprised of company and union members per contractual agreement. Awards given for both good and bad performance.
- 2. Corporate Industrial Hygienist Inspections - Yearly inspection made by Corporate Industrial Hygienist. Results are reported

to plant manager and official responses made.

3. Plant Industrial Hygienist Inspections - Monthly followup inspection made by plant industrial hygienist on all items detected by Corporate Hygienist's inspection. Report of status made via monthly report to all department heads.
4. Plant Nurse Inspection of Breakrooms and Sanitary Facilities - Inspection and reporting done monthly by plant nurse.

H. Lighting

A program for periodic survey of lighting has been planned, but has not been started at writing.

I. Idle Equipment

There are no formal procedures established for safety securing idle equipment.

III. MEDICAL

A. Medical Services

Normal doctor and hospital services are pre-arranged to handle injuries and illnesses. Unusual services are obtained with the help and guidance of the Medical Division and the local company doctors.

B. Medical Surveillance

Periodic physicals and medical tests are done routinely under the guidance of, and with the help of, the Medical Division.

C. First Aid Facilities

Excellent first aid facilities have been established for in-plant first aid treatment. This facility is under the control of the plant nurse. Night and weekend first aid is rendered by lab shift workers, who are designated and trained to provide such treatment.

IV. INDUSTRIAL HYGIENE

A. Toxic Material Control

1. Ventilation

No formalized inspection of ventilation exists, except that done by the corporate Industrial Hygienist, as noted above. Occasional inspections are made by the Safety Department and deficiencies reported to management.

Some improvement has been made in improving ventilation in some areas, such as the dryer and large reactor control rooms, but much work is needed in other areas of the plant, particularly in the compound areas, where large volumes of highly toxic materials, such as lead, are routinely used.

2. Material Safety Data Sheets

There is a file of material safety data sheets available to all employees, although the file is not complete and is poorly organized. There is no system established for maintaining the file at writing.

3. Labeling

A program, though not formalized, exists for labeling toxic chemicals. However, the results, with certain exceptions, such as labeling of VCM containing materials, are not totally adequate and much more effort is needed to clearly identify toxicities and their correct handling.

B. Hearing Conservation

1. A routine audiometric testing program is well established and performed by the plant nurse under the direction of the Medical Division.
2. Various noise level surveys have been run for several years by corporate engineering and those results used for formulating noise reduction action plans. However, such engineering efforts to curtail noise exposure have not been accomplished due to the relatively low priorities assigned to those projects by plant management.
3. Employees are required to wear hearing protection in high noise level areas.
4. An in-plant noise survey is scheduled for December.

C. Employee Health

Each employee is offered a vision and blood pressure screen and examination and consultation by company doctors at their request or on the recommendation of the plant nurse. Health literature is made available for all employees.

V. TRAINING

A. New Employees

There is a program for indoctrinating new employees in plant safety policy, rules, and regulations. However, the program is not adequately formalized and documented.

B. Supervisors

There is no continuous program for training supervisors in safety. However:

1. A supervising workshop, ran jointly by the Safety Department and the Personnel Department is scheduled to begin during the last week of this month. It is tentatively planned that each supervisor will be expected to attend and participate in one work shop each month, with subject material not being limited to safety.
2. A proposal is being made for establishment of Department run supervisory training.

C. Job Safety Instruction

There is no plant wide program for safe job instruction based on job safety analysis, with the exception of that being done with laboratory personnel.

D. Fire Fighting

At present, there is no established program for training all

employees in fire fighting on a continuing basis. New employees do receive a short class (no hands-on fire fighting) on the use of portable fire extinguishers.

A facility for fire training is presently being designed and will be proposed.

E. First Aid Training

There is no established program for training all employees in first aid on a routine basis. A very limited amount of training was done by Harold Fischer during one visit. Plans were made for getting the plant nurse certified as a first aid instructor but this has not been accomplished. A mannequin, made for such training purposes, has been purchased.

F. Respiratory Protection

All plant employees have been trained in the use of respiratory equipment, primarily as a result of the VCM health regulations. Such training continues.

G. Plant Safety Manual

Two manuals are in use:

1. Supervisor's Safety Notebook - This is a manual given to each supervisor which contains selected procedures on plant wide safety subjects and procedures. It is used for supervisory guidance and training in general.
2. Employee Conduct and Safety Rules - A printed booklet given to each employee which defines rules on personal conduct and safety. This booklet is being up-dated and reprinted at writing.

H. CONOCO Safety Manual

With occasional exceptions, this manual is given to all employees, normally as they are hired. To date, no documentation has been made of the fact of the employee having certified or declared his (her) having read and understood the material, although this procedure is now being started.

VI. MOTIVATION

A. Safety Meetings

Safety meeting for employees are held in most departments by supervisors at least monthly. Plant wide compliance is not total.

A control system is established for documenting meeting and attendance, but no mechanism exists for reporting plant wide results.

Acting upon problems raised is considered to be a supervisory responsibility and no formal system for control exists.

B. Discipline

Policies on discipline with respect to violations of safety

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rules and regulations are established by contractual agreement, although evidence indicates a somewhat less than uniform application of these policies on a plant wide basis, with the tendency being to approach safety discipline less forcefully than other forms of discipline.

C. Incentives

Incentive programs used are:

1. Conoco Service and Safety Awards
2. Plant wide, personal gifts for achieving one, two, etc. years without lost time. Such awards have not been used since the plant achieved two years with no lost time over one year ago.
3. Department dinners have been used for good performance in injury reduction, though not within the last year.
4. Safe Driver Awards - A part of the Lift Truck Driver Training program.

D. Off-Job Safety

No program exists to encourage off-the-job safety, except that the "Family Safety Magazine" is sent to each employee's home quarterly.

E. Community Safety

There is little or no participation in or encouragement of community safety.

VII. ACCIDENT AND INJURY RECORDS

A. Reports

Initiated on:

1. First Aid - In-plant "Injury Investigation Report"
2. Medical - In-plant "Injury Investigation Report" plus form 6-7X6 per Insurance Policy Guide.
3. Disabling Injuries - In-plant form plus form 6 - 7X6 plus immediate TWX to Insurance Division and Manager of Manufacturing.
4. Off-Job - Form 6-97PA used per Medical Procedures Guide.
5. Fires - In-plant form used.
6. Mishaps - No procedure is established for reporting and acting on mishaps.
7. Property Loss - Form 6-15S is used per the Insurance Policy Guide.
8. Automotive Accidents - Form 6 -33S is used per the Insurance Policy Guide.
9. General Liability - Form F6-34S is used per the Insurance Policy Guide.

B. Investigation and Analysis

All injuries, including first aid cases, are promptly investigated and action taken as required.

All medical cases are reported to the Manager of Manufacturing. In those cases where the initial report is incomplete, supplemental 6-7X6 reports are made.

C. Follow Up

Controlling and reporting the status of all corrective action is accomplished via the quarterly injury report.

D. Records

Records are kept of all injuries, illnesses, investigations, and corrective actions.

E. OSHA Record Keeping

All injury and illness record keeping is in accordance with OSHA regulations and has been so certified during OSHA compliance officer inspection.

F. Statistics & Special Studies

A "Department Injury Summary" report is prepared and distributed on a monthly basis to assess performance by department and supervisor.

Special studies of accident causes, types, etc. are made when the need is indicated by lack of performance. These studies are not scheduled on a routine basis.

G. Quarterly Injury Report

A quarterly injury report is made according to procedures now in effect.

H. Workmens Compensation

Contact has been established (and routinely used) with the local Hartford Insurance office and the CONOCO Insurance Division for surveillance and control of Workmens Compensation cases.



Jerald V. Uptain
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c: J. Powell

All Department Heads

All Safety Department Personnel