

To: John Friend

From: D. W. Hollis
Date: February 25, 1986

Subject: VINYL 1986 SAFETY PROGRAM

Interoffice
Communication

VISTA

A meeting was held with the Vinyl Shift Supervisors on January 7 to discuss the safety effort in Vinyl and to work on a program in 1986 that would increase safety awareness.

There was a general opinion that, on a day-to-day basis, safety had not been emphasized enough. A need was recognized to put safety in the forefront of our work and the method to do this was discussed. One method is to make sure that the work permit issued to maintenance includes all safety/respirator equipment needed and that the equipment is used in the field. This would involve double checking on maintenance jobs in progress and carefully reviewing the work practices. Another work practice check needed is on the operators. An audit of how they do certain jobs and then a candid review with the operator would aid in correcting unsafe work practices and would heighten safety awareness.

The changes anticipated in the monthly safety meetings were discussed. The mandatory OSHA training sessions will be organized to reduce the time they take in our safety sessions. Also, the training under the EPA Consent Decree will be organized in the same manner. This should give us more time to discuss safety topics in the monthly meetings. Also, there will be cases when Vinyl will have the mandatory meetings and regular safety meetings in the same month.

The Vinyl safety program for 1986 will center around work practice audits by the Shift Supervisors. The last three medical cases in Vinyl occurred while operators were opening or closing valves. Special attention will be paid during the audits to actions of the operators during valve operation. Also the condition of the valve, absence of handle and location of valves will be reviewed during the audit to make jobs safer. Each Shift Supervisor will perform one audit a month. Chris and I will assist in these audits, if needed, and help implement training needed and will also perform a minimum of six independent audits each.

These audits are being done to accomplish the goal of heightening the safety awareness of everyone in Vinyl.

David Hollis
D. W. Hollis
Operations Superintendent - Vinyl

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1985 SAFETY PROGRAM REVIEW

A review of the 1985 safety program and the injuries that occurred in Vinyl is included for completeness.

Monthly Safety Meetings

1. Have two meetings dedicated to writing and discussing Job Safety Analysis. Two meetings utilizing Job Safety Analyses were done and were well received by the operators. We had some problems with people being embarrassed to speak in front of a group. These meetings did generate a lot of discussion on different ways to do the same job and brought safety problems to light (e.g. the dryer tumbler turning while people are in it cleaning-solution is to put chocks in the drive gear to prevent this).
2. Have one meeting discussing home safety and home emergency preparedness. This meeting concentrated on having a home emergency plan (fire escape, emergency phone numbers, neighbors to notify in case of emergency, spouses trained in first aid) and how to properly handle handtools. Seat belt safety was also discussed.
3. Have the Safety Department give the required annual respirator training to provide shift-to-shift consistency. This training was given by the Safety Department and they did a good job of covering all the respirators as how to wear, care for and properly treat the respirators. All the operators tried on the two types of Scott air packs and the air line respirator.
4. Prepare the monthly meetings so that there is more operator participation. The meetings were designed for more participation by having the training done as a question and answer lesson. This worked well on some topics but others did not lend themselves well to this method. The 1986 meetings will be designed in this method also.
5. Have a meeting to review the recently revised power failure procedure. This meeting was held and the AMS emergency kill system was discussed in detail.

On-Shift Meetings

1. Develop the use of short on-shift meetings to discuss recent safety problems, operational problems and review new or existing procedures. These meetings did not develop as well as we wanted but were mainly held during the shutdowns to make sure everyone understood safety was paramount. The shutdowns went well with no injuries.
2. These meetings would also be used to get operator feedback on developing operational problems. As discussed above, these meetings did not develop well.

Training Needed

1. Train the "A" operators to assist in permit procedures by learning to clear equipment and prepare for maintenance. Some work was done to train the operators but more emphasis was placed on cross-training the "A" operators between the reactor units and dryers.

Training Needed - continued

2. Have a training session for the Shift Supervisors and Chief Operators on the VCM tank farm. This would cover the railcar unloading operation and environmental/safety systems at the tank farm. These training sessions were held and Dean Honeycutt did a good job of explaining the actions needed in an emergency. The total operation was briefly discussed but emphasis was placed on emergency response.

Vinyl Injuries1985MedicalOperator
ClassificationInjury DescriptionA-operator
(dryers)

Laceration to left forearm - While opening a block valve, the operator's arm contacted a rough edge on the insulation metal (8-14-85).

Chief Lead

Fractured ribs - While closing the discharge valve on 903 recovery valve; the chain broke where welded to valve handle and he fell backwards (11-20-85).

First Aid

General Helper

Laceration to finger - Employee received paper cut while handling box top in staging area (2-21-85).

A-operator
(Reactors)

Contusion/laceration to top of left hand - Employee was connecting recovery hose from reactor sampling cart to recovery line west of 742/743 reactors when the back of his hand struck discharge pipe off of breathing air RV (10-14-85).

Chief Lead

Puncture wound to finger - Employee received puncture wound (apparently from piece of wire) while opening air to valves on dump manifold at 743 reactor (3-06-85).

Yard Operator

Sprayed with alcohol into his eyes while disconnecting unloading hose at the bottom of the car. Investigation is in progress (12-26-85).

Chief Lead

Puncture wound to finger - Employee received puncture wound from piece of wire on handle of manual valve at fluid bed dryer (1-16-85).

Vinyl Injuries

1984

Medical

Operator
Classification

Injury Description

Operations Engineer

Laceration to third right finger - Employee was cut by sharp edge on insulation on pipe while exiting backmix section of the fluid bed (7-9-84).

A-operator
(Reactors)

Fracture to right heel and ligament strain to right knee - Employee fell approximately three feet from portable ladder when pipe wrench slipped off of stem of manual valve (12-22-84).

First Aid

Yard Operator

Right eye red and irritated - A bug flew into his eye causing it to become irritated (7-8-84).

Chief Lead

Abrasion to right knee - Employee stepped up from a two-step platform and bumped his knee on the corner of the old module dump box (8-2-84).

Vinyl Injuries1983MedicalOperator
ClassificationInjury Description

Yard Operator

Laceration to upper lip - The employee's lip contacted a piece of angle iron while circling a hopper car (4-24-83).

A-operator
(Reactors)

Contusion to left knee - Employee was struck in the kneecap with an air hose coupling when it somehow became disconnected to a chipping hammer (4-11-83).

First Aid

Yard Operator

Spider bite to left forearm - while loading a resin railcar, the injured was bitten by a small spider. (7-12-83).

A-operator
(Dryers)

Contusion to left side of face - Employee was struck in the face with the extension of a hijacker while trying to lower it (8-29-83).

A-operator
(Dryers)

Laceration to left thumb - Employee's left thumb became caught between a nut and channellocks when the channellocks slipped (6-19-83).

Vinyl Injuries1982MedicalOperator
ClassificationInjury DescriptionA-operator
(Reactors)

Laceration to inside of right arm and elbow - While overriding the secondary VCM charge valve on 743 reactor, the read switch on top of the actuator pinched the arm and caused a sever laceration (10-15-82).

General Helper

Laceration to left hand - Employee cut his hand on the fragment of a partially removed drum seal while trying to up-right the drum (5-20-82).

A-operator
(Reactors)

Laceration to third left finger - Employee's finger was caught between a calcium stearate drum and a valve bonnet (9-15-82).

Chief Lead

Muscle strain to lower back - Employee was injured while helping the shift mechanic remove a pump (9-21-82).

First Aid

Chief Lead

First degree burn to left cheek - Employee was burnt while handling a steam hose in subfreezing weather (1-15-82).

Yard Operator

Contusion to left hand - Employee slipped in embankment slag while sampling a railcar and his hand struck the side of the railcar causing a bruise (3-9-82).

Yard Operator

Deep abrasion to right thumb - Employee was injured when 690 silo chute (which was full of resin that had leaked through the automatic valve) fell rapidly against his thumb (3-22-82).

Vinyl Injuries1982 - continuedFirst Aid - continuedOperator
ClassificationInjury DescriptionA-operator
(Reactors)

Contusion to left hand - Employee was injured when north seal water filter pack lid fell on his hand (7-28-82).

A-operator
(Dryers)

Wasp sting to back right side of neck - while walking along second street south of emergency equipment building (9-28-82).

Yard Operator

Sprain to right wrist - Employee was injured when he fell while chasing a loose hopper car (8-22-82).

A-operator
(Reactors)

Chemical burn to right foot - AMS was splashed on employee's foot while transferring AMS (4-12-82).

General Helper

Abrasion to right lower leg - Employee fell while vacuuming the fluid bed plate coils and his shin was cut by the edge of a coil (2-24-82).

Vinyl Injuries1981MedicalOperator
ClassificationInjury Description

None

None

First Aid

General Helper

Abrasion to fourth right finger -
Employee's finger was pinched while
removing collapsible work platform
from dryer dust collector (4-1-81).

A-operator
(Reactors)

Chemical burn to lower trunk and legs -
Injured was splashed with AMS when the
drum pump hose failed (8-8-81).

A-operator
(Reactors)

First degree burn to left forearm -
Employee received burn when his fore-
arm contacted uninsulated steam
stripping line in pipe rack (9-13-81).

A-operator
(Reactors)

First degree burn to right forearm -
Employee's arm contacted uninsulated
steam tracing line at new module east
RVCM pump (12-7-81).

Chief Lead

Laceration of third left finger -
Employee was picking up a piece of
wire when it hung on some grating
and caused the laceration (4-13-81).

Chief Lead

Abrasion to left wrist - while preparing
to clear a plugged resin transfer line,
a fitting came loose resulting in the
abrasion (5-28-81).

Yard Operator

Cut to left thumb - Employee's hand was
caught between a valve handle and brace
on the supervac unit (11-23-81).

INJURY SUMMARY (1981 - 1985)*

	1981		1982		1983		1984		1985	
	<u>FA</u>	<u>Med</u>	<u>FA</u>	<u>Med</u>	<u>FA</u>	<u>Med</u>	<u>FA</u>	<u>Med</u>	<u>FA</u>	<u>Med</u>
(1) Vinyl	7	0	8	4	3	2	2	2	4	2
(2) Maintenance										
a. Total	19	2	15	2	14	1	18	1	15	4
b. In Vinyl	12	2	8	0	7	1	7	1	5	1

* All numbers are reported for calendar years - not fiscal years.