

HEALTH & SAFETY COMMITTEE
MINUTES
January 3, 1991

AGENDA

1. This month's Audit Area Manager(s)
2. Unit Audit(s)

UNIT AUDIT(s)

<u>Area</u>	<u>Audit Date</u>	<u>Response Due = Received</u>
Alkylation/Thermal Cracking	11/01/91	01/01/92 01/06/92
Major Resins	12/06/91	02/06/92
North/West Warehouses	12/06/91	02/06/92
Central Maintenance	01/03/91	03/03/91

ITEM # OLD BUSINESS: (Status reviewed in December 6 meeting)

1-12/91: Are the grinders in the Field Zone Shops on an Audit Program?
If so, who does this audit?

Action: C. W. Vasek, H&S (Pending Completion)

Response: Currently, the BA's have responsibility to maintain the grinders. H&S has developed a grinder inspection sheet that is being used in the Central Shops and was also issued to BA area Safety Inspectors to implement in their areas of assignment. Implementation throughout the Complex is still on-going. Field audits are being conducted and BA area Safety Inspectors are auditing these forms.

2-6/91: There is a concern about ladder inspections not being done. Also, metal ladders are being brought into the Complex by contractors to the sub-stations.

Action: Smokey Mathers, Carpenter Shop (Action Complete)

Response: A study group has looked at the program and determined we are not in compliance. The study group (Randy Sapp is team leader) is in its final stages of completion. The new ladder order (M-114) will cover concerns about inspection and tagging. Maintenance is in the final process of implementing Maintenance Order M-114 (Portable Ladders) which addresses inspections, tagging, and use of ladders. Maintenance Order (M-114) Portable Ladders issued January 1, 1992.

3-6/91: There has been a report that during Chemical safety meetings if safety items which are not on the agenda, are not allowed to be brought up for discussion. Safety issues should be brought to management's attention immediately. [7/5/91] It was determined that this issue still needs to be worked on.

Action: W. M. Boaze, Safety Inspector/Ed Koch
(Pending Completion)

Response: If there is a safety concern, it should be brought up immediately to management's attention. One should not wait until there is a safety meeting. Items discussed at a meeting should follow the agenda. If there is still a question on a safety issue, contact your foreman or supervisor after the meeting. E. M. Hawthorne & S. Smith will visit with Maintenance management and discuss this item.

4-7/91: BA's are inconsistent with policy on when electricians working on 440 can work alone or require a buddy. New safety order w/revised guidelines are being presented to HSMT. These guidelines identify what jobs should be performed with two people. Also, when a motor trips, re-energization should not be done unless you have identified the problem (per OSHA). What is the current policy on starting breakers?

Action: S. Breaux/D. Martin (Pending Completion)

Response: Many of the Electrical Safe Work Practices issues are currently being worked by Head Office Electrical. When these issues have been resolved and the final guidance is provided, the DPMC requirements will be finalized. Completion scheduled by 1st quarter of 1992. Major issue is procedure for restarting tripped breakers.

5-8/91: The OP2 truck loading rack has an inline-drips drum that is used to catch any liquid before it goes to vent. At one time, the drum had a level indicator which is not missing. How is the liquid level controlled without an indicator?
[9-9/91] OP2 vent line @ truck loading rack still pressures up and vents to air. This concern was brought up in previous H&S meetings and was to have been resolved.

Action: Kenney Moore (Follow-up on project status - Pending Completion)

Response: The inline-drips drum was installed temporarily until the source of vent liquid was determined. It was determined there was a faulty spring-loaded valve in the vent line which has been replaced. After further evaluation, it has been determined that the drum is not necessary and has been removed. A project has been initiated to modify the vent handling.

6-10/91: Several months ago, when new conduit was installed at a pump shed @ HDUI, the old transite conduit began crumbling. At that time, Industrial Hygiene notified the area to remove the transite conduit. This removal has not been done.

Action: Bill White, SOM-Aromatics (Additional follow-up - Pending Completion) Lynne Tackett/Mike Cunningham

Response: MUTS ticket issued to remove transite where

practical and cover areas that were identified by using approved sealing procedures.

7-12/91: Overtime lunches are being delivered cold. Is there a health concern?

Action: Eddy Melton, ARA Services (Action Complete)

Response: ARA Services has recently changed the system for delivered meals. The change was brought about to provide hot meals on a timely basis. The primary difference between the new system and the old system is much shorter routes for the drivers. In the past, a route consisted of 12-15 stops. Under the new system, a route has 4-5 stops. This does not allow the food to get cold on the truck.

Another change is when ARA plates the food. Previously, a meal that was plated at 10:30 am might not be delivered until 12:15. The new system has a meal plated at 10:30 am leaving the door at 10:35 am and to be delivered within 15 minutes. This does not allow the meal to cool before it leaves the South Cafeterial. The new system has as many as 8-9 routes for a meal period as opposed to 2-3.

8-12/91: Are all inplant vehicles inspected "road ready" even if they are not driven outside the Complex?

Action: Steve Bailey, Automotive Supervisor (Action Complete)

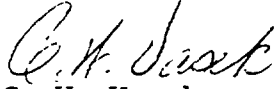
Response: The "in-plant only" vehicles receive the same inspection and service that the "over the road" vehicles do. This entails a bumper-to-bumper inspection every time the vehicle comes in for preventative maintenance. The only things that are not the same is that the "in-plant" vehicles do not get the headlights adjusted with the headlight machine, the emission test for CO2 with the litmus paper, or receive the state inspection sticker and license plate sticker.

AGENDA ITEMS:

1. Joe Gandolfo, Manager Central Maintenance, made a presentation to the committee. He gave an overview of 1991 activities, manpower increase, training programs, and their safety program.
2. Donna Fondaw, Purchasing Representative for the FRC Program and the Cintas Representative attended the meeting for a question/answer session.
3. EMH gave an update on the following:
 - a. 1991 Safety Performance @ DPMC
 - b. MTP presentation to HSMT - FRII form and procedures being revised
 - c. EPA visit
 - d. Benzene spill - F360 (Dispatching Operations)

- e. Vehicle fire @ DU2
- f. Exchange head fire @ DU2
- g. Union Carbide Seadrift plant citation (Attachment)

4. Committee audited Central Maintenance.


C. W. Vasek

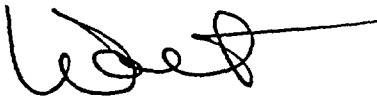
Attachments

INTEROFFICE MEMORANDUM

DECEMBER 30, 1991

FROM: MANAGER, PRODUCTS HEALTH & SAFETY
TO: SEE ATTACHED DISTRIBUTION LIST
SUBJECT: INFORMATION REGARDING OSHA AND UNION CARBIDE'S SEADRIFT PLANT

The attached articles are for your information.

A handwritten signature in black ink, appearing to read 'W. L. Heitz', with a long horizontal stroke extending to the right.

W. L. Heitz

WLH:bjd

Attachment

DISTRIBUTION LIST

MANUFACTURING LOCATIONS

ANACORTES REFINERY
MANAGER, HEALTH, SAFETY AND ENVIRONMENT

BELPRE PLANT
MANAGER, HEALTH, SAFETY AND ENVIRONMENT

DEER PARK MANUFACTURING COMPLEX
MANAGER, HEALTH AND SAFETY

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MARTINEZ MANUFACTURING COMPLEX
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NORCO MANUFACTURING COMPLEX
MANAGER, HEALTH AND SAFETY

ODESSA REFINERY
MANAGER, HEALTH, SAFETY AND ENVIRONMENT

TAFT PLANT
SR. SAFETY REPRESENTATIVE

WILMINGTON MANUFACTURING COMPLEX
MANAGER, HEALTH AND SAFETY

WOOD RIVER MANUFACTURING COMPLEX
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Chemical negligence alleged

OSHA criticizes Union Carbide

By DAVID IVANOVICH
Houston Chronicle

Managers at Union Carbide's Seadrift plant knew for 20 years that some chemical storage tanks were located dangerously close to a chemical reactor but failed to move them, federal regulators have alleged.

Inspectors for the Occupational Safety and Health Administration learned of the safety hazard while investigating an explosion at the Seadrift plant that killed one contract worker and injured 32 others, according to an internal OSHA report issued in June.

The lapse was one of the main reasons the agency was seeking a \$2.8 million penalty against Union Carbide in the wake of the March explosion, the OSHA report said.

On March 12, a reactor containing 60,000 pounds of ethylene oxide exploded. The blast ignited a fire and threw large pieces of shrapnel the size of vehicles into the air.

Workers trying to escape found some exits locked, forcing them to climb over a fence, OSHA investigators said. Inadequate water pressure prevented firefighters from being able to keep nearby process units cool.

But the accident could have been far worse, the OSHA report contended.

The reactor was only about 150 feet from a group of 13 tanks containing 288,051 pounds of liquid ethylene oxide, an extremely flammable and poisonous material equivalent to 58 tons of TNT, the report said.

"Ethylene oxide in this location... is like a bomb waiting to be detonated," the OSHA report said.

Four company audits dating to 1971 had recommended that plant officials move the storage tanks to avoid a potential calamity, the report said. But rather than move the tanks, plant officials opted to limit the amount of ethylene oxide permitted to be stored there to 950,000 pounds, which OSHA officials said was equivalent to 190 tons of TNT.

Following the March 12 blast, "shrapnel barely missed the tanks, which would have caused a fire and explosion there and the possible loss of the entire plant, including a tremendous loss of life," the OSHA report said.

OSHA officials refused to discuss the report, saying they could not discuss a report that had not been released publicly. Dave Goris, plant manager at the Seadrift facility, said plant officials consider the allegations of violations unfounded.

"We believe we're in full compliance with the OSHA regulations... and we're contesting all citations," he said. Goris declined to discuss most of the specifics of the report, saying he had not seen it.

OSHA investigators had inspected the Seadrift plant on seven previous occasions, and Goris pointed out that the plant had never received a citation.

But Jim Blackburn, a Houston environmental attorney representing local residents who claim a yellow-and-gray cloud emitted from the plant caused them health problems, called Union Carbide's actions "very difficult to excuse."

"I was really disgusted, more than anything, that a company like Union Carbide wouldn't take care of problems they identified," Blackburn said.

OSHA investigators also insisted that employees participating in the investigation had been intimidated by company representatives, a claim Goris vehemently denies.

Report on blast slams Union Carbide

OSHA cites 20 years of safety violations

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BY KATE THOMAS
OF THE HOUSTON POST STAFF

Union Carbide Corp.'s Seadrift plant, site of a deadly accident last March, ignored internal safety recommendations for 20 years and exposed employees to hazards that "were likely to cause death or serious physical harm," according to a government document obtained by The Houston Post.

The allegations are contained in an internal Occupational Safety and Health Administration report on the fire and explosion that killed one worker and injured 32 others March 12, 1991, at the remote South Texas petrochemical facility.

The results of the June 28, 1991, OSHA report prompted the government in September to seek \$2.8 million in fines from Union Carbide for safety violations, including dozens of alleged "willful" violations.

OSHA investigators also complained that Union Carbide may have intimidated employees into not signing statements about the accident which hurled shrapnel — some nearly as big as a "vehicle" — throughout the facility, destroyed a critical control building, damaged others and rocked the surrounding countryside.

Union Carbide officials weren't available for comment on the report Tuesday or Thursday, but Union Carbide chairman Robert Kennedy has said the company intends to "vigorously contest" the citations. A Union Carbide employee earlier told The Post he wasn't coached by the company.

Fred Millar, director of the chemical safety project for Friends of the Earth, called the OSHA report "stunning," adding it "deserves an enormous amount of

congressional attention." He said it demonstrated the public needs access to companies' internal safety audits.

Citing Union Carbide's decision to contest the fines, OSHA's Dallas regional administrator Gilbert J. Saulter declined to discuss the following findings:

□ At about 1:18 a.m. March 12, an explosion occurred in the No. 1 Oxide Unit, only 150 feet from an ethylene oxide tank farm where the equivalent of 58 tons of TNT was stored. Shrapnel, which barely missed the tanks, broke some fire water lines, the report said.

OSHA said it found internal documents showing Union Carbide Corp. auditors had informed the Seadrift facility's management of the potential hazard posed by the tank farm's location in 1971, 1978, 1986 and 1989.

Rather than relocating the tank farm, OSHA investigators said, plant management responded by reducing the amount of inventory stored in the tanks. Moving the explosive material to a more remote location was ruled out as too costly, according to OSHA.

"The 'bomb' hazard still existed in the tank farm at the time of the explosion," the report found.

□ Despite repeated internal warnings, Seadrift management failed to locate the Oxide Control building a safe distance from potentially explosive process equipment and failed to make it blast resistant, according to the report.

During the March 12 blast, a load-bearing wall in the control room collapsed, light fixtures and air conditioning ducts fell from the ceiling and the roof almost collapsed.

"The employer took absolutely no action to prevent these events from happening prior to the explosive loading on March 12, 1991," investigators said.

□ Failure to insulate vessels containing high percentages of ethylene oxide and to install instruments capable of detecting spot-heating and potential insulation fires constituted a "flagrant" safety violation, said government investigators.

Knowledge of a potential hazard existed and a means of abatement was known but no action was taken, OSHA alleged.

The company could produce no records documenting when the last time a critical temperature transmitter was last calibrated, OSHA said. Government investigators said they suspected the sensitive instrument hadn't been checked for accuracy since it was put into operation in October 1988.

□ Compounding the problem, investigators found the plant had three locked exits, no alarm was ever sounded, water pressure was too low to fight the fire for over an hour and the event occurred at night when employees could not see where they were going.

Operators didn't have pre- and post-startup checklists to follow to ensure that procedures were consistent. Government investigators also said they found two valves were closed, preventing cooling water from reaching a condenser March 11.

□ Union Carbide's law firm initially insisted upon having one of their "hand-picked, company-oriented employees witness each and every interview," OSHA complained. The government safety watchdog said it took about two weeks to obtain private interviews with employees.

Even then, according to the report, company lawyers spent an hour before and after each interview briefing and debriefing employees.

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Fearing intimidation, OSHA said the agency mailed copies of the employee's statements to their homes for their signatures. But few were willing to sign.

"OSHA was unable to directly establish this as a fact," the report says, "but employees were very nervous when asked to sign personal statements. All employees regardless did attest verbally to the validity of their statements after having read them."

One employee said "it would be wonderful" if government officials would come in before catastrophes occur. But they come in afterward after "everybody has gone through a trauma. They kept insinuating the company was opposing me. I was not coached to say anything," he said.

Attorneys representing Union Carbide could not be reached for comment Thursday.

Prior to the blast, the Seadrift plant was one of 35 chemical plants in the United States presented Star Awards by OSHA under the Voluntary Protection Program for its exemplary safety record and in 1989 the plant was named the safest in the Texas by the Texas Industry Chemical Council.

The OSHA investigative report, which has not been made public, commended the Seadrift plant for an "excellent" written health and safety program, but said many basic safety concerns were not addressed in actual application.

A worker who was in the control room at the time of the explosion told The Houston Post "it was just like a bomb exploding. All of a sudden the wall was blown in on us. We started out the doors. The doors were jammed. We went out the wall toward the fire. We crawled over the rubble."

Citing Union Carbide's "significant enforcement history," OSHA said the proposed fines were intended to make a "significant impact" on the Danbury, Conn.-based firm and "other manufacturers of chemicals nationwide," the report said.

A Union Carbide pesticide plant exploded in 1984 in Bhopal, India, killing more than 3,000 people and injuring thousands more. In 1986, OSHA fined Union Carbide's plant in Institute, W. Va., \$1.4 million for "willful" safety and recordkeeping violations.

"When you think about Bhopal and West Virginia, you would think they would be out in front on safety issues," said Jim Blackburn, a Houston environmental attorney who is working with the Calhoun County Resource Watch.

"It's one thing to make a mistake. When they (mistakes) have been identified and not acted on, that's when it really become serious. It's that type of mentality, that refusal to correct, that destroys the credibility of the industry."

Blackburn said he was especially disturbed by the suggestion that Union Carbide may have tried to influence the investigation of the Seadrift tragedy.

The Seadrift plant annually produces about 820 million pounds of ethylene oxide, a highly reactive and unstable substance with "catastrophic" explosive potential, according to OSHA.

LAM 003517

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DPMC-09618

HEALTH & SAFETY COMMITTEE
AUDIT

JANUARY 3, 1992

PLEASE RETURN RESPONSE WITHIN TWO (2) MONTHS OF INITIAL AUDIT

CENTRAL SHOP

1. NOTE: Sometimes big trucks getting loaded or unloaded, don't turn off engines and shop accumulates exhaust fumed. Forklifts also.
2. Broken light fixtures: much improved from the past.
3. Have had complaints that dust is thick on flat surfaces overhead - its bad when disturbed.
4. Sandblaster in Inst. Shop leaks around doors - needs to be fixed or possibly even put outside.
5. A lot of dust around sandblasting machine - has machine been checked for leaks while in operation?
6. Consider re-stripping yellow areas.
7. Consider painting crane hooks/chains with florescent paint.
8. Overhead crane inspections up to date - Good job.
9. Oil spill near tube bundle area needs cleaning.
10. Torch (tube bundle area) not in use, should be on retractable reel.
11. All face shields on grinders - Good job.
12. Lock out tag missing on disconnect switch mounted near Sub 36.
13. Suggest locating grating near Sub 36 in storage rack - present grating on floor. (tripping hazard)
14. Sling located on floor near water bottles needs to be properly stored.
15. Areas well lighted - Good job!
16. Overall housekeeping good!
17. Rest room window (locker room) needs repair.

LAM 003518

DPMC-09619

18. Consider replacing towel/hard hat rack in Mens rest room - fabricated with 2x4 and nails for hooks. Easy to fall up against rack and come in contact with nails.
19. Roof in locker room needs ATTENTION.
20. Floor in Supervisor's store room needs minor work.

SOUTH PORTION OF NORTH SHOP

1. Craftsman commented on needing to push the project to move the jib crane (from the Inst. area) over to the electric side for handling of vertical motors.
2. Noticed old lead pot that hasn't been used recently with trash in it. Need to demo and remove if not needed. Need to rewire and keep trash and debris out of it if needed. Located in electrical area. Removed trash from pot.
3. Fire extinguisher in front of Machine Shop office missing plastic seal. Checked extinguisher and it is in working order.
4. Craftsman commented that the electrical loading for entire North Shop is nearing overload with occasional breaker trips. Lots of equipment added. A new electrical feed is being run but may need to redistribute power.
5. Overall, housekeeping was well done.

ACID VAT AREA

1. N/W corner, fire hydrant has crowfoot connections and air hose connected for water usage. REPLACE
2. N/E - S/W corner, safety shower appears to have low water pressure. Have water pressure checked.

PAINT SHOP AREA

1. Microwave and refrigerator need cleaning.
2. N/W corner safety shower appears to have low water pressure.

BREAK ROOM/LUNCH ROOM

1. Microwave and refrigerator need cleaning.

LAM 003519

DPMC-09620

SOUTH BROILER SHOP

1. Fire extinguisher next to west exit door not inspected since 10/91.
2. Fire extinguisher next to double doors not inspected since 8/91.
3. Fire extinguishers in shear room not inspected since 10/91.

ANALYZER SHOP

1. Bags of transite outside of Analyzer Shop needs to be removed now. Bags are torn open. Asbestos hazard.

RADIO REPAIR SHOP

1. Microwave oven needs cleaning.
2. Ladders need to be inspected. No tags.

AUTO GARAGE

1. Old asbestos brakes are not being bagged per Maintenance procedure.
2. Eye shield guard needed on the wire wheel grinder by the auto battery cage?

SCAFFOLD YARD

1. Hand sprayers on north side of caster building have liquid in them but are not marked.
2. Overall, the scaffold yard was orderly. There does need to be some additional emphasis on neatness, especially regarding the wooden timbers which are used to keep scaffolding off the ground. They don't always get picked up and properly stored.
3. There seems to be a sizeable amount of re-useable lumber being discarded in the large refuse bin. What determines when it can be re-used and when it must be discarded?

LAM 003520

DPMC-09621



DEER PARK MANUFACTURING COMPLEX

HEALTH & SAFETY COMMITTEE

JANUARY 3, 1992

<u>Member</u>	<u>PROFS</u>	<u>SAM #</u>	<u>TEL #</u>	<u>BEEPER #</u>
L. L. Contreras*		62347	66381	549-1266
W. P. Charles*	WPC		66850	549-9581
V. W. Cornett*	VWC		67508	549-9594
C. P. Ebanks*	CPE9	60929	67471	549-9979
C. E. Green*	CEG3	62348	66264	549-1218
W. L. Harbuck*	WLH29		67558	549-2456
E. M. Hawthorne	EMH29		66902	-
M. D. Leaverton*	MDL29		66259	549-5713
C. P. Meeks*	CPM29		66784	549-7573
S. R. Prichard*	SRP		67224	549-9486
M. W. Smith*	MWS	60413	66285	549-0922
S. W. Smith*	SWS29	60419	67510	549-9980
G. Theiler*	GDT29	62342	67058	-

Alternate

H. P. Corley	HPC	60436	66670	549-9744
J. A. Lummus	JAL9	66775		549-7250
A. J. Maggioro*	AJM29		66049	549-9588
E. Morales	EMM9	62341	66982	-
D. A. Skeahan	DAS1	69380	67357	549-0688
C. W. Vasek*	CWV		63017	549-4201

*Present at Meeting

PROPOSED NEXT MONTH'S AGENDA

1. This month's Unit Audit Manager(s)
2. Unit Audit(s)
3. Review of this month's Audit with the Manager(s) concerned
4. Next Meeting - February 7, 1992