



Interoffice Communication

To OSHA-Engineering and Work Control Plan File
From J. Paul Warner
Date April, 1979
Subject UPDATE OF ENGINEERING AND WORK PRACTICE CONTROL PLAN

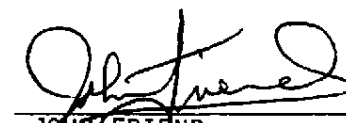
Attached is an update of the Plant's engineering and work practice controls plan for complying with the OSHA VCM Exposure Standard.

All work practice controls have been implemented and significant progress has been made on most of the engineering controls. The start-up of the EPA compliance equipment has significantly reduced VCM levels in the Plant. Currently, however, we are having to rely on breathing air to limit the VCM exposure from some exposure sources.

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Approved: _____


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JPW-spt
Attachment
CC: JF, AWS, KLF, JWW, WHN, RP, LAH, JBE, REB, DPB

CCR 000010498

ENGINEERING AND WORK PRACTICE CONTROL PLAN
FOR COMPLIANCE WITH OSHA VCM EXPOSURE STANDARD
CONOCO CHEMICALS
OKLAHOMA CITY PVC PLANT
April, 1979

<u>Exposure Source</u>	<u>Work Practice Controls⁽¹⁾</u>	<u>Engineering Controls</u>
1. Residual monomer in slurry and resin.	1a. All batches are steam stripped to remove unreacted VCM from the slurry prior to dumping the slurry to the blend tanks. Tests show that the slurry contains less than 400 PPM VCM after steam stripping. 1b. After the slurry is dumped from the reactors to the blend tanks, the slurry is stripped with air to further reduce the VCM concentration. Tests show that the VCM content of the dried resin is below 5 PPM when the combination of steam and air stripping is used.	1a. Preliminary design work is in progress to replace the existing dump system with an enclosed system. 1b. A design for removing the blend tank vents from the process area is being developed.
2. Obtaining and handling samples.	2. Wear personnel protection equipment which meets OSHA standards when VCM samples or reactor samples are obtained.	2. A design for a closed reactor system is being developed. VCM from the samples will be routed to a control system.
3. VCM railcar.	3. Wear personnel protection equipment which meets OSHA standards while connecting and disconnecting tank cars.	
4. Chemical wash screen.	4. Steam stripping of all batches has reduced the possibility of exposure from this source.	4. A class "A" design for improving the screener ventilation has been prepared and equipment is being placed on order.

Note (1): As part of the work practice controls, two Honeywell VCM monitors sample twenty locations in the process and tank farm areas to detect VCM leaks.

CCR 000010499

ENGINEERING AND WORK PRACTICE CONTROL PLAN
FOR COMPLIANCE WITH OSHA VCM EXPOSURE STANDARD
CONOCO CHEMICALS
OKLAHOMA CITY PVC PLANT
April, 1979 (Continued)

<u>Exposure Source</u>	<u>Work Practice Controls⁽¹⁾</u>	<u>Engineering Controls</u>
5. Reactor rinse after dump.	5. Transfer the effluent from the initial water rinse after reactor dump to the dump system.	
6. Flexible hoses, pipe unions and flanges, valve stems and swivel joints in VCM service.	6. At least once per month, flexible hoses, pipe unions and flanges, valve stems and swivel joints in VCM service are checked for leaks. Leaks are repaired on the spot if possible and are put on the maintenance schedule where they cannot be repaired immediately.	
7. Opening and working on equipment or piping which may contain VCM.	7a. Before opening, VCM is removed from equipment or piping to the lowest practical level by flushing, purging and/or evacuation where possible. 7b. Wear personnel protection equipment which meets OSHA standards when opening equipment or piping which may contain VCM. 7c. Before commencing repair work, measure the VCM concentration in or near the opened equipment or piping to determine what protective equipment is required and if further VCM removal is necessary.	

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