MCC 950920

Monsanto

SHAC

PLAINTIFF'S EXHIBIT
MON-1262

FROM (NAME & LOCATION) R. L. Maute

DATE : September 10, 1975

SUBJECT : Stockroom Storage of Flammable Organics

REFERENCE

TO : W. H. Lane

cc: W. G. Juhl
L. R. Evans
R. D. Querry
PT Safety Committee
J. A. Glass
Central Files

To eliminate the fire and safety hazards involved with the storage of flammable organics, PT Department personnel have been making a concentrated effort to reduce the amount and number of liquid organics in the labs and stockroom. For example, approved NFPA cabinets are now used in the stockroom to store major solvents. However, the stockroom is still a major fire hazard because of the quantity and variety of reagent organics stored in overstock. This fire hazard has been one of my major concerns since I became responsible for the stockroom. The possible alternatives for eliminating this stockroom hazard are given below.

1. Build a separate solvent storage building. This is one possibility which was recommended earlier (see enclosed memo KAP/WGJ 9/10/74). However, the costs for this would be excessive, probably $20,000 or so and space near the labs could be a problem. This approach is rejected.

2. Replace the shelves with approved NFPA storage cabinets. The shelves now used for the storage of liquid and solid organics are at rear of the stockroom. Replacing them would probably require at least 8 cabinets (at about $500 each) to store the flammable liquid organics. Moreover, there is not enough space for these cabinets to fit where the organics are currently being stocked. The cost and space requirements preclude this action.

3. Discard all of the flammable chemicals. This would require all special chemicals to be ordered as needed. The costs would rise markedly and productivity would suffer. Moreover, the number of chemicals on hand would build up with time. An earlier attempt to dispose of a portion of the chemicals was met with strong resistance from PT Department personnel. Before any action is taken, the chemicals on hand will be re-examined and the very reactive, questionable or excessive reagents will be discarded. Disposal of all organics is unthinkable.

4. Move the overstock chemicals to room B2136A (S. of pressure cells). The less frequently used chemicals now stored at the rear of the stockroom plus the refrigerator used for storing volatile organics (in Butler Bldg.) would be moved to B2136A, not now used except for furniture storage. This possibility was also suggested earlier (memo KAP/WGJ 9/10/74) and is the recommended choice.

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This room has the following advantages:

a. Low revision cost - The estimated cost for modification of this room for flammable chemicals is $1200 - $1500. This includes installation of metal shelves (3' isles), updating the fire extinguishing system now in the room, placing safety glass in the doors and revising the outside lock, revamping the safety shower and minor modification of the available air conditioning system.

b. CO_2 Fire Protection System available - This system would be updated (larger CO_2 source, automatic switch) to insure the necessary fire protection. This system should douse a fire in a few minutes. The CO_2 system would be tied into the air conditioning so that the A/C would automatically go off if the CO_2 system were activated. Personnel in the room during a fire would have time to evacuate out either door before the CO_2 would reach suffocation level.

c. Isolated Room - This room is isolated from the remainder of the labs so that a fire here would minimize personnel hazards and cause much less damage to the building or other stockroom supplies. Even so, access to the location is readily available for obtaining chemicals, for fire trucks or delivery of chemicals.

d. Room approved by Loss Prevention Personnel. Both Fox and Eason of the Loss Prevention Department examined this room and said that it would be quite adequate for storage of chemicals once the revisions were made. The room does not meet all the NFPA recommendations, but is vastly superior to our present flammable storage facilities. Egress by two exits is available, whereas only one is available now. Currently we have a potential fire trap.

e. Reorganization of stockroom possible. Lastly, the movement of the flammable organics into B2136A would permit a more effective and efficient organization of the stockroom. The space now taken up by flammable organics can be used to store less frequently used items. Also, those supplies now stored in the aisles (a safety and housekeeping problem) in cabinets (including two solvent storage cabinets) could be moved elsewhere. This would eliminate the overcrowded aisles and improve the looks, safety and efficiency of the stockroom organization.

Recommendation

I recommend that you and Bill Juhl give me approval to expend the money to revamp Room B2136A for storage of flammable organics. The PT Safety Committee concurs with this recommendation. If prompt approval is given, I will try to expedite the move before the plant inspection, if possible.

Bob

R. L. Maute

:s

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K. Allan Pinkerton, Texas City

September 10, 1974

Storage of Flamable Liquids

Memo "Liquids in the Laboratory"
KAP to WGJ, 8/30/74

W. G. Juhl

The Safety & Housekeeping Committee recommends a storage area for flamable liquids of 15 feet by 25 feet by 8 feet high which meets NFPA-30 standards. Another way of stating the dimension is to provide 250 running feet of shelves 2 feet deep, about equally divided between gallon bottle height and quart bottle height.

In the process of evaluating alternate sites, we recommend consideration be given to the appendage room on the south side of the pressure cells (Dog house). The room is 16 feet x 24 feet with two doors and of transite and metal construction.

K. Allan Pinkerton

K. Allan Pinkerton

gw:9/10/74

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