

**Pan Am World Services, Inc.**  
**MEMORANDUM**

LA 35/85  
JA (OIL PIT)

TO: Oliven Wilton, PSFT  
FROM: Safety Engineer, PSFT

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DATE: 12 August 1989 MEMO NO.: PSFT89.810

SUBJECT: REMOVAL OF CEMENT LINING @ TA-35, BLDG. 85 OIL PIT  
TRIAL OF NEW PERSONAL PROTECTIVE EQUIPMENT

I arrived at 05:45 hours as the crew was scheduled to begin @ 06:00 hours. After some initial problems with the pump the pit was pumped dry. I gave all 5 crew members a organic vapor monitor - their names and monitor numbers are listed below:

Jerry Lopez, Z-100499	Monitor # HK 0584
Mark Romero, Z-097881	Monitor # HK 6565
Jose Montoya, Z-100490	Monitor # HK 0795
Jeffrey Cordova, Z-097886	Monitor # HK 0583
Alfonso Rodriguez, Z-097850	Monitor # KH 0799

All of the men took turns operating the jackhammers and should have approximately equal exposures.

In order to judge the effectiveness of the Kimberly Clark personal protection coveralls and to access the heat stress effects, I wore the coveralls and operated a 90 lb. jackhammer along with the craftsmen. I determined that 10 minute work intervals should be the maximum, given the fact that the craftsmen were in fullface respirators, and wearing non-breathable type coveralls, over boots and rubber gloves. Ten minutes of jackhammer work in that personal protective equipment, given the temperature and humidity, leaves a person tired and soaked with perspiration.

Of the three types of Kimberly Clark trial coveralls the yellow one - Kleen Guard - work wear - provided the longest use without ripping and seemed to be more breathable than the other two pairs. The Kleen Guard work wear lasted for 35 minute of use. The Kleen Guard Limited Use - The blue coveralls lasted less than 7 minutes before they ripped. They appeared to be less than adequate for any kind of heavy work whatsoever. The standard stock tyvex coveralls, on the average, were lasting two ten minute work sets (20 minutes) and seemed to be hotter than the Kimberly Clark work wear coveralls. Based on the fact that the work wear coveralls lasted longer and seemed to be more "breathable". I would recommend that we purchase some for a more in depth trial.

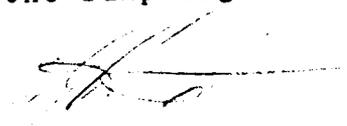


72

The breaking of material and its placement in drums was hampered in the afternoon by the intermittent heavy rains. It was not practical nor safe to have the craftsmen working outside during the periods of heavy rain and lightening. I would also recommend that only 60 lb. jackhammers be used for the concrete removal on the sidewalks as a 90 lb. jackhammer is difficult to handle and has the potential for causing a back injury when used at that angle.

If the vapor monitor results show ppm exposures less than we originally anticipated then we need to consider changing the personal protective equipment requirements for this job. The current requirements not only add to the heat stress experienced by the employees, but also slow down productivity. If possible, I would like to receive a written copy of the vapor monitor test results.

If you have any further questions concerning the work rest regime or the sampling techniques please contact me.



Michael Strosinski

MS/cp

cc: C. Barnett, PENV  
J. Fitzgibbon, CA2D  
J. Lopez, PHSE  
I. Trujillo, PSFT  
READING FILE  
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