



DuPont
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CC: A. J. Playtis

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TO: BENJAMIN RAMIREZ, M.D.
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FROM: Y. L. POWER, M.D. *YLP*
WASHINGTON WORKS

REVIEW OF C-8 AND RECOMMENDATIONS

C-8 exposure has been extensively monitored at Washington Works since the late 1970's. This has included both biological/blood monitoring and air monitoring. The results of these surveys were summarized by Howard Smith in March 1990. I have included a summary for your review. As a consequence of this summary, Washington Works continues to monitor air exposure of C-8 and offers on a voluntary basis to exposed employees a blood determination of their C-8 levels. In 1993, only 13 employees volunteered to have their blood checked for C-8.

An epidemiology study on employees exposed to C-8 was completed in 1980. It compared liver function tests between exposed and non-exposed employees. The study concluded as follows: "The data provided no conclusive evidence of occupational-related health problems among workers exposed to C-8." However, the summary recommended continuing survey of liver function tests which were automatically obtained on periodic physicals. For several years, I checked liver function tests of employees with the highest C-8 levels. I found no significant elevations of liver functions. After several years, I stopped this study because I could find no evidence of any liver disease. I am unaware of any cases of severe liver disease at Washington Works who were exposed to C-8. Washington Works has markedly reduced exposure to C-8 by various engineering controls such as removal of C-8 from the Fine Powder dryers and the use of liquid C-8 solution instead of the dry chemical. *RECOVERY*

In summary, I believe C-8 exposure is not causing any significant affect on the livers of Washington Works' employees. I would, however, recommend that we follow screening procedures as outlined by Howard Smith in #7 of his "Review of Washington Works C-8 Data - Personnel Air Monitoring and Blood Data". I would also recommend doing liver function tests at this time to discover any potentially unknown liver toxicity. The present cost of C-8 blood determinations is between \$100-200; therefore, the addition of liver function tests would add very little to the cost of this program. I have discussed this proposal with both Tony Playtis, our Occupational Health Coordinator, and the involved areas and have received their concordance.

YLP:mah
Attachment
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