

Monsanto

FROM (NAME & LOCATION) P. E. Bureau - 1870 - 2660

DATE June 25, 1981

cc F. E. Kearney - E2SA
J. L. Shriver

SUBJECT Springfield Mortality Study

REFERENCE

TO W. R. Gaffey - G2WE

After thorough review of G. Marsh's Supplemental Report of the Springfield Plant Mortality Study, significant concerns, corrections and questions were generated with regard to accuracy of information and the manner in which it might have been presented. For simplicity, the following summarizes our comments on a page by page basis. Also, Springfield's thoughts regarding an action plan are included.

Concerns

Page 1 - first paragraph

- 1) reference to Springfield being a "chemical plant" is misleading. it should be referred to as a "plastics producing plant."
- 2) the plant is located in Springfield - not "near"

Page 1 - second paragraph

- 1) reference to "activist group" is unnecessary and gives an impression of coercion to initiate subsequent study.
- 2) the 86 death certificates were not selected on a random basis as inferred but, rather, purposely because they proved their hypothesis.

Page 4 - first paragraph

typo - "duration or employment" - "or" should be "of"

Page 4 - second paragraph

- 1) "a partial list" should be rewritten to read "a list of major finished goods"
- 2) reference to formaldehyde and formalin is redundant - only formalin should be used.
- 3) reference to VC products should be more accurately written as "vinyl chloride polymers, including polyvinyl chloride products"

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Page 10 - second paragraph

would like to see second sentence rewritten for clarity, e.g.,
"It is most probable that workers studied in this report were
exposed to a variety of chemicals rather than a single agent."

Page 11 - second paragraph

rewrite second sentence to say that "information does not exist
on the intensity or extent of various chemical exposures which
occurred within the 21 OEC's"

Page 31 - first paragraph

we need to establish the who, when and how. Further work will be
done before the final report is issued.

Page 36 - #27

C. S. Winfield's correct title is Manager of Industrial Hygiene,
she is not a hygienist.

Page 74-75

- 1) Work histories of personnel are not complete as they do not
extend back to hire dates. Nowhere is this explained. This
selective excerpt of the work history gives a skewed and
misleading impression of the person's work history and exposure.
- 2) In Appendix E, note that Case 2 was employed in Dept. 62 from
1963 until retirement. Dept. 62 was a Styrene Polymerization
area completely, not a Polystyrene Processing area and, therefore,
had no exposure to cadmium or any other heavy metal. (This is a
major error in the report and needs to be recalculated for
significance as it may change the conclusion of cadmium exposure and
prostatic cancer.) When Springfield personnel collapsed the original
120 departments into the 21 OEC's, that G. Marsh uses in this report,
Dept. 62 was mistakenly placed into OEC II rather than correctly in
OEC I. The mistake was not noted until the study calculations were
completed whereupon G. Marsh was informed of the error prior to
writing the draft final report.

One additional point need to be made. If Polystyrene Processing
indeed had a higher incidence of prostatic cancer, then wouldn't
one expect to find a similar relationship in PVC Processing (OECIV)?
PVC Processing used many of the same heavy metal colorants in a
similar fashion, in addition to a variety of heavy metal stabilizers
that Polystyrene did not use.

W. R. Gaffey - G2WE

June 25, 1981

Page 54 - Table 14

Is the odds ratio for OEC XII significant?

Recommended Action

- 1) G. Marsh should be advised in writing of receipt of his "draft final report" and that appropriate people are reviewing this for accuracy.
- 2) Monsanto's comments with regard to his draft final report should be resolved with Gary Marsh. - *NR 2 - done Gary*
- 3) Plans should be established for a subsequent and continuing study looking specifically at prostatic cancers to determine if that relationship holds or to look at others if appropriate.
- 4) A communications approach must be developed for the Union, Plant Personnel, Government and Community to include:
 - a. A letter to appropriate state and federal governmental organizations.
 - b. A meeting with the Union by plant management to explain the findings.
 - c. A bulletin board notice for plantwide use at Springfield signed by DMEH.
 - d. A special Monsanto DMEH Communication.
 - e. A press release to the major Springfield newspapers and other media.

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