Interoffice Communication

To    (see below)
From  F. Kennedy
Date   October 25, 1973
Subject VCM Epidemiological Study

Please find attached Progress Report No. 2 from Tabershaw-Cooper Associates, Inc.

Flynt Kennedy

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Distribution: RLL-JJL-(JDBr-LJS)-KLS-(JDBu-JMcC)-(LNV-GDJ)-RDG-GFT-EMS
To: TECHNICAL TASK GROUP ON VINYL CHLORIDE RESEARCH

Subject: Tabershaw-Cooper Associates, Inc.
Progress Report No. 2 for Period
August 20 - October 11, 1973

Gentlemen:

Distributed herewith is the subject report.

Please note their request for possible MCA-guidance on the persistence of follow-up efforts on terminated employees, and be prepared to express your views on this problem.

Sincerely,

Kenneth D. Johnson, Ph.D.
Staff Representative
Technical Task Group on
Vinyl Chloride Research

KDJ:mb

Enclosure

cc: Dr. D. P. Duffield
    Mr. D. M. Elliott
    Dr. Tiziano Garlenda

VVC 00001163
MANUFACTURING CHEMISTS ASSOCIATION

VCM EPIDEMIOLOGICAL STUDY

PROGRESS REPORT

October 15, 1973

Prepared by

Tabershaw-Cooper Associates, Inc.
2180 Milvia
Berkeley, California 94704
Manufacturing Chemists Association
VCM Epidemiological Study
Progress Report

Progress to Date

Four of the five plants which had not responded to our background questionnaire at the time of the previous progress report have now done so, and one new plant has been added. The plant population is now 53 in number, of whom six have been dropped from the study because they had been in operation less than five years as of the end of 1972, and one has not responded. The latter plant has agreed to participate, but the response has been delayed for administrative reasons. Table 1 shows the distribution of the 51 responding plants by the length of time over which usable records are kept, and Table 2 shows the distribution of the 45 plants included in the study by size of currently exposed workforce.

So far, 21 plants have been contacted. Partial or complete data are now in hand from seven of these, microfilm from two plants is being processed, and the remaining plants are in the process of completing job history forms.

The data now in hand comprises 492 active employees, 397 terminations whose current status is not yet known, and 11 deaths. The number of deaths is less than expected because many of the first plants visited were relatively new, with a young work force.
The microfilm now being processed will approximately double the size of the current sample, and since it comes from older plants, will yield many more deaths.

The Measurement of Exposure

In almost half of the current sample, plants were unable to provide any quantification of exposure beyond "high," "medium" and "low." To the extent that plant personnel were able to make rough estimates of exposure ranges, it appears that such terms as "high" have different meanings in different plants. The situation is further complicated by the fact that in many plants a worker's exposure often depends on both his job title and on where in the plant he works, so that the transcript of his job title history has to be reviewed by the plant safety or personnel officer in order to estimate his particular exposure.

It appears that the best use that can be made of these data is to give a score of 3, 2, and 1, respectively, to jobs with high, medium and low exposure, and to calculate a time weighted average of these exposure scores for each worker. This is now being done.
Follow-up of Terminations

Several companies have indicated that they do not wish their terminated employees to be contacted directly. Ordinarily, a form follow-up letter would be sent to the last known address of each terminated employee asking (without identifying the specific study or the sponsor) whether that person was still alive. In the case of undeliverable letters, driver licensing bureaus, local telephone directories and retail credit agencies would be used to get a current address to which the letter would then be remailed.

Not infrequently, the process of getting an address through driver license bureaus or retail credit agencies reveals indirectly that the individual is alive, as evidenced by such things as a record of a traffic violation or the opening of a charge account. If an individual is not to be contacted directly, this process can be exploited by having a retail credit agency review all the lists and files available to it to establish whether the person is alive or dead. However, for those who cannot be found in this way, the last resort is to have credit agency representatives visit the neighborhood of the last known address and make inquiries. Depending on the proportion of the group for whom the last step is necessary, the expense of an indirect follow-up may be prohibitive.

We are presently testing, on two different groups of terminated employees, the effectiveness of a driver license check (which is relatively inexpensive) and a retail credit agency check.
extending as far as a neighborhood visit.

If these methods prove ineffective or prohibitively expensive, it may be necessary to consider alternatives. One is to trace terminated employees only in those companies which permit a direct mail follow-up. Another is, in addition, to trace the other terminations only as far as a check of driver license records, and a check of retail credit records, without any further follow-up.

If the tests indicate that there is indeed a problem, we will inform the Manufacturing Chemists Association immediately and seek guidance as to what appears to be the best solution.

**Future Plans**

Receipt of the remaining data from the plants already contacted will bring the sample to approximately 50 percent of the total to be included in the study. Data collection for the rest of the plants will proceed simultaneously with data reduction and follow-up of the sample in hand.
Table 1

Distribution of 51 Plants by Number of Years for Which Personnel Records Are Available

<table>
<thead>
<tr>
<th>Number of Years</th>
<th>Total</th>
<th>&lt;5</th>
<th>5-9</th>
<th>10-14</th>
<th>15-19</th>
<th>20-24</th>
<th>25+</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Plants</td>
<td>51</td>
<td>6</td>
<td>12</td>
<td>19</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

*not included in study

Table 2

Distribution of 45 Study Plants by Size of Current Exposed Work Force

<table>
<thead>
<tr>
<th>Number of Workers</th>
<th>Total</th>
<th>&lt;50</th>
<th>50-99</th>
<th>100-249</th>
<th>250-499</th>
<th>500+</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Plants</td>
<td>45</td>
<td>14</td>
<td>15</td>
<td>10</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>