

# PCB — A Threat or a False Alarm

**POLYCHLORINATED BIPHENYL** which was first recognized as a contaminant in 1964, has since been found in various concentrations in food packagings and also in poultry and fish.

Because of its close structural similarity to DDT (both are chlorinated hydrocarbons), it was immediately viewed with suspicion.

How did PCB find its way into food packaging materials or even into turkeys and fish?

PCB is a chlorinated hydrocarbon manufactured by Monsanto Company and marketed as a material used in heat exchangers. It is also used in the manufacture of NCR papers. The latter, when recycled, introduced the PCB into waste-paper pulp used in the manufacture of cylinder board. Alternatively, when used in heat-exchange units, any spills will lead to the eventual presence of PCB in poultry, fish and even the growing plant.

Accordingly, the presence of this compound in varying quantities in poultry, fish and food packaging materials has produced quite a scare, so that Monsanto has agreed to discontinue marketing the material for non-controllable applications and FDA has limited the quantity permissible in packagings to a maximum of 5ppm — the same as for DDT.

## Other Complications

One would have thought that the constraint imposed by FDA upon the permissible concentration of PCB would have eliminated the problem. This is not so.

The difficulty is that there seems to be no accurate method of determining the quantity of PCB in any material. The results of analysis — carried out by gas chromatography or spectroscopy — are too uncertain and cannot be reproduced. The same sample may show 5ppm

of PCB on one occasion and then may go up to 10ppm on the next try. Moreover, its similarity with DDT makes it uncertain whether you are measuring one or the other.

The Institute of Paper Chemistry in Appleton, Wisconsin, is currently engaged in designing methods that will result in more accurate analysis.

To compound the problem still further, certain experiments carried out in Europe seem to indicate that pure PCB is not toxic, that the toxicity is caused by dibenzoyl furan which appears as a contaminant in the commercial grades of PCB.

It has also been suggested that, because of the extreme stability of PCB (it is reported to be more stable than DDT), it may be completely harmless to animals or human beings.

With the current interest in PCB, it is likely that these questions will be resolved within a few years. ■

## BRIDGING THE PRODUCTIVITY GAP (Continued from page 23)

shortcomings. The pulp mill superintendent may find that there are a great many things which he can do to help the paper mill superintendent. He may even discover that he is the biggest problem to improving operations in the paper mill. The mill accountant may learn that the standard cost analyst who works in the paper mill area is not doing an effective job of training paper mill supervision to use standard cost. Objective setting which is locked into a secrecy relationship between a manager and his individual subordinates can never get at all the facts. When information is shared fully between departmental areas in objective setting on a team basis, an organization development process is created.

It is also worthy of mention that all managers will work harder to achieve their objectives when the maturity of their planning and thinking is exposed to other managers who work at their own level. A manager may not respond to the pressure of his boss, but he is unusual when he fails to respond to the pressure of his own pride, when his thinking process is exposed to his own peers. More importantly, we find that managers will give their own time to helping a peer who is clearly out of step with the work group. Never underestimate the powerful social forces of the group in helping a manager develop a subordinate who is in trouble. If you have a problem child, do not overlook the fact that the entire work group may need counseling in a team setting to solve the problem.

All too often, when introducing a new set of concepts to line managers, we fail to recognize that we

can try to teach too much too soon about the technical details of the new concepts. We always try to avoid this mistake. Line managers already know far more from their own experience than they are using.

## Importance of Increased Involvement

In the Mini Breaks-Maxi Profits Program we introduced the concept of increased involvement of hourly workers in improving company operations. We did not give our line managers a clearly defined structure to accomplish this. The training in work simplification techniques did explain the use of project teams. We then asked the line managers to find additional ways to involve workers. Crew meetings and crew training were later identified by them as successful techniques based on actual mill experience. Out of this experience, a new formal structure of involvement was created. Now, we are engaged in developing and refining the details of the new formal structure.

One of the most important functions of staff people is to identify the significant creative ideas which are developed spontaneously by the line organization. Human ingenuity often already has developed great ideas for solving most problems of the organization. Staff should somehow find these ideas, describe them, and make them available to all other members of the organization. With our new work improvement system, we feel that we finally have a practical framework within which we can put this philosophy to work on an objective basis. ■