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RESULTS OF THE 1995 STUDY OF C-8 BLOOD LEVELS

Ammonium perfluorooctanoate, better known as C-8, is a surfactant that is commonly used in the Teflon® BTO. People who have been exposed to C-8 may have low levels of it in their blood, and even after exposure stops, it can take years for the C-8 to be completely eliminated from the body. Although no harmful effects have ever been observed, C-8's persistence in the blood merits careful monitoring. For this reason, we do systematic testing of employees' blood C-8 levels at intervals of about five years. This is not done every year because it has been found that more frequent testing does not yield any additional information.

A round of systematic testing was done last year, when we tested the blood of over 100 people who may have had past or present exposure to C-8. Although we won't be doing such extensive testing again for another few years, we are continuing our practice of offering an annual opportunity for employees to voluntarily have their blood tested for C-8. This year, twenty people had their blood tested.

The testing we did last year revealed several things. Results were grouped by job in order to find any situations where exposures might be high enough to warrant additional control measures. Recognizing that the data did not always allow a clearcut conclusion, here is what was found.

- o None of the people tested had a blood level of C-8 higher than 5 ppm, which was not the case in years past.
- o Different jobs have different average blood levels for the people in them, with job averages in the range of 0.5 - 3.5 ppm.
- o Average job blood levels in 1995 seem somewhat lower than in 1989, but there are a couple of jobs where the average level may have gone up. It is hard to be precise, since often the blood donors were not the same people in both years.
- o It is possible for two people to work in the same job for many years and have widely different C-8 blood levels.
- o Area mechanics have lower blood levels than do most operators in jobs that involve C-8, with their average around 1 ppm.
- o Results from pensioners no longer exposed to C-8 indicate that the time it takes for the C-8 level in blood to go down by half is about four years, although considerable variation is seen from one person to the next.

We are now in the process of reviewing the jobs with higher than average C-8 blood levels to see if we can discover any routes of exposure that can be better controlled. We are also talking to operators with blood levels at the upper or lower end of the range for their job with the hope of learning something that could be helpful to everyone. If you have any ideas on how to reduce C-8 exposure, or if you have any questions or concerns about C-8, please contact Tony Playtis, who will be happy to discuss them with you.

Revised by A. J. Playtis, Plant OH Coordinator, 11/3/97.
Due For Review 11/02.