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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

TO: Henry Jacoby, Product Manager #21
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Budd
9/30/82

SUBJECT: Dietary Analysis Addendum to Mouse Spot Test of
Captan. Reg. No. 239-1246.

TOX Chem. No. 159

Registrant: Chevron Chemical Company
Richmond, California

Background:

A mouse somatic cell mutation assay was performed by Litton Bionetics, Project No. 20951, October, 1980 for Chevron Chemical Company. This submission is a report of the dietary analysis.

Recommendation:

Accept and include this dietary information with the somatic cell mutation assay. The dietary analysis results in a lowering of the reported dose levels.

Study:

The previously reported analytical method for dietary analysis method resulted in captan recoveries that were consistently greater than 100%. The Chevron Research and Development Department studied the problem and determined that column fatigue was probably the cause. The addition of a cleanup step in the extraction process resulted in more reproducible and consistent results. The analysis was rerun using this step which consisted of diluting the acetone extraction with benzene and washing with deionized water before analysing with a gas chromatograph.

Results:

| Dietary Dose Level (ppm) | Captan Found (ppm) | Actual Dose Level (average) |
|-----------------------------|-----------------------|--------------------------------|
| 0 | 0 | 0 |
| 0 | 0 | |
| 100 | 56 | 56 |
| 100 | 58 | |
| 1000 | 688 | 766 |
| 1000 | 844 | |
| 5000 | 4670 | 4835 |
| 5000 | 5000 | |

Conclusions:

The additional step appears to produce more accurate results. These dose levels should be used in evaluating the mouse somatic cell mutation assay.

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