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OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Ethoprop, Quantitative Risk Assessment Based on the Male
Sprague-Dawley Rat

P.C.# 123000

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The Health Effects Division Carcinogenicity Peer Review Committee (CPRC) meeting on May 14, 1997, recommended that a linear low-dose extrapolation be based on malignant pheochromocytomas of the adrenal gland in male Sprague-Dawley rats.

Because the animals in the low and mid-dose groups were not all examined, the multistage model was fit to the control and high-dose data. The dose levels used were 0 and 400 ppm of Ethoprop, and the corresponding tumor rates were 0/68 and 5/67. The unit risk, Q_1^* (mg/kg/day)⁻¹ of Ethoprop is 2.81×10^{-2} in human equivalents, converted from animals to humans using the 3/4's scaling factor.

If one were to assume that the tumor counts would not increase even if all the animals in the 1 ppm and 60 ppm groups were examined, the corresponding tumor rates, based on numbers of animals surviving 52 weeks or longer, would be 0/68, 2/67, 2/67, and 5/67. The resulting unit risk, Q_1^* (mg/kg/day)⁻¹ of Ethoprop would be 2.59×10^{-2} in human equivalents. In the absence of a complete tumor count, the unit risk of 2.81×10^{-2} should be used.