based on increased resorption and increased postimplantation loss.

5. A developmental toxicity study in rats by the inhalation route of administration with a maternal NOEL of 0.0011 mg/L and an LEL of 0.0047 mg/L, based on reduced mobility, dyspnea, piloerection, ungroomed coats, and eye irritation. The fetal NOEL is 0.00059 mg/L, and the fetal LEL is 0.0011 mg/L, based on sternal anomalies and increased incidence of runts. A second developmental toxicity study in rats by the inhalation route of administration is currently under review. The issue of whether cyfluthrin directly induces fetotoxicity under these conditions is unresolved at this time.

6. A three-generation reproduction study in rats with a systemic NOEL of 2.5 mg/kg/day and a systemic LEL of 7.5 mg/kg/day due to decreased parent and pup body weights. The reproductive NOEL and LEL are 7.5 mg/kg/day and 22.5 mg/kg/day, respectively.

7. Mutagenicity tests, including several gene mutation assays (reverse mutation and recombination assays in bacteria and a Chinese hamster ovary(CHO)/HGPRT assay); a structural chromosome aberration assay (CHO/sister chromatid exchange assay); and an unscheduled DNA synthesis assay in rat hepatocytes. All tests were negative for genotoxicity.

8. A metabolism study in rats showing that cyfluthrin is rapidly absorbed and excreted, mostly as conjugated metabolites in the urine, within 48 hours. An enterohepatic circulation was observed.

A chronic dietary exposure/risk assessment was performed for cyfluthrin using a Reference Dose (RfD) of 0.025 mg/kg bwt/day, based on a no-observed-effect level (NOEL) of 50 ppm (2.5 mg/kg bwt/day) and an uncertainty factor of 100. The NOEL was determined in a 2-year rat feeding study. The endpoint effects of concern were decreased body weights in males and inflammation of the kidneys in females at the LEL of 150 ppm (6.2 mg/kg/day). The current estimated dietary exposure for the overall U.S. population resulting from established tolerances is 0.002730 mg/kg/bwt day, which represents 11% of the RfD. Established tolerances utilize 32% of the RfD in the subgroup population with the highest exposure levels, nonnursing infants less than 1-year old. The proposed use on sugarcane would not significantly contribute to the dietary exposure of the overall U.S. population or nonnursing infants. Generally speaking, EPA has no cause for concern if total residue contribution for published and proposed tolerances is less than the RfD. EPA concludes that the chronic dietary risk of cyfluthrin, as estimated by the dietary risk assessment, does not appear to be of concern.

Because there was a sign of developmental effects seen in animal studies, the Agency used the rabbit developmental toxicity study with a maternal NOEL of 20 mg/kg/day to assess acute dietary exposure and determine a margin of exposure (MOE) for the overall U.S. population and certain subgroups. Since the toxicological end-point pertains to developmental toxicity, the population group of concern for this analysis is women aged 13 and above, the subgroup which most closely approximates women of child-bearing age. The MOE is calculated as the ratio of the NOEL to the exposure. For this analysis the Agency calculated the MOE for women ages 13 and above to be 1,250. Generally speaking, MOE's greater than 100 for data derived from animal studies are acceptable to the Agency.

The established tolerances of 0.40 ppm for residues of cyfluthrin in/on fat, meat, and meat byproducts of cattle, goats, hogs, horses, and sheep and 0.01 ppm in/on fat, meat, and meat byproducts of poultry and eggs are adequate to cover secondary residues resulting from the proposed use as delineated in 40 CFR 180.6(a)(2).

The metabolism of cyfluthrin in plants and livestock for this use is adequately understood. The residue of concern is cyfluthrin per se. An adequate analytical method, gas-liquid chromatography, is available for enforcement purposes. The enforcement methodology has been submitted to the Food and Drug Administration for publication in the Pesticide Analytical Manual, Vol. II (PAM II). Because of the long lead time for publication of the method in PAM II, the analytical methodology is being made available in the interim to anyone interested in pesticide enforcement when requested from: Calvin Furlow, Public Response and Program Resources Branch, Field Operations Divisions (7506C), Office of Pesticide Programs, Environmental Protection Agency 401 M St., Washington, DC 20460. Office location and telephone number: Rm. 1132, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA 22202, (703)-305-5232.

On August 5, 1988, EPA issued a conditional registration and time-limited tolerance for cyfluthrin for use on cottonseed with an expiration date of October 31, 1991 (see the **Federal Register** of August 15, 1988 (53 FR 30676)). On November 12, 1992, the conditional registration was amended and extended to November 15, 1993, and the tolerance on cottonseed extended to November 15, 1994 (see the **Federal Registers** of October 20, 1993 (58 FR 54094) and February 22, 1994 (54 FR 9411)). On November 15, 1993, EPA amended the conditional registration on cottonseed by extending the expiration date to November 15, 1996, and extending the timelimited tolerance to November 15, 1997. The conditional registration was amended and extended to allow time for submission and evaluation of additional environmental effects data. In order to evaluate the effects of cyfluthrin on fish and aquatic organisms and its fate in the environment, additional data were required to be collected and submitted during the period of conditional registration. Such requirements included a sediment bioavailability and toxicity study and a small-plot runoff study that must be submitted to the Agency by July 1, 1996. To be consistent with the conditional registration and extension on cottonseed, the Agency is proposing to issue a conditional registration with an expiration date of November 15, 1996, and establish a time-limited tolerance on sugarcane and sugarcane molasses with an expiration date of November 15, 1997, to cover residues expected to result from use during the period of conditional registration.

Residues remaining in or on the above commodities after expiration of these tolerances will not be considered actionable if the pesticide is legally applied during the term of and in accordance with provisions of the conditional registration.

There are currently no actions pending against the continued registration of this chemical.

The pesticide is considered useful for the purposes for which it is sought and capable of achieving its intended physical or technical effect. Based on the information and data considered, the Agency has determined that the tolerances established by amending 40 CFR part 180 would protect the public health and that use of the pesticide in accordance with the tolerance established by amending 40 CFR part 186 would be safe. Therefore, the tolerances are established as set forth below.

Any person adversely affected by this regulation may, within 30 days after publication of this document in the **Federal Register**, file written objections to the regulation and may also request a hearing on those objections. Objections and hearing requests must be filed with the Hearing Clerk, at the address given above (40 CFR 178.20). A copy of the objections and/or hearing