

FFDCA, for tolerances for combined residues of sulfentrazone and its major metabolites on asparagus at 0.15 ppm; bean, lima, succulent at 0.15 ppm; cabbage at 0.20 ppm; corn, field, forage at 0.20 ppm; corn, field, grain at 0.15 ppm; corn, field, stover at 0.30 ppm; horseradish, roots at 0.20 ppm; pea and bean, dried shelled, except soybean, subgroup 6C at 0.15 ppm; peanut at 0.20 ppm; peanut, meal at 0.40 ppm; peppermint, tops at 0.30 ppm; potato at

0.15 ppm; spearmint, tops at 0.30 ppm; sugarcane, cane 0.15 ppm; sugarcane, molasses 0.20 ppm; and sunflower, seed at 0.20 ppm. EPA's assessment of exposures and risks associated with establishing the tolerances follows.

A. Toxicological Profile

EPA has evaluated the available toxicity data and considered its validity, completeness, and reliability as well as the relationship of the results of the

studies to human risk. EPA has also considered available information concerning the variability of the sensitivities of major identifiable subgroups of consumers, including infants and children. The nature of the toxic effects caused by sulfentrazone are discussed in Table 1 of this unit as well as the no observed adverse effect level (NOAEL) and the lowest observed adverse effect level (LOAEL) from the toxicity studies reviewed.

TABLE 1.—SUBCHRONIC, CHRONIC, AND OTHER TOXICITY

Guideline No.	Study Type	Results
870.3100	90-Day oral toxicity rodents (rats)	NOAEL = 19.9 milligrams/kilogram/day (mg/kg/day) for males and 23.1 mg/kg/day for females LOAEL = 65.8 mg/kg/day for males and 78.1 mg/kg/day for females based on clinical signs of anemia (reduced hematocrit, hemoglobin, mean cell volume, and mean cell hemoglobin values during treatment)
870.3100	90-Day oral toxicity rodents (mice)	NOAEL = 60 mg/kg/day for males and 79.8 mg/kg/day for females LOAEL = 108.4 mg/kg/day for males and 143.6 mg/kg/day for females based on decreased body weights, body weight gains, red blood cells, hemoglobin, hematocrit, and severity of splenic micro pathology (increased incidence and severity of extramedullary hematopoiesis)
870.3150	90-Day oral toxicity in nonrodents (dogs)	NOAEL = 28 mg/kg/day LOAEL = 57 mg/kg/day for males and 73 mg/kg/day for females based on decreased body weights (7-10%) and body weight gains during first 5 weeks of study; decreased hemoglobin, hematocrit, mean cell volume, mean cell hemoglobin and mean cell hemoglobin concentration, and increased absolute liver weights and alkaline phosphatase levels, and microscopic changes in the liver and spleen (pigmented sinusoidal macrophages in the liver, swollen centrilobular hepatocytes and pigmented reticuloendothelial cells in the spleen)
870.3200	21/28-Day dermal toxicity	Systemic and dermal NOAEL = 1,000 mg/kg/day, highest dose tested (HDT)
870.3700	Prenatal developmental in rodents (rats)	Maternal NOAEL = 25 mg/kg/day LOAEL = 50 mg/kg/day based on increased relative splenic extramedullary hematopoiesis Developmental NOAEL = 10 mg/kg/day LOAEL = 25 mg/kg/day based on decreased mean fetal weights, and retardation in skeletal development evidenced by an increased number of litters with any variation and by decreased number of caudal vertebral and metacarpal ossification sites