

US EPA ARCHIVE DOCUMENT

**TABLE 7-7
TRVS FOR ECOLOGICAL RISK CALCULATIONS**

**RFI PHASE II REPORT
GENERAL MOTORS CORPORATION
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN**

CoPC	Class	Test Species	Body Weight (kg)	Exposure Route	No-Effects Dose Concentration	Lowest-Observed-Effects Dose Concentration	Ingestion Rate	Endpoint	Duration of Study	NOAEL / LOAEL (mg/kg bw - d)		References
										NOAEL	LOAEL	
Manganese	Mammals	Rat	0.35 ^a	oral in diet	1,050 ppm and 50 ppm in food	3,500 ppm and 50 ppm in food	0.028 kg/day ^b	reproduction	224 days	88	280	Laskey et al. (1982)
Selenium	Mammals	Rat	0.35 ^c	oral in water	1.5 mg/L	2.5 mg/L	0.046 L/day ^d	reproduction	2 generations	0.20	0.33	Rosenfeld and Beath (1954)
Zinc	Mammals	Sprague-Dawley rat	0.35 ^c	oral in diet	2,000 ppm	4,000 ppm	0.028 kg/day ^b	reproduction	16 days during gestation	160	320	Schlicker and Cox (1968)
Total PCBs	Mammals	Mink	1.0 ^e	oral in diet	1 ppm	2 ppm	0.137 kg/day ^f	reproduction	9 months	0.137	0.27	Aulerich and Ringer (1977)

Notes:

Dose concentrations and ingestion rates are expressed in wet weight unless otherwise noted.

bw = body weight.

CoPC = chemical of potential concern.

LOAEL = lowest-observed-adverse-effect level.

NOAEL = no-observed-adverse-effect level.

PCB = polychlorinated biphenyl.

TRV = toxicity reference value.

^a U.S. EPA (1995).

^b Calculated using allometric equation from U.S. EPA (1988).

^c U.S. EPA (1988).

^d Calder and Braun (1983).

^e U.S. EPA (1993).

^f Based on the observations of Bleavins and Aulerich (1981).