TABLE 7-8

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

SHORT-TAILED SHREW EXPOSURE MODEL
AND RISK CALCULATIONS

	Soil Max. (mg/kg)	BAFs (dry) *B* 0	BAFs (dry) *B* 1	ln[Earthworm Tissue] (mg/kg, dry)	Earthworm Tissue (mg/kg, dry)	Intake via Food (mg/kg bw-d)	Intake via Soil (mg/kg bw-d)	Total Ingestion (mg/kg bw-d)	Toxicity Reference Value (mg/kg bw-d)	Hazard Quotient
Metals										
Manganese	1300	-0.809	0.682	4.08	5.92E+01	8.63E+00	1.78E+01	2.65E+01	88	0.3
Selenium	0.65	-0.075	0.733	-0.39	6.77E-01	9.86E-02	8.91E-03	1.08E-01	0.20	0.5
Zinc	170	4.449	0.328	6.13	4.61E+02	6.72E+01	2.33E+00	6.96E+01	160	0.4
PCBs										
Total PCBs	0.85	0.1352	1.0347	0.06	7.21E+00	1.05E+00	1.16E-02	1.06E+00	0.137	7.8

Notes:
Maximum soil concentrations are from Table 7-3.
BAF - bioaccumulation factor
PCB - polychlorinated biphenyl
Toxicity Reference Values are from Table 7-7.
Dry-weight nonlinear BAF has form: $\ln[biota] = B0 + B1 * \ln[soil]$ (Sample et al. 1998); refer to Table 7-6.
Dry-weight PCB nonlinear BAF has form: 6.25 (log[biota] = B0 + B1 * log[soil]) (Appendix H); refer to Table 7-6.
PCB BAF assumes an average earthworm moisture content of 84% (U.S. EPA 1993)