The results of the AERMOD dispersion modeling analysis represent an intermediate product in the HHRA process. The HARP model was subsequently used to determine cancer, chronic, and acute health risks. To assess chronic and acute noncancer exposures, annual and 1-hour TAC concentrations are compared with the RELs developed by OEHHA to obtain a chronic or acute hazard index. Cancer risks were evaluated based on the inhalation cancer potency, oral slope factor, frequency and duration of exposure at the receptor, and breathing rate of the exposed persons.

This HHRA included potential health impacts from home grown produce, dermal absorption, soil ingestion, and mother's milk, as required by OEHHA guidelines. The inhalation cancer potency, oral slope factor values, and RELs used to characterize health risks associated with the modeled impacts were obtained from the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* (OEHHA and CARB, 2005), and are shown in Table 4-1.

TABLE 4-1
Risk Assessment Health Values for Toxic Air Contaminants
Evergreen Pulp Human Health Risk Assessment

		Cancer Risks		Noncancer Effects		
Toxic Air Contaminant	CAS No.	Inhalation Cancer Potency (mg/kg-day)	Oral Slope Factor $(\mu g/m^3)^{-1}$	Chronic Inhalation REL $(\mu g/m^3)$	Chronic Oral (mg/kg-day)	Acute Inhalation REL $(\mu g/m^3)$
1,1,1-Trichloroethane	71556	NA	NA	1,000	NA	68,000
1,1,2-Trichloroethane	79005	0.06	NA	NA	NA	NA
Acetaldehyde	75070	0.01	NA	9	NA	NA
Acrolein	107028	NA	NA	0.060	NA	0.19
Ammonia	7664417	NA	NA	200	NA	3,200
Benzene	71432	0.1	NA	60	NA	1,300
Bis(2-ethylhexyl)pthalate	117817	0.0084	0.0084	70	NA	NA
Bromomethane	74839	NA	NA	5	NA	3,900
Carbon Tetrachloride	56235	0.15	NA	40	NA	1,900
Chlorobenzene	108907	NA	NA	1,000	NA	NA
Chloroform	67663	0.019	NA	300	NA	150
Ethyl Benzene	100414	NA	NA	2,000	NA	NA
Formaldehyde	50000	0.021	NA	3	NA	94
Hexachlorocyclopentadiene	77474	NA	NA	0.24	NA	NA
Isopropanol	67630	NA	NA	7,000	NA	3,200
Methanol	67561	NA	NA	4,000	NA	28,000