

**4717.7880 MULTIPLE CHEMICAL HEALTH RISK LIMITS: NONCANCER.**

Subpart 1. **Scope.** To evaluate the risk of effects other than cancer from multiple chemicals detected in groundwater, a health risk index for each health endpoint must be calculated for each duration period using the procedure specified in this part.

Subp. 2. **Grouping of chemicals.** Chemicals must be grouped according to health endpoints, other than cancer, specified in part 4717.7860, and according to duration except that:

- A. chemicals for which no health endpoint is specified will not be grouped; and
- B. a chemical will be included in the group for each health endpoint listed for that chemical.

Subp. 3. **Equation.** Using the following equation, a noncancer health risk index must be determined for each group of two or more chemicals that have a common health endpoint and common duration period.

$$\text{Noncancer health risk index}_{\text{duration}} = C_1/n\text{HRL}_{1\text{duration}} + C_2/n\text{HRL}_{2\text{duration}} + \dots + C_N/n\text{HRL}_{N\text{duration}}$$

Where:

A.  $C_N$  represents the concentration expressed as  $\mu\text{g/L}$  of the first through Nth chemical. In the case of a chemical that has been detected but cannot be quantified,  $C_N$  is determined by standard statistical procedures.

B.  $n\text{HRL}_{N\text{duration}}$  represents the duration specific acute, short-term, subchronic, or chronic noncancer health risk limit expressed as  $\mu\text{g/L}$  for the first through Nth chemical, as specified in part 4717.7860.

**Statutory Authority:** *MS s 103H.201*

**History:** *33 SR 1792*

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