

**WAC 173-340-706 Use of Method C.** (1) **Applicability.** Method C cleanup levels represent concentrations that are protective of human health and the environment for specified site uses and conditions. A site (or portion of a site) that qualifies for a Method C cleanup level for one medium does not necessarily qualify for a Method C cleanup level in other media. Each medium must be evaluated separately using the criteria applicable to that medium. Method C cleanup levels may be used in the following situations:

(a) For surface water, groundwater and air, Method C cleanup levels may be established where the person conducting the cleanup action can demonstrate that such levels comply with applicable state and federal laws, that all practicable methods of treatment are used, that institutional controls are implemented in accordance with WAC 173-340-440, and that one or more of the following conditions exist:

(i) Where Method A or B cleanup levels are below area background concentrations, Method C cleanup levels may be established at concentrations that are equal to area background concentrations, but in no case greater than concentrations specified in subsection (2) of this section;

(ii) Where attainment of Method A or B cleanup levels has the potential for creating a significantly greater overall threat to human health or the environment than attainment of Method C cleanup levels established under this chapter, Method C cleanup levels may be established at concentrations that minimize those overall threats, but in no case greater than concentrations specified in subsection (2) of this section. Factors that shall be considered in making this determination include:

- (A) Results of a site-specific risk assessment;
- (B) Duration of threats;
- (C) Reversibility of threats;
- (D) Magnitude of threats; and
- (E) Nature of affected population.

(iii) Where Method A or B cleanup levels are below technically possible concentrations, Method C cleanup levels may be established at the technically possible concentrations, but in no case greater than levels specified in subsection (2) of this section.

(b) Method C soil cleanup levels may only be established where the person conducting the cleanup action can demonstrate that the area under consideration is an industrial property and meets the criteria for establishing industrial soil cleanup levels under WAC 173-340-745.

(c) Method C air cleanup levels may also be established for facilities qualifying as industrial property under WAC 173-340-745 and for utility vaults and manholes. (See WAC 173-340-750.)

(2) **Cleanup levels.** Method C consists of two approaches, standard and modified. Standard Method C uses default formulas, assumptions, and procedures to develop cleanup levels. Under modified Method C, chemical-specific or site-specific information may be used to change certain assumptions to calculate different cleanup levels. When the term "Method C" is used in this chapter, it means both standard and modified Method C. Method C cleanup levels shall be established in accordance with the procedures in WAC 173-340-720 through 173-340-760. Method C cleanup levels shall be at least as stringent as all of the following:

(a) Concentrations established under applicable state and federal laws;

(b) Concentrations that are estimated to result in no significant adverse effects on the protection and propagation of aquatic life, and

no significant adverse effects on wildlife using the procedures specified in WAC 173-340-7490 through 173-340-7494;

(c) For hazardous substances for which sufficiently protective, health-based criteria or standards have not been established under applicable state and federal laws, those concentrations which are protective of human health as determined by the following methods:

(i) Concentrations that are estimated to result in no significant adverse acute or chronic toxic effects on human health as estimated using a hazard quotient of one (1) and the procedures defined in WAC 173-340-720 through 173-340-760;

(ii) For known or suspected carcinogens, concentrations for which the upper bound on the estimated excess cancer risk is less than or equal to one in one hundred thousand ( $1 \times 10^{-5}$ ) as determined using the procedures defined in WAC 173-340-720 through 173-340-760; and

(iii) Concentrations that eliminate or minimize the potential for food chain contamination as necessary to protect human health.

(3) **More stringent cleanup levels.** The department may establish Method C cleanup levels that are more stringent than those required by subsection (2) of this section when based upon a site-specific evaluation, the department determines that such levels are necessary to protect human health and the environment. Any imposition of more stringent requirements under this provision shall comply with WAC 173-340-702 and 173-340-708.

(4) **Multiple hazardous substances or pathways.** Concentrations of individual hazardous substances established under subsections (2) and (3) of this section, including those based on applicable state and federal laws, shall be adjusted downward to take into account exposure to multiple hazardous substances and/or exposure resulting from more than one pathway of exposure. These adjustments need to be made only if, without these adjustments, the hazard index would exceed one (1) or the total excess cancer risk would exceed one in one hundred thousand ( $1 \times 10^{-5}$ ). These adjustments shall be made in accordance with WAC 173-340-708 (5) and (6). In making these adjustments, the hazard index shall not exceed one and the total excess cancer risk shall not exceed one in one hundred thousand ( $1 \times 10^{-5}$ ).

(5) **Adjustments to cleanup levels based on applicable laws.** When a cleanup level is based on an applicable state or federal law and the level of risk upon which the applicable law is based exceeds an excess cancer risk of one in one hundred thousand ( $1 \times 10^{-5}$ ) or a hazard index of one (1), the cleanup level must be adjusted downward so that the total excess cancer risk does not exceed one in one hundred thousand ( $1 \times 10^{-5}$ ) and the hazard index does not exceed one (1) at the site.

(6) **Limitation on adjustments.** Cleanup levels determined using Method C, including cleanup levels adjusted under subsections (4) and (5) of this section, shall not be set at levels below the practical quantitation limit or natural background, whichever is higher. See WAC 173-340-707 and 173-340-709 for additional requirements on practical quantitation limits and natural background.

(7) **Remediation levels.** Method C formulas may be modified for the purpose of using a human health risk assessment to evaluate the protectiveness of a remedy. WAC 173-340-708 (3) and (10) describe the adjustments that can be made to the Method C formulas. Also see WAC 173-340-355 and 173-340-357 for more detailed information on remediation levels and quantitative risk assessment.

(8) **Inconsistencies.** If there are any inconsistencies between this subsection and any specifically referenced sections, the referenced section shall govern.

[Statutory Authority: Chapter 70.105D RCW. WSR 01-05-024 (Order 97-09A), § 173-340-706, filed 2/12/01, effective 8/15/01; WSR 96-04-010 (Order 94-37), § 173-340-706, filed 1/26/96, effective 2/26/96; WSR 91-04-019, § 173-340-706, filed 1/28/91, effective 2/28/91.]