

DTSC Toxicity Criteria Rule for Human Health Risk Assessments

Responses to Frequently Asked Questions (FAQs)

California is a leader in protecting public health using strong scientific-based decision making. The Department of Toxic Substances Control's (DTSC) new regulation, *Toxicity Criteria for Human Health Risk Assessments, Screening Levels, and Remediation Goals* (1), continues this leadership. The Toxicity Criteria Rule protects human health by ensuring that human health risk assessments, risk-based screening levels, and risk-based remediation goals for hazardous waste and hazardous substance cleanup sites in California use the appropriate toxicity criteria specified in section 69021 of the rule. Toxicity criteria are chemical-specific numerical values that describe the potency of a chemical or contaminant (2).

The Toxicity Criteria Rule formalizes DTSC existing statewide practice regarding application of toxicity criteria at cleanup sites. The toxicity values set in the Rule protect California's diverse population including through the use or consideration the following factors:

- Best available science, i.e., the most current, sound scientific methods in risk assessment and toxicology, as required by H&SC 25356.1.5
- California's environmental justice laws and policies
- Age and race sensitivities to chemical exposure
- Exposure due to cultural and income level differences
- Children's special vulnerabilities to exposure to environmental hazards as required in the California's Children's Environmental Health Protection Act (3) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendment and Reauthorization Act (4) of 1986.

The Toxicity Criteria Rule reduces uncertainty, time, and costs required to resolve different interpretations of federal guidance on applicable toxicity criteria, and disputes over which

toxicity criteria to use at federal sites. It also assures consistent health protection across California.

To assist the public, DTSC developed the following brief answers to the most frequently asked questions regarding the Toxicity Criteria Rule.

1. "Toxicity Criteria Rule"; Title 22, California Code of Regulations, sections 68400.5, 69020-69022. (Effective date September 4, 2018). The regulatory text is also available at <https://dtsc.ca.gov/regs/toxicity-criteria-for-human-health-risk-assessment/>.
2. US Environmental Protection Agency, Risk Assessment Guidance for Superfund, EPA/540/1-89/002 (December 1989) Available at https://www.epa.gov/sites/default/files/2015-09/documents/rags_a.pdf
3. Children's Environmental Health Protection Act, Senate Bill No. 25, Escutia, Chapter 1999, 1998-1999 Session.
4. 42 U.S. Code sections 9601 et seq.
5. https://www.epa.gov/sites/production/files/2015-09/documents/rags_a.pdf
6. The Toxicity Criteria Rule explicitly applies to all sites undergoing cleanup under the following laws: Hazardous Waste Control Act (Health and Safety Code section 25100 et seq., also known as "Chapter 6.5"), Hazardous Substances Account Act (Health and Safety Code section 25300 et seq. also known as "Chapter 6.8"), and the California Land Reuse and Revitalization Act (Health and Safety Code section 25395.60 et seq.).

What are toxicity criteria?

Toxicity criteria are chemical-specific numerical values that reflect the potency of a chemical or contaminant (5). There are two types of toxicity criteria: cancer and noncancer. Cancer toxicity criteria are health-protective values used to predict the increased cancer risk from a lifetime exposure to a chemical or contaminant of concern. The noncancer toxicity value is the amount of a chemical or contaminant that a person can ingest or breathe every day for a lifetime without any expected adverse health effects.

What does the Toxicity Criteria Rule do?

Is this Toxicity Criteria Rule changing DTSC's methods for risk assessment?

How are the toxicity criteria used at California hazardous waste and hazardous substance release sites?

What are DTSC's primary sources of toxicity criteria?

How do I use the Toxicity Criteria Rule to identify the appropriate toxicity criteria for a contaminant?

The form or type of contaminant present at my site differs from the one on which the toxicity criteria are based. What value do I use?

How do I determine appropriate toxicity criteria for total petroleum hydrocarbons?

How will the Toxicity Criteria Rule be updated to reflect new or updated toxicity criteria?

What values should I use if new or updated toxicity criteria are available from OEHHA or IRIS before the Toxicity Criteria Rule is amended?

Will the Toxicity Criteria Rule impact previously approved remedies?

How does the Toxicity Criteria Rule affect Five-Year Reviews?

Is the Toxicity Criteria Rule consistent with federal guidance?

How to select toxicity criteria under the Toxicity Criteria Rule (1)

- Consult Appendix I
If toxicity criteria for the chemical and pathway is listed use that value. If not, move to next step.
- Consult USEPA IRIS Database
If toxicity criteria for the chemical and pathway is listed use that value. If not, move to next step.
- Consult DTSC HHRA Note 10
Use the DTSC pre-approved listed toxicity criteria for the chemical and pathway.

(1) Monitor HERO's website for updates to Appendix I and HHRA Note 10.