

Remedy Selection and Disproportionate Cost Analysis

Overview of Preliminary Draft Changes to WAC 173-340-350 and 173-340-360

STAG Briefing on January 30, 2020

Introduction

The Department of Ecology (Ecology) proposes making targeted changes to the remedy selection and Disproportionate Cost Analysis (DCA) requirements in Sections [350](#) and [360](#) of Chapter [173-340](#) WAC,ⁱ the Model Toxics Control Act (MTCA) Cleanup Regulation. The proposed changes are intended to update and clarify the requirements for the regulated community and the public, and provide a framework for Ecology to develop any needed policies or guidance in the future. Ecology is not proposing fundamental changes to the overall process for selecting a cleanup action as part of this rulemaking.

Background

MTCA authorizes Ecology to “conduct, provide for conducting, or require potentially responsible persons to conduct remedial actions... to remedy releases or threatened releases of hazardous substances.” When doing so, MTCA requires Ecology to “give preference to permanent solutions to the maximum extent practicable...” (RCW [70.105D.030\(1\)\(b\)](#))ⁱⁱ. The statute does not define the term “practicability.”

WAC [173-340-350](#)ⁱⁱⁱ (Remedial investigations and feasibility study) and [173-340-360](#)^{iv} (Selection of cleanup actions) establish requirements for cleanup actions and a process for selecting a cleanup action. The selected cleanup action must, among other things, “use permanent solutions to the maximum extent practicable” (WAC [173-340-360\(2\)\(b\)\(i\)](#)).

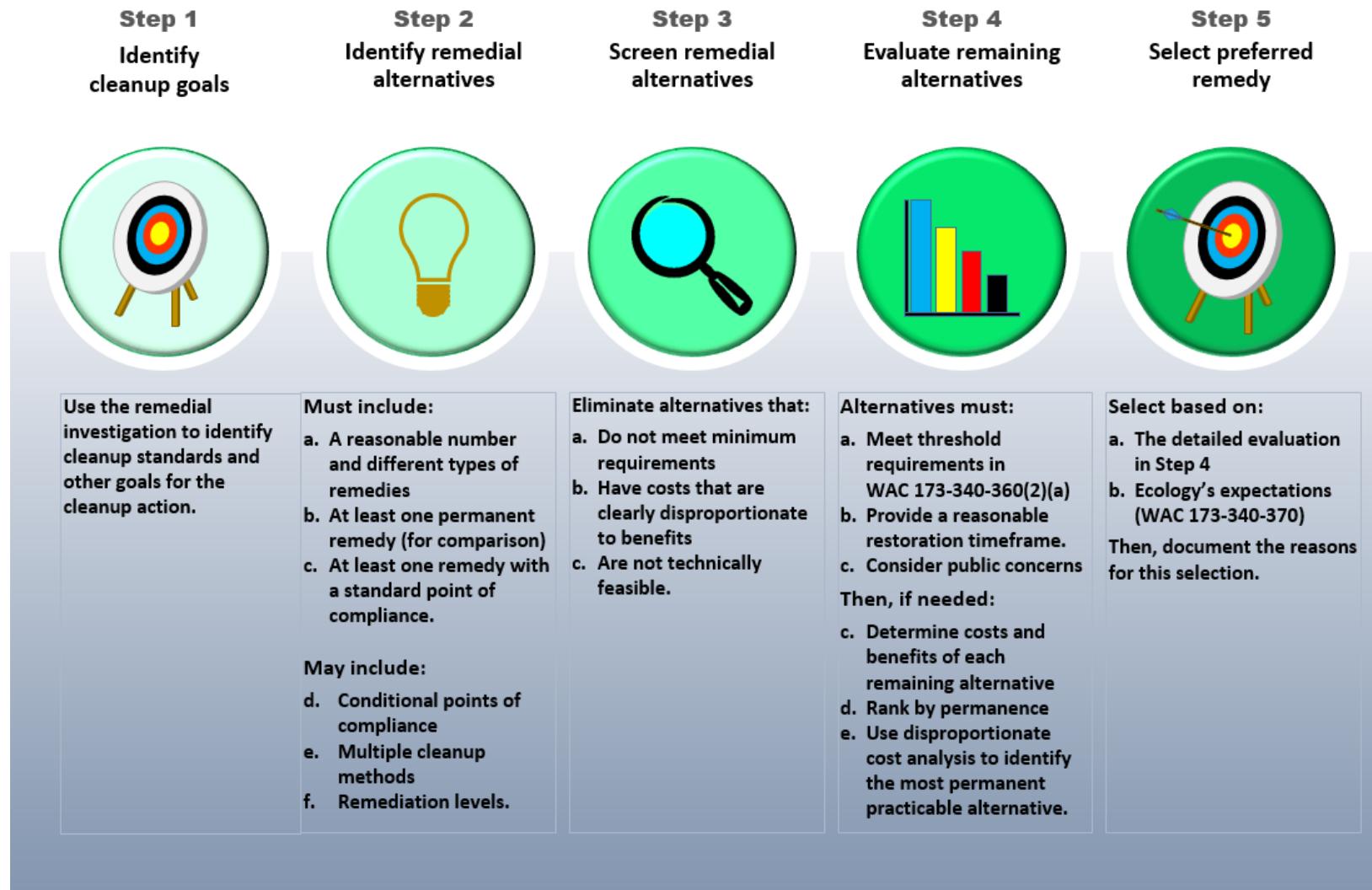
Figure 1 on the next page provides a step-by-step summary of the current remedy selection process, adjusted as discussed below. The Supplemental Background section at the end of this memo provides a detailed description of the remedy selection process and includes definitions of relevant terms.

Purpose of Changes

As part of this rulemaking, Ecology is proposing to:

- Clarify and make targeted changes to the remedy selection process and the DCA.
- Provide a framework for developing separate guidance on remedy selection and the DCA.
- Update provisions related to remedial investigations and feasibility studies in Section 350.
- Align rule language and organization with agency rule preferences.

Following this rulemaking and as resources permit, Ecology plans to develop any needed policies or guidance to help the regulated community conduct DCAs and comply with the remedy selection requirements.

Figure 1. Remedy selection process under WAC 173-340-350 and -360**Figure 1: Remedy selection process under WAC 173-340-350 and -360**

Overview of Changes

Ecology is considering the following changes to **WAC 173-340-350** (Remedial investigation and feasibility study):

- Update, clarify, and streamline procedures for conducting remedial investigations.
- Revise and reorganize procedures for conducting feasibility studies, detailing a step-by-step process for identifying, evaluating and selecting a remedy. This rule reorganization would facilitate future guidance on remedy selection and DCA.
- Revise and reorganize provisions specifying the contents of feasibility study reports. Feasibility studies are required to document the detailed evaluation of alternatives (See Step 4 in Figure 1, above).
- Add requirements for managing waste materials generated by site investigations.

Ecology is considering the following changes to **WAC 173-340-360** (Selection of cleanup actions):

- Clarify the distinction between the “threshold requirements” and “other requirements” for selecting cleanup actions.
- Add consideration of environmental justice to the list of requirements for selecting cleanup alternatives.
- Compile a comprehensive list of existing requirements pertaining to groundwater cleanup actions.
- Clarify that incremental costs will be considered disproportionate only if they *substantially* exceed incremental benefits.
- Add requirement that the expectations for cleanup actions in WAC [173-340-370^v](#) must be considered when evaluating cleanup action alternatives. This change is intended to facilitate future guidance on remedy selection and the DCA.
- Provide a more detailed description of costs to be included in DCA, and require use of a low rate of return in the present worth analysis of future costs.
- Add a new evaluation criterion to the DCA: compatibility with comprehensive land use planning and zoning.
- Add a new evaluation criterion to the DCA: vulnerability to climate change.

Supplemental Background

To understand the purpose and effects of the rule changes discussed in the previous overview, it is helpful to have a more detailed appreciation of the current MTCA remedy section and DCA processes. This section describes the logic and policy basis of the process summarized in Figure 1, and provides several important definitions established in the current rule.

The MTCA remedy selection and DCA provisions were originally adopted by Ecology in 1990. See [WSR 90-08-086^{vi}](#) for the original rule text and the [Responsiveness Summary^{vii}](#) for more information. Those provisions were last amended by Ecology in 2001. See [WSR 01-05-024^{viii}](#) for the amended rule text and the [Concise Explanatory Statement^{ix}](#) for a description of what changed and an explanation of why those changes were made.

As part of the suspended 2010 rulemaking, Ecology considered making several changes to clarify and update the MTCA remedy selection provisions, including the addition of procedural steps.

The MTCA remedy selection process has always included the following four basic steps:

- A **remedial investigation** of the site to collect and evaluate sufficient information to establish cleanup standards and select a cleanup action for the site ([WAC 173-340-350\(7\)](#)).
- A **feasibility study** to develop and evaluate an appropriate range of cleanup action alternatives for the site ([WAC 173-340-350\(8\)](#)).
- An **initial screening** of cleanup alternatives during the feasibility study to reduce the number requiring detailed evaluation ([WAC 173-340-350\(8\)\(b\)](#)).
- A **detailed evaluation** of cleanup action alternatives to select a preferred cleanup action from the remaining alternatives.

To be selected, a cleanup action alternative must:

- Meet the “threshold” requirements in [WAC 173-340-360\(2\)\(a\)](#):
 - Protect human health and the environment
 - Comply with MTCA cleanup standards
 - Comply with applicable state and federal laws
 - Provide for compliance monitoring.
- Be permanent, or use permanent solutions to the maximum extent practicable ([WAC 173-340-360\(2\)\(b\)\(i\)](#) and (3)). To make this determination, one must conduct a DCA and consider the following factors as part of the analysis:
 - Protectiveness
 - Permanence
 - Cost
 - Long-term effectiveness
 - Short-term risk (i.e., risks related to construction and initial implementation)
 - Technical and administrative implementability
 - Public concerns.

- Provide for a reasonable restoration timeframe (WAC [173-340-360](#)(2)(b)(ii) and (4)).
- Consider public concerns raised during the public involvement process (WAC [173-340-360](#)(2)(b)(iii) and (3)(f)(vii)).
- Comply with other media-specific (such as groundwater) or action-specific (such as dilution or dispersion) requirements (WAC [173-340-360](#)(2)(c) through (h)).

Selected definitions from current rule:

"Permanent solution" or **"permanent cleanup action"** means a cleanup action in which cleanup standards of WAC 173-340-700 through 173-340-760 can be met without further action being required at the site being cleaned up or any other site involved with the cleanup action, other than the approved disposal of any residue from the treatment of hazardous substances. (WAC [173-340-200](#))^x

"Disproportionate": Costs are disproportionate to benefits if the incremental costs of the alternative over that of a lower cost alternative exceed the incremental degree of benefits achieved by the alternative over that of the other lower cost alternative. (WAC [173-340-360](#)(3)(e)(i))

"Practicable" means capable of being designed, constructed and implemented in a reliable and effective manner including consideration of cost. When considering cost under this analysis, an alternative shall not be considered practicable if the incremental costs of the alternative are disproportionate to the incremental degree of benefits provided by the alternative over other lower cost alternatives.

(WAC [173-340-200](#))

ⁱ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-340>

ⁱⁱ <https://app.leg.wa.gov/RCW/default.aspx?cite=70.105D.030>

ⁱⁱⁱ <https://apps.leg.wa.gov/wac/default.aspx?cite=173-340-350>

^{iv} <https://apps.leg.wa.gov/wac/default.aspx?cite=173-340-360>

^v <https://apps.leg.wa.gov/wac/default.aspx?cite=173-340-370>

^{vi} <http://lawfilesext.leg.wa.gov/law/wsr/1978-1996/90-08.pdf>

^{vii} <https://fortress.wa.gov/ecy/publications/SummaryPages/9009907.html>

^{viii} <http://lawfilesext.leg.wa.gov/law/wsr/2001/05/01-05-024.htm>

^{ix} <https://fortress.wa.gov/ecy/publications/summarypages/0109043.html>

^x <https://apps.leg.wa.gov/wac/default.aspx?cite=173-340-200>