



DEPARTMENT OF
ECOLOGY
State of Washington

MTCA Cleanup Rulemaking
Chapter 173-340 WAC
Preliminary Draft

Sections 310 through 330

November 8, 2019

Purpose of this document:

This document provides a preliminary draft of Ecology's proposed changes to Sections 310 through 330 of Chapter 173-340 WAC, Model Toxics Control Act (MTCA) Cleanup Regulations, for review and consideration by the Stakeholder and Tribal Advisory Group (STAG) in advance of the November 21, 2019, STAG meeting. The document also includes additional information to facilitate STAG member review, including context for the changes, a summary of changes, and workflow diagrams. The document also includes a list of questions that Ecology would like STAG members to consider when reviewing the preliminary draft of the rule changes to facilitate discussions at the meeting.

For more information about the cleanup rulemaking:

Visit Ecology's website at <http://www.ecy.wa.gov/programs/tcp/regs/wac173360/1602inv.html>.

For more information about the Stakeholder and Tribal Advisory Group:

Visit Ecology's website at https://www.ezview.wa.gov/site/alias_1988/37514/overview.aspx.

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Accommodation requests:

To request ADA accommodation including materials in a format for the visually impaired, call Ecology's Toxics Cleanup Program at 360-407-7170. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
CSL	Contaminated Sites List
EPA	United States Environmental Protection Agency
HSL	Hazardous Sites List
II	Initial Investigation
ISIS	Integrated Site Information System database
MTCA	Model Toxics Control Act
NFA	No Further Action
PLP	Potentially Liable Person
RCW	Revised Code of Washington
SHA	Site Hazard Assessment (current rule)
SHARP	Site Hazard Assessment and Ranking Process (draft rule)
STAG	Stakeholder and Tribal Advisory Group
TCP	Toxics Cleanup Program
VCP	Voluntary Cleanup Program
WAC	Washington Administrative Code
WARM	Washington Ranking Method

Background and Purpose

The basic steps of the cleanup process for contaminated sites under the Model Toxics Control Act (MTCA) were established in 1990 and included in Chapter 173-340 WAC (Cleanup Rule). These are:

1. Site discovery and reporting
2. Initial investigation
3. Site hazard assessment
4. Hazard ranking
5. Remedial investigation/feasibility study
6. Cleanup action selection
7. Site cleanup

For further discussion of these steps, see “Focus on the MTCA Cleanup Regulation,” available at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/nfa>.

Sections 310 through 330 of the Cleanup Rule implement steps 2 through 4 above, establishing requirements for the initial evaluation and listing of potentially-contaminated sites reported to or discovered by Ecology. Those requirements have not been modified since 2001.

The Cleanup Rule reflects early expectations about cleanups in Washington State, many of which are now out of date.

- More contaminated sites need cleanup than anticipated in the early decades of MTCA, and site cleanups often take much longer to complete. As of November 6, 2019:
 - 13,385 sites are tracked in Ecology’s Integrated Site Information System (ISIS).
 - 1,881 sites have a status of “Awaiting Cleanup.” Of these, 1,203 have been listed for more than 10 years and, of those, 575 have been listed for more than 20 years.
 - 4,060 sites have a status of “Cleanup Started.” Of these, 3,363 have been listed for more than 10 years and, of those, 2,564 have been listed for more than 20 years.
 - 7,721 sites have a status of “No Further Action”. These sites are listed on our NFA Sites List, available at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/nfa>.
- Most contaminated sites are cleaned up independently by the owner instead of under Ecology or EPA supervision. As of November 6, 2019:
 - Of the 7,721 sites with NFA status, only 248 were cleaned up under Ecology or EPA supervision.
 - 2,818 sites with NFA status were cleaned up independently under the Voluntary Cleanup Program (VCP).
 - 2,481 sites with NFA status were cleaned up independently during the Initial Investigation phase.
 - 948 sites with NFA status were cleaned up independently during the Site Hazard Assessment phase.
 - 1,226 sites were cleaned up through other independent processes.

- Under the existing site hazard assessment (SHA) and ranking process, Ecology cannot keep pace with the number of new sites discovered each year and cannot update rankings based on changes in site conditions or new information.
 - Section 140 of the Cleanup Rule requires that Ecology complete at least 35 SHAs each year and to prioritize SHAs for Ecology-conducted and supervised cleanups. These requirements reflect early expectations about the number and duration of cleanups, and of the role of site owners in conducting them.
 - Since 2000, between 200 and 300 new contaminated sites are discovered and reported each year. Cleanups are completed at a rate of approximately 200 sites each year.
 - The current SHA and ranking process, which requires additional investigations, is too slow and costly to keep pace with the current rates of site discovery and cleanup. As of April 2019, there were 3,964 unranked contaminated sites. Of those unranked sites:
 - 1,204 sites are awaiting cleanup.
 - 2,760 sites have started cleanup. About 23% of those sites are enrolled in the VCP and 67% of those sites are listed as “independent,” which includes sites that exited the VCP without achieving NFA status.
 - The current SHA and ranking process is not intended to be updated. But we now know that significant changes in site conditions and information can occur during the long duration of many sites in the MTCA cleanup process.

Ecology is proposing changes to Sections 310 through 330 of the Cleanup Rule to develop and implement a new and more flexible tool that will allow Ecology to more quickly assess and update the threats posed by a site, and to communicate more effectively with the public about those threats and the progress made to reduce them. The new process will enable Ecology to:

- Reflect both the potential for exposure and the severity of such exposures at a site.
- Indicate the evaluator’s confidence in the ranking based on the quantity and quality of information available at the time of ranking.
- Review available demographic and economic information about the population near the site, using criteria established by Ecology to identify populations that may be especially vulnerable to harm from exposure to hazardous substances.
- Integrate the assessment into the Initial Investigation process so that all investigations of confirmed or suspected sites result in a ranking.
- Rank all sites requiring further action and list them on a single Contaminated Sites List (CSL).
- Allow for re-ranking of sites to track and communicate progress in cleaning up sites and reducing threats posed to human health and the environment.

Finally, by moving details of the site hazard assessment and ranking process from the rule to policy and procedure, Ecology intends to make the process more readily adaptable to future challenges and opportunities.

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Overview of Proposed Changes

The following is a summary of the proposed changes to Sections 310 through 330 and related definitions in Section 200 of Chapter 173-340 WAC, Model Toxics Control Act (MTCA) Cleanup Regulations. The proposed changes are also footnoted in the preliminary draft of the rule text.

Section 200 Definitions

- Replaced term “hazardous waste site” with term “contaminated site.” Expanded definition to include not only sites where Ecology has confirmed a release, but also sites where Ecology reasonably suspects a release requiring further remedial action under this chapter.
- Replaced term “hazardous sites list” with term “contaminated sites list.” Expanded definition to include all contaminated sites, including both sites where Ecology has confirmed a release and sites where Ecology reasonably suspects a release requiring further remedial action under this chapter. Ecology already maintains and reports such a list on its website at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/contaminated>. It is currently referred to as the “confirmed and suspected contaminated sites list.”
- Added term “no further action sites list” to reflect current practice. Ecology already maintains and reports such a list on its website at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/nfa>. The list helps satisfy the requirement in the current rule under WAC 173-340-330(8).
- Replaced term “site hazard assessment” with “site hazard assessment and ranking.” Changed definition to reflect changes in purpose identified under WAC 173-340-320 and to integrate the concept of ranking.

Section 310 Initial investigation and assessment

Purpose and scope

- Expanded title of section to reflect the fact that Ecology will perform a site hazard assessment and ranking when making determinations based on the initial investigation.
- Added identifying current owners and operators as one of the purposes of the initial investigation. This reflects Ecology’s current practice and policy, as specified in Toxics Cleanup Program Policy 310A, Section 5.

Applicability and timing

- Combined existing subsection (2), applicability and timing, with subsection (3), exemptions.
- Eliminated separate exemption for permitted releases. Such releases are exempt from reporting under WAC 173-340-300(3) and therefore are covered by subsection (2)(a).
- Added explicit discretion for Ecology to extend deadline for completing initial investigation under two circumstances: 1) To collect additional information to make determinations required under this section, or 2) to encourage the quick and permanent cleanup of a site. Extensions are limited to an additional 180 days. This addition incorporates an existing policy specified in Toxics Cleanup Program Policy 310A, Section 7. Ecology is still considering what sideboards should be placed in rule as opposed to policy.

Performance

- Changed what must be done when performing an initial investigation. Ecology is no longer required to inspect the site before making a determination. If sufficient information has already been reported, Ecology may not need to collect additional information to make a determination. Ecology may also be able to collect additional information without visiting the site. This reflects current practice.

Determinations and next steps

- Combined existing subsection (5), department decision, with subsection (6), notifications, to clarify what must be done depending on the determination made.
- For cases where Ecology has confirmed no release, changed notification requirement. Instead of providing notice to owners and operators only when requested, Ecology will always provide notice.
- For cases where Ecology has confirmed release but no threat, changed notification requirement. Instead of providing notice to owners and operators only when requested, Ecology will always provide notice.
- For cases where Ecology has confirmed release that poses threat, but action under another authority is appropriate, changed notification requirement. Instead of providing notice to owners and operators only when requested, Ecology will always provide notice.
- Distinguished between cases where there was no release that required action under this chapter and cases where no further action is necessary because sufficient action has already been taken. The steps Ecology must take based on those determinations are different.
- For cases where no further action is necessary because sufficient action has already been taken, added requirement to perform site hazard assessment and ranking in accordance with WAC 173-340-320 and to list the site on the no further action sites list in accordance with WAC 173-340-330(5). Also changed notification requirement to always require notice, not just when requested by owner or operator.
- For cases where further action is necessary under this chapter, added requirement to perform site hazard assessment and ranking in accordance with WAC 173-340-320 and to list the site on the contaminated sites list in accordance with WAC 173-340-330(2). Also changed notification requirement to allow methods other than sending letters through mail.

Section 320 Site hazard assessment and ranking process

Purpose

- Combined the ranking provisions in Section 330 with the assessment provisions in Section 320.
- Changed purpose of site hazard assessment and ranking process from collecting additional information to evaluating available information to assess and rank the hazards posed by a site.

Development

- Eliminated requirement that Ecology use the Washington Ranking Method (WARM) to assess and rank the hazard of sites. Replaced with a requirement that Ecology must develop a process for assessing and ranking the hazard of sites and provide the public with notice and opportunity to comment before implementing the process.

Scope and content

- Changed functional requirements for site hazard assessment and ranking process to reflect change in purpose. The process must assess and rank potentials for exposure and relative severity of threats and report the evaluator's level of confidence. The process must also identify vulnerable populations near the site based on available demographic and economic information.

Applicability and timing

- Changed applicability and timing of when Ecology must assess and rank the hazards posed by a site. Currently, Ecology is only required to perform once in the cleanup process, sometime after the initial investigation is completed. Under the proposal, Ecology would be required to perform before listing, de-listing, or re-listing a contaminated site. Ecology may also perform at other times based on new information or changed conditions.

Performance

- Changed performance requirements to reflect that the purpose of the assessment is not to collect additional information, but rather to evaluate available information. The information that must be considered is the same as under the current rule.

Notification

- Ecology is considering whether and how to update the Site Register and how it is published. See WAC [173-340-600\(7\)](#) of the current rule.
- Added requirement that Ecology must make results of site hazard assessments and rankings available to the public on Ecology's website.

Section 330 Contaminated sites list

Purpose

- Changed name of list from "hazardous sites list" to "contaminated sites list." Also changed purpose of list to include suspected sites. See Section 200 for definitions and related notes.

Remedial action status

- Eliminated the non-exclusive list of remedial action statuses. Ecology must still track and update statuses.

De-listing criteria and process

- Separated the requirement for consulting public before de-listing sites from the requirement to inform the public after de-listing sites to clarify applicability. The current rule includes both requirements in same subsection.
- For sites where cleanup action includes containment, added de-listing conditions for solid waste landfills other than municipal solid waste landfills. Chapter [173-351](#) WAC applies to municipal solid waste landfills. Chapter [173-350](#) WAC applies to all other types of landfills, such as industrial waste landfills.
- Adjusted when Ecology must provide public opportunity to comment when de-listing sites based on whether such opportunities exist throughout the earlier steps in the cleanup process. Such opportunities exist for Ecology-conducted and supervised cleanups, but not for independent cleanups. Ecology retains discretion to provide such opportunities for independent cleanups on a case-specific basis under WAC [173-340-600](#)(3).
- Changed public notice requirement for de-listing sites to allow methods other than those prescribed in the definition of “public notice.” The definition is specified in statute (RCW [70.105D.020](#)(30)), and does not apply to de-listing sites (RCW [70.105D.030](#)(2)(a)). The definition is out of date and requires the use of methods, such as publication in newspapers, that may no longer be the most effective means of informing the public.

No further action sites lists

- Updated record requirement to specify that Ecology must maintain a “no further action sites list” to reflect current practice. Ecology currently maintains and reports such a list on its website at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/nfa>.
- Clarified that the no further action sites list must include sites where Ecology made a no further action determination based on an initial investigation.

Notification

- Ecology is considering whether and how to update the Site Register and how it is published. See WAC [173-340-600](#)(7) of the current rule.
- Added requirement that Ecology must make available to the public on its website any changes to the contaminated sites list or the remedial action status of any site on that list.

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Questions for Stakeholder and Tribal Advisory Group Members

For the November 21, 2019, meeting of the Stakeholder and Tribal Advisory Group (STAG), we would like you to review the preliminary draft of Sections 310 through 330 of the Cleanup Rule and come prepared to discuss the following questions. You may also submit written comments before or after the meeting. Ecology also welcomes any other comments and questions about the proposed changes.

Questions about Section 310: Initial investigation and assessment

1. Ecology is proposing to incorporate an existing policy that allows Ecology to extend the deadline for completing an initial investigation to encourage quick cleanups. Do you have any concerns with the policy, including the circumstances under which Ecology may provide an extension or how long Ecology may extend the deadline?

See Section 310(3) in the preliminary draft.

2. Should Ecology always notify owners and operators of the result of an initial investigation even if no further action is necessary under MTCA? And should such notice be in the form a letter sent by mail, or are other methods adequate?

See Section 310(6) in the preliminary draft.

Questions about Section 320: Site hazard assessment and ranking process (SHARP)

When answering the following questions, please also consider the SHARP Tool Memorandum and prototype SHARP Tool spreadsheet, provided separately.

3. Do you agree that the current site hazard assessment and ranking process should be replaced?

See Sections 320 and 330(2) through (4) in the current rule.

4. Do you have any concerns with Ecology developing a new process outside of the rule guided by performance standards in the rule? Do the performance standards in the draft rule provide sufficient direction? Does the draft rule strike the right balance between specificity and flexibility?

See Sections 320(2), (3), and (5) in the preliminary draft.

5. Does the draft rule provide the right level of public involvement for developing a new site hazard assessment and ranking process?

See Section 320(2) in the preliminary draft.

6. Does the new process properly account for environmental justice concerns?

See Section 320(3)(c) in the preliminary draft. Also see page 5 of the SHARP Tool Memorandum and the "flagged factors" worksheet of the SHARP Tool.

7. Should Ecology always assess and rank the hazard of sites before listing or de-listing sites?

See Section 330(4) in the preliminary draft.

8. Should Ecology re-rank sites when new information becomes available or site conditions change? Do you think any other situations should trigger re-ranking?

See Section 330(4) in the preliminary draft.

Questions about Section 330: Contaminated sites list

9. Does the draft rule provide the right level of public involvement for removing a site from the contaminated sites list?

See Section 330(4)(c) in the preliminary draft.

10. How should Ecology inform the public when it:

- a. Adds or removes a site from the contaminated sites list?

See Section 330(7)(b) in the preliminary draft.

- b. Ranks or re-ranks the hazard of a site on the contaminated sites list?

See Section 320(7)(b) in the preliminary draft.

- c. Specifies or updates the cleanup status of a site on the contaminated sites list?

See Section 330(7)(b) in the preliminary draft.

Questions about economic impacts

11. What, if any, economic effects might the draft rule changes have on you or your constituents?
12. Can you identify a less burdensome regulatory approach to fulfilling the statutory requirements for assessing, ranking, and listing contaminated sites?
13. Would the draft rule changes have a disproportionate impact on small businesses or local governments?
14. Would the draft rule changes provide an advantage or disadvantage to Washington businesses compared to businesses in other states?

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Work Flow Diagrams

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Cleanup Process Workflow: Role of Site Hazard Assessment and Ranking

The purpose of this diagram is to illustrate how Ecology plans to use the new Site Hazard Assessment and Ranking Process (SHARP) throughout the cleanup process, from initial investigation of a release and listing of a site to removal of the site from the contaminated sites list (CSL).

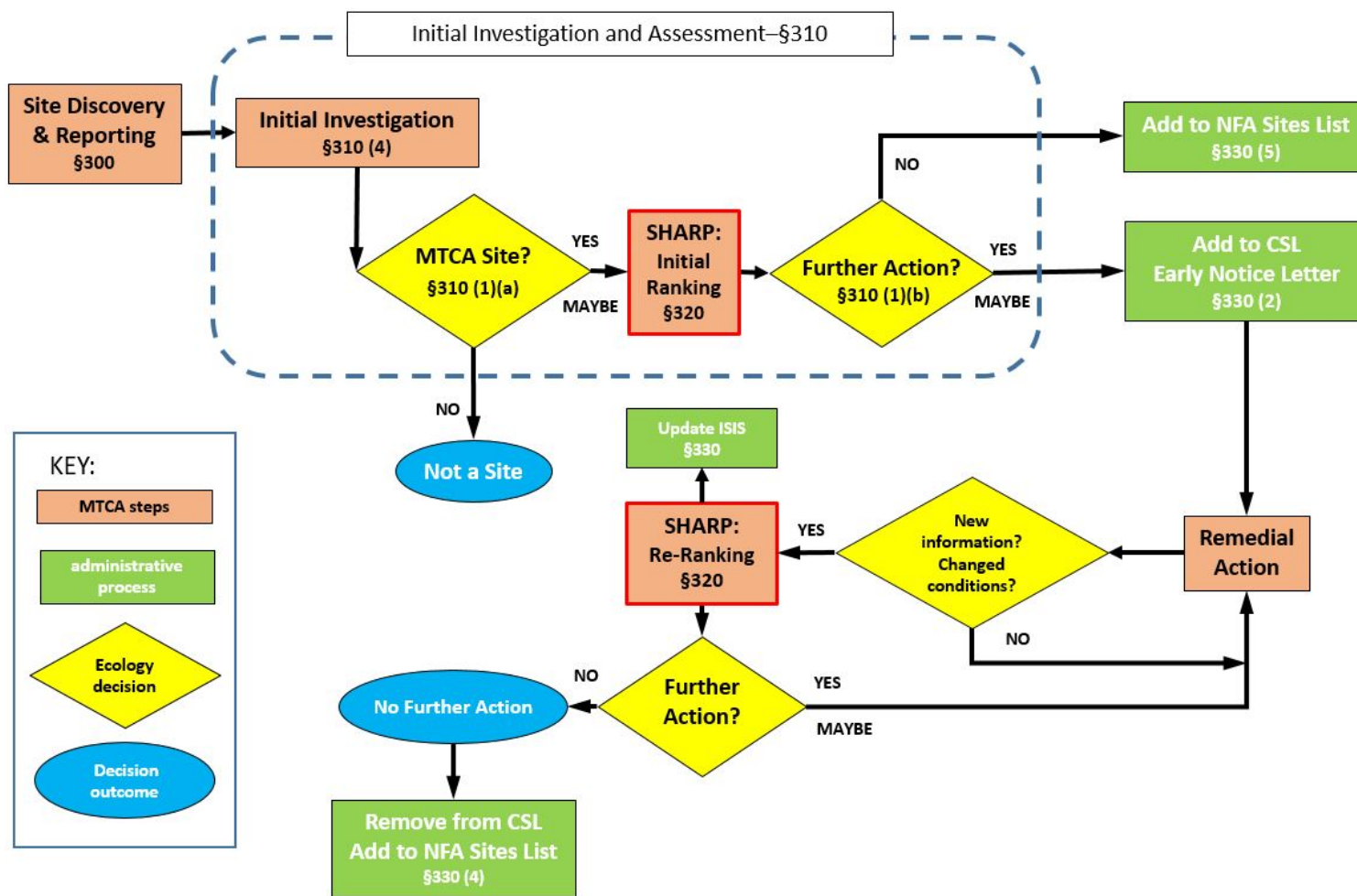


Figure 1: Workflow diagram showing how Ecology plans to use the new Site Hazard Assessment and Ranking Process (SHARP) throughout the cleanup process.

Initial Investigation and Assessment Detailed Workflow

The purpose of this diagram is to illustrate how Ecology plans to initially respond to reported releases, including performance of initial investigations, determinations based on those investigations, and what Ecology will do based on those determinations. The diagram also illustrates how Ecology will use the new Site Hazard Assessment and Ranking Process (SHARP) when making those determinations.

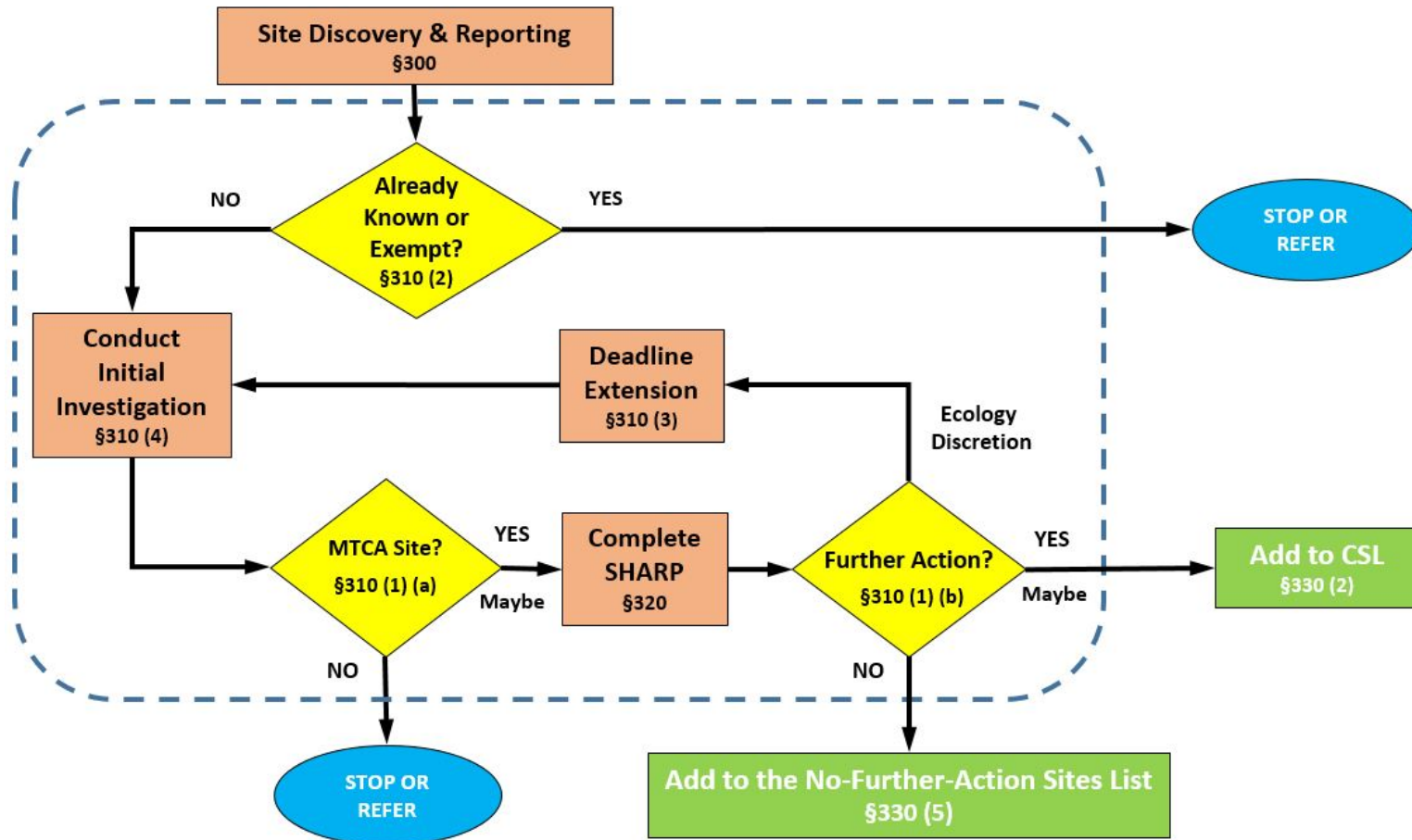


Figure 2: Workflow diagram showing how Ecology plans to initially respond to reported releases and use the new Site Hazard Assessment and Ranking Process (SHARP) when making determinations.

Preliminary Draft of Amended Rule

IMPORTANT

This part of the document includes a preliminary draft of the proposed changes to Sections 310 through 330 and related definitions in Section 200 of Chapter 173-340 WAC. **The proposed changes are footnoted in the rule text.** The proposed changes are not tracked using strikeout and underline because the sections were significantly reorganized, making it difficult to review tracked changes.

WAC 173-340-200 Definitions [excerpts]

- **“Contaminated site”** means any site where Ecology has confirmed or reasonably suspects a release or threatened release of a hazardous substance requiring further remedial action under this chapter.¹
- **“Contaminated sites list”** means a list of contaminated sites maintained under WAC 173-340-330.²
- **“No further action sites list”** means a list of sites where Ecology has determined no further remedial action is necessary under this chapter.³
- **“Initial investigation”** means a remedial action that consists of an investigation performed under WAC 173-340-310.
- **“Site hazard assessment and ranking”** means a remedial action that consists of an assessment and ranking performed under WAC 173-340-320.⁴

¹ Replaced term “hazardous waste site” with term “contaminated site.” Expanded definition to include not only sites where Ecology has confirmed a release, but also sites where Ecology reasonably suspects a release requiring further remedial action under this chapter.

² Replaced term “hazardous sites list” with term “contaminated sites list.” Expanded definition to include all contaminated sites, including both sites where Ecology has confirmed a release and sites where Ecology reasonably suspects a release requiring further remedial action under this chapter. Ecology already maintains and reports such a list on its website at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/contaminated>. It is currently referred to as the “confirmed and suspected contaminated sites list.”

³ Added term “no further action sites list” to reflect current practice. Ecology already maintains and reports such a list on its website at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/nfa>. The list helps satisfy the requirement in the current rule under WAC 173-340-330(8).

⁴ Replaced term “site hazard assessment” with “site hazard assessment and ranking.” Changed definition to reflect changes in purpose identified under WAC 173-340-320 and to integrate the concept of ranking.

WAC 173-340-310 Initial investigation and assessment⁵

- (1) **Purpose.** The purpose of an initial investigation is to:
- (a) Determine whether there has been a release or threatened release of a hazardous substance that may pose a threat to human health or the environment;
 - (b) Determine whether further remedial action is necessary under this chapter to respond to the release or threatened release; and
 - (c) Identify the current owners and operators of the site.⁶
- (2) **Applicability and timing.⁷** Within ninety days of discovering a release or receiving a release report, Ecology must complete an initial investigation unless:
- (a) The release is exempt from reporting under WAC 173-340-300(3);⁸
 - (b) The circumstances associated with the release or threatened release are known to Ecology and have previously been or currently are being evaluated by Ecology or another government agency; or
 - (c) Ecology does not have a reasonable basis to believe that there has been a release or threatened release of a hazardous substance that may pose a threat to human health or the environment.
- (3) **Deadline extension.⁹** Ecology may extend the deadline for completing an initial investigation for up to an additional one hundred and eighty days to:
- (a) Collect, or encourage owners or operators to collect, additional information to make the determinations specified in subsection (1) of this section; or
 - (b) Encourage owners or operators to quickly and permanently clean up a site under the following circumstances:
 - (i) The releases or threatened releases at the site impact soil, but not any other environmental media;

⁵ Expanded title of section to reflect the fact that Ecology will perform a site hazard assessment and ranking when making determinations based on the initial investigation.

⁶ Added identifying current owners and operators as one of the purposes of the initial investigation. This reflects Ecology's current practice and policy, as specified in Toxics Cleanup Program Policy 310A, Section 5.

⁷ Combined existing subsection (2), applicability and timing, with subsection (3), exemptions.

⁸ Eliminated separate exemption for permitted releases. Such releases are exempt from reporting under WAC 173-340-300(3) and therefore are covered by subsection (2)(a).

⁹ Added explicit discretion for Ecology to extend deadline for completing initial investigation under two circumstances: 1) To collect additional information to make determinations required under this section, or 2) to encourage the quick and permanent cleanup of a site. Extensions are limited to an additional 180 days. This addition incorporates an existing policy specified in Toxics Cleanup Program Policy 310A, Section 7. Ecology is still considering what sideboards should be placed in rule as opposed to policy.

- (ii) The owner or operator provides a plan and schedule for cleaning up the site within the extension period; and
 - (iii) The cleanup action is a permanent solution that does not require any institutional or engineered controls.
- (4) **Performance.** When performing an initial investigation, Ecology must review available information and may collect additional information to make the determinations specified in subsection (1) of this section.¹⁰
- (5) **Performance by others.** Ecology may rely on another government agency or a contractor to Ecology to perform an initial investigation on its behalf, provided:
 - (a) The agency or contractor is not suspected of having contributed to the release or threatened release; and
 - (b) The agency or contractor has no conflict of interest.
- (6) **Determinations and next steps.**¹¹ Within thirty days of completing the initial investigation, Ecology must make one of the following determinations and take the specified steps based on its determination:
 - (a) No release or threatened release has occurred. In this case, Ecology must notify the owner and operator in writing of its determination;¹²
 - (b) A release or threatened release has occurred, but there is no threat to human health or the environment requiring remedial action under this chapter. This determination must be based on factors other than performance of remedial action. In this case, Ecology must notify the owner and operator in writing of its determination;¹³
 - (c) A release or threatened release has occurred that poses a threat to human health or the environment, but action under another authority is appropriate. In this case, Ecology must notify the owner and operator in writing of its determination;¹⁴

¹⁰ Changed what must be done when performing an initial investigation. Ecology is no longer required to inspect the site before making a determination. If sufficient information has already been reported, Ecology may not need to collect additional information to make a determination. Ecology may also be able to collect additional information without visiting the site. This reflects current practice.

¹¹ Combined existing subsection (5), department decision, with subsection (6), notifications, to clarify what must be done depending on the determination made.

¹² For cases where Ecology has confirmed no release, changed notification requirement. Instead of providing notice to owners and operators only when requested, Ecology will always provide notice.

¹³ For cases where Ecology has confirmed release but no threat, changed notification requirement. Instead of providing notice to owners and operators only when requested, Ecology will always provide notice.

¹⁴ For cases where Ecology has confirmed release that poses threat, but action under another authority is appropriate, changed notification requirement. Instead of providing notice to owners and operators only when requested, Ecology will always provide notice.

- (d)** A release or threatened release occurred that posed a threat to human health or the environment, but remedial action has been performed and no further remedial action is necessary under this chapter.¹⁵ In this case, Ecology must:¹⁶

 - (i)** Perform a site hazard assessment and ranking in accordance with WAC 173-340-320;
 - (ii)** List the site on Ecology's no further action list in accordance with WAC 173-340-330(5); and
 - (iii)** Notify the owner and operator in writing of Ecology's determination; or
- (e)** A release or threatened release occurred or may have occurred that poses a threat to human health or the environment, and further remedial action is necessary under this chapter. In this case, Ecology must:¹⁷

 - (i)** Perform a site hazard assessment and ranking in accordance with WAC 173-340-320;
 - (ii)** List the site on the contaminated sites list in accordance with WAC 173-340-300(2);
 - (iii)** Notify the owner, operator, and any potentially liable person known to Ecology in writing of Ecology's determination. The notice may be combined with the potentially liable person status letter in WAC 173-340-500. The notice must include:

 - (A)** The basis for Ecology's decision;
 - (B)** Information on the cleanup process provided for in this chapter;
 - (C)** A statement that it is Ecology's policy to work cooperatively with persons to accomplish prompt and effective cleanups;
 - (D)** An Ecology staff or office to contact regarding the contents of the letter; and

¹⁵ Distinguished between cases where there was no release that required action under this chapter and cases where no further action is necessary because sufficient action has already been taken. The steps Ecology must take based on those determinations are different.

¹⁶ For cases where no further action is necessary because sufficient action has already been taken, added requirement to perform site hazard assessment and ranking in accordance with WAC 173-340-320 and to list the site on the no further action sites list in accordance with WAC 173-340-330(5). Also changed notification requirement to always require notice, not just when requested by owner or operator.

¹⁷ For cases where further action is necessary under this chapter, added requirement to perform site hazard assessment and ranking in accordance with WAC 173-340-320 and to list the site on the contaminated sites list in accordance with WAC 173-340-330(2). Also changed notification requirement to allow methods other than sending letters through mail.

WAC 173-340-320 Site hazardous assessment and ranking process¹⁸

- (1) Purpose.**¹⁹ The purpose of the site hazard assessment and ranking process is to provide a uniform system for evaluating and comparing threats posed by contaminated sites. The process is not intended to provide a detailed site characterization. Ecology uses the process to:

 - (a)** Assess threats posed by contaminated sites within each environmental medium;
 - (b)** Compare threats posed within and among contaminated sites to prioritize remedial action;
 - (c)** Reflect changes in threats posed by contaminated sites based on new information or changes in site conditions;
 - (d)** Support decisions whether to list, de-list, or re-list contaminated sites under WAC 173-340-330; and
 - (e)** Inform the legislature and the public about the threats posed by contaminated sites.
- (2) Development.**²⁰ Ecology must develop a site hazard assessment and ranking process. Before implementing the process, Ecology must provide the public with notice and opportunity to comment on the process.
- (3) Scope and content.**²¹ The site hazard assessment and ranking process must enable Ecology to:

 - (a)** Assess and rank the potential for exposure of human and environmental receptors to confirmed or suspected releases or threatened releases of hazardous substances at the contaminated site, considering exposures through soil, groundwater, surface water, sediments, and air;
 - (b)** Assess and rank the relative severity of such threats to human health and the environment;
 - (c)** Assess and identify whether the population near the site is a vulnerable population; and
 - (d)** Report the evaluator's level of confidence in the exposure and severity rankings as appropriate to the quality and quantity of information available to the evaluator at the time of ranking.

¹⁸ Combined the ranking provisions in Section 330 with the assessment provisions in Section 320.

¹⁹ Changed purpose of site hazard assessment and ranking process from collecting additional information to evaluating available information to assess and rank the hazards posed by a site.

²⁰ Eliminated requirement that Ecology use the Washington Ranking Method (WARM) to assess and rank the hazard of sites. Replaced with a requirement that Ecology must develop a process for assessing and ranking the hazard of sites and provide the public with notice and opportunity to comment before implementing the process.

²¹ Changed functional requirements for site hazard assessment and ranking process to reflect change in purpose. The process must assess and rank potentials for exposure and relative severity of threats and report the evaluator's level of confidence. The process must also identify vulnerable populations near the site based on available demographic and economic information.

- (4) **Applicability and timing.**²² Ecology must perform a site hazard assessment and ranking before listing, de-listing, or re-listing a contaminated site under WAC 173-340-330 and when required under WAC 173-340-310(6)(d)(i). Ecology may also perform a site hazard assessment and ranking when new information becomes available or when site conditions change.
- (5) **Performance.**²³ When performing a site hazard assessment and ranking, Ecology must review available information and use best professional judgment. At a minimum, Ecology must consider the following information, as available:
- (a) Evidence supporting or confirming a release or threatened release of hazardous substances to the environment;
 - (b) Observed or reported hazardous substances, including what was or may have been released or threatens to be released, what products of decomposition, recombination, or chemical reaction are currently present, and estimated quantities and concentrations;
 - (c) Descriptions of facilities containing releases, if any, and their condition;
 - (d) Location of areas where hazardous substances are known or suspected;
 - (e) Surface water run-on and run-off and the leaching potential of the hazardous substances;
 - (f) Characterizations of subsurface and groundwater actually or potentially affected by the release, including the depth of groundwater and distance to nearby wells, bodies of surface water, and drinking water intakes;
 - (g) Evaluations of possible receptors, including human populations and any sub-populations with increased vulnerability to harm from exposure to contaminants, food crops, recreation areas, parks, sensitive environments, irrigated areas, and aquatic resources currently or potentially affected by contaminated soil, surface water, groundwater, vapor intrusion or sediment containing contaminants released at the site; and
 - (h) Any other physical factors that may be significant in estimating the potential or current exposure to sensitive biota.
- (6) **Performance by others.** Ecology may rely on another government agency or a contractor to Ecology to perform a site hazard assessment and ranking on its behalf, provided:

²² Changed applicability and timing of when Ecology must assess and rank the hazards posed by a site. Currently, Ecology is only required to perform once in the cleanup process, sometime after the initial investigation is completed. Under the proposal, Ecology would be required to perform before listing, de-listing, or re-listing a contaminated site. Ecology may also perform at other times based on new information or changed conditions.

²³ Changed performance requirements to reflect that the purpose of the assessment is not to collect additional information, but rather to evaluate available information. The information that must be considered is the same as under the current rule.

- (a) The agency or contractor is not suspected of having contributed to the release or threatened release; and
 - (b) The agency or contractor has no conflict of interest.
- (7) **Notification.** Upon completion of a site hazard assessment and ranking of a contaminated site, Ecology must:
 - (a) Notify the owner and operator and any potentially liable person identified by Ecology under WAC 173-340-500 of the results;
 - (b) Inform the public by publishing the results in the *Site Register*²⁴ and making the results available on Ecology's website.²⁵

²⁴ Ecology is considering whether and how to update the Site Register and how it is published. See WAC [173-340-600\(7\)](#) of the current rule.

²⁵ Added requirement that Ecology must make results of site hazard assessments and rankings available to the public on Ecology's website.

WAC 173-340-330 Contaminated sites list²⁶

- (1) Purpose.** The purpose of the contaminated sites list is to:
 - (a)** Identify sites where Ecology has determined remedial action is or may be necessary under this chapter;²⁷ and
 - (b)** Specify the hazard ranking and status of remedial action for each listed site.
- (2) Listing sites.** Ecology must rank and place a site on the contaminated sites list if, after completion of an initial investigation under WAC 173-340-310, Ecology determines further remedial action is or may be required at the site. Placement of a site on the contaminated sites list does not, by itself, imply that persons associated with the site are liable under chapter 70.105D RCW.
- (3) Status of remedial actions.** Ecology must include on the contaminated sites list the status of remedial action at each site on the list. Ecology may change the remedial action status of a site to reflect current conditions.²⁸
- (4) De-listing sites.**
 - (a) Basis.** Ecology may remove a site from the contaminated sites list only after it has determined that:
 - (i)** The listing was erroneous;
 - (ii)** For sites where the selected cleanup action does not include containment, all remedial actions except confirmational monitoring have been completed and compliance with the cleanup standards has been achieved at the site; or
 - (iii)** For sites where the selected cleanup action includes containment, if all of the following conditions have been met:
 - (A)** All construction and operation of remedial actions have been adequately completed and:
 - (I)** Only passive maintenance activities such as monitoring, inspections and periodic repairs remain; or
 - (II)** For all solid waste landfills, a closure plan meeting the substantive requirements in chapters 173-350 WAC or 173-351 WAC, whichever is deemed to be applicable or relevant and appropriate under WAC 173-340-710,²⁹ has been approved by

²⁶ Combined ranking provisions in Section 330 with assessment provisions in Section 320.

²⁷ Changed name of list from “hazardous sites list” to “contaminated sites list.” Also changed purpose of list to include suspected sites. See Section 200 for definitions and related notes.

²⁸ Eliminated the non-exclusive list of remedial action statuses. Ecology must still track and update statuses.

²⁹ For sites where cleanup action includes containment, added de-listing conditions for solid waste landfills other than municipal solid waste landfills. Chapter [173-351](#) WAC applies to municipal solid waste landfills. Chapter [173-350](#) WAC applies to all other types of landfills, such as industrial waste landfills.

Ecology as part of a remedial action under this chapter and the only remaining active maintenance activities are methane gas control, the operation of leachate collection and treatment systems, and/or surface water diversion;

- (B) Sufficient confirmational monitoring has been done to demonstrate that the remedy has effectively contained the hazardous substances of concern at the site;
 - (C) All required performance monitoring has been completed;
 - (D) Any required institutional controls are in place and have been demonstrated to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action;
 - (E) Written documentation is present in Ecology files that describes what hazardous substances have been left on site, where they are located, and the long-term monitoring and maintenance obligations at the site;
 - (F) When required under WAC 173-340-440, financial assurances are in place; and
 - (G) For sites with releases to groundwater, it has been demonstrated the site meets groundwater cleanup levels at the designated point of compliance.
- (b) **Petition.** A site owner, operator, or potentially liable person may petition Ecology to remove a site from the contaminated sites list.
- (i) The petition must be in writing and include thorough documentation of all investigations performed, all cleanup actions taken, and adequate compliance monitoring to demonstrate to Ecology's satisfaction that one of the conditions in (a) of this subsection has been met.
 - (ii) Ecology must review the petition. However, the timing of Ecology's review is at its discretion and as resources permit.
 - (iii) Ecology may collect from the petitioner all costs incurred by Ecology in reviewing and verifying the work performed. Ecology may require a deposit in advance of reviewing the petition.

- (c) **Public participation.**³⁰ For Ecology-conducted and Ecology-supervised remedial actions,³¹ Ecology must inform and provide the public an opportunity to comment before removing a site from the contaminated sites list.³²
- (5) **No further action sites list.** Ecology must maintain a list of sites where Ecology has determined no further remedial action is necessary under this chapter.³³ This includes sites where Ecology made a determination based on an initial investigation under WAC 173-340-310(6)(d) and sites that Ecology has removed from the contaminated sites list under subsection (4) of this section, except for erroneously listed sites.³⁴ As part of the list, Ecology must identify which sites require institutional controls under WAC 173-340-440 and which sites are subject to periodic review under WAC 173-340-420.
- (6) **Re-listing of sites.** Ecology may re-list a site on the contaminated sites list that it previously removed from the list if Ecology determines further remedial action is necessary at the site under this chapter.
- (7) **Notification.** Upon listing, de-listing, or re-listing of a site on the contaminated sites list, or upon any change in the remedial action status of a site on the list, Ecology must:
- (a) Notify the owner and operator and any potentially liable person identified by Ecology under WAC 173-340-500;
 - (b) Inform the public by publishing in the *Site Register*³⁵ and making available on Ecology's website.³⁶

³⁰ Separated requirement for consulting public before de-listing sites from requirement to inform the public after de-listing sites to clarify applicability. The current rule includes both requirements in same subsection.

³¹ Adjusted when Ecology must provide public opportunity to comment when de-listing sites based on whether such opportunities exist throughout the earlier steps in the cleanup process. Such opportunities exist for Ecology-conducted and supervised cleanups, but not for independent cleanups. Ecology retains discretion to provide such opportunities for independent cleanups on a case-specific basis under WAC [173-340-600\(3\)](#).

³² Changed public notice requirement for de-listing sites to allow methods other than those prescribed in the definition of "public notice." The definition is specified in statute (RCW [70.105D.020\(30\)](#)), and does not apply to de-listing sites (RCW [70.105D.030\(2\)\(a\)](#)). The definition is out of date and requires the use of methods, such as publication in newspapers, that may no longer be the most effective means of informing the public.

³³ Updated record requirement to specify that Ecology must maintain a "no further action sites list" to reflect current practice. Ecology currently maintains and reports such a list on its website at: <https://apps.ecology.wa.gov/tcpwebreporting/reports/cleanup/nfa>.

³⁴ Clarified that the no further action sites list must include sites where Ecology made a no further action determination based on an initial investigation.

³⁵ Ecology is considering whether and how to update the Site Register and how it is published. See WAC [173-340-600\(7\)](#) of the current rule.

³⁶ Added requirement that Ecology must make available to the public on its website any changes to the contaminated sites list or the remedial action status of any site on that list.

Current Rule

WAC 173-340-200 Definitions [excerpts]

- **“Hazardous waste site”** means any facility where there has been confirmation of a release or threatened release of a hazardous substance that requires remedial action.
- **“Hazardous sites list”** means a list of hazardous waste sites maintained under WAC 173-340-330.
- **“Initial investigation”** means a remedial action that consists of an investigation performed under WAC 173-340-310.
- **“Site hazard assessment”** means a remedial action that consists of an investigation performed under WAC 173-340-320.

WAC 173-340-310 Initial investigation.

- (1) Purpose.** An initial investigation is an inspection of a suspected site by the department and documentation of conditions observed during that site inspection. The purpose of the initial investigation is to determine whether a release or threatened release of a hazardous substance may have occurred that warrants further action under this chapter.
- (2) Applicability and timing.** Whenever the department receives information and has a reasonable basis to believe that there may be a release or a threatened release of a hazardous substance that may pose a threat to human health or the environment, the department shall conduct an initial investigation within ninety days.
- (3) Exemptions.** The department shall not be required to conduct an initial investigation when:

 - (a)** The circumstances associated with the release or threatened release are known to the department and have previously been or currently are being evaluated by the department or other government agency;
 - (b)** The release is permitted; or
 - (c)** The release is exempt from reporting under WAC [173-340-300](#)(3).
- (4) Department deferral to others.** The department may rely on another government agency or a contractor to the department to conduct an initial investigation on its behalf, provided the department determines such an agency or contractor is not suspected to have contributed to the release or threatened release of a hazardous substance and that no conflict of interest exists.
- (5) Department decision.** Based on the information obtained about the site, the department shall within thirty days of completion of the initial investigation make one or more of the following decisions:

 - (a)** A site hazard assessment is required;
 - (b)** Emergency remedial action is required;
 - (c)** Interim action is required; or
 - (d)** The site requires no further action under this chapter at this time because either:

 - (i)** There has been no release or threatened release of a hazardous substance; or
 - (ii)** A release or threatened release of a hazardous substance has occurred, but in the department's judgment, does not pose a threat to human health or the environment; or
 - (iii)** Action under another authority is appropriate.

A decision for a particular follow-up action does not preclude the department from requiring some other action in the future based on reevaluation of the site or additional information.

- (6) Notification.**

- (a) Sites requiring an emergency remedial action or interim action. If the department determines that an emergency remedial action or interim action is required, then notification of the threat to the potentially affected vicinity may be required by the department. The method and nature of the notification shall be determined on a case-by-case basis using the methods specified in WAC [173-340-600](#). Such notification shall be the responsibility of the site owner or operator if required in writing by the department.
 - (b) Sites requiring further remedial action. For sites requiring further remedial action under chapter [70.105D](#) RCW, the department shall notify the owner, operator, and any potentially liable person known to the department of its decision. This notification shall be a letter ("Early Notice Letter") mailed to the person which includes:
 - (i) The basis for the department's decision;
 - (ii) Information on the cleanup process provided for in this chapter;
 - (iii) A statement that it is the department's policy to work cooperatively with persons to accomplish prompt and effective cleanups;
 - (iv) A person or office of the department to contact regarding the contents of the letter; and
 - (v) A statement that the letter is not a determination of liability and that cooperating with the department in planning or conducting a remedial action is not an admission of guilt or liability.
 - (c) Sites not requiring further remedial action. For sites requiring no further remedial action under chapter [70.105D](#) RCW, if requested by the owner or operator, the department shall notify the owner or operator of the department's conclusion. This notification shall be in writing and may be combined with the determination of status letter in WAC [173-340-500](#).
- (7) **Reservation of rights.** Nothing in this section shall preclude the department from taking or requiring appropriate remedial action at any time.

WAC 173-340-320 Site hazard assessment.

- (1) Purpose.** The purpose of the site hazard assessment is to provide sufficient sampling data and other information for the department to:

 - (a)** Confirm or rule out that a release or threatened release of a hazardous substance has occurred;
 - (b)** Identify the hazardous substance and provide some information regarding the extent and concentration of the substance;
 - (c)** Identify site characteristics that could result in the hazardous substance entering and moving through the environment;
 - (d)** Evaluate the potential for the threat to human health and the environment; and
 - (e)** Determine the hazard ranking of the site under WAC [173-340-330](#), if appropriate.
- (2) Timing.** Generally, a site hazard assessment shall be completed before proceeding to any subsequent phase of remedial action, other than an emergency or interim action.
- (3) Administrative options.** The site hazard assessment may be conducted under any of the procedures described in WAC [173-340-510](#). The department may rely on another government agency or a contractor to the department to conduct a site hazard assessment on its behalf, provided the department determines such an agency or contractor is not suspected to have contributed to the release or threatened release of a hazardous substance and that no conflict of interest exists.
- (4) Scope and content.** A site hazard assessment is an early study to provide preliminary data regarding the relative potential hazard of the site. A site hazard assessment is not intended to be a detailed site characterization; however, it shall include sufficient sampling, site observations, maps, and other information needed to meet the purposes specified in subsection (1) of this section. To fulfill this requirement, a site hazard assessment shall include, as appropriate, the following information:

 - (a)** Identification of hazardous substances, including what was released and is threatened to be released and/or, if known, what products of decomposition, recombination, or chemical reaction are currently present on site, and an estimate of their quantities and concentrations;
 - (b)** Evidence confirming a release or threatened release of hazardous substances to the environment;
 - (c)** Description of facilities containing releases, if any, and their condition;
 - (d)** Identification of the location of all areas where a hazardous substance is known or suspected to be, indicated on a site map;
 - (e)** Consideration of surface water run-on and runoff and the hazardous substances leaching potential;

- (f) Preliminary characterization of the subsurface and groundwater actually or potentially affected by the release, including vertical depth to groundwater and distance to nearby wells, bodies of surface water, and drinking water intakes;
 - (g) Preliminary evaluation of receptors, including: Human population, food crops, recreation areas, parks, sensitive environments, irrigated areas, and aquatic resources currently or potentially affected by groundwater, air, or surface water containing the release of hazardous substances at the site, including distances to these receptors; and
 - (h) Any other physical factors which may be significant in estimating the potential or current exposure to sensitive biota.
- (5) **Guidance.** The department shall make available guidance for how to conduct a site hazard assessment to meet the requirements of this section. Persons are encouraged to contact the department to obtain a copy of the latest guidance.
- (6) **Department decision.** Based on the results of the site hazard assessment and other available information about the site, the department shall either determine the site warrants no further action using the criteria in WAC [173-340-310](#) (5)(d) or proceed with ranking and placing the site on the hazardous sites list under WAC [173-340-330](#).
- (7) **Notification.** The department shall make available the results of the site hazard assessment to the site's owner and operator and any person who has received a potentially liable person status letter under WAC [173-340-500](#) regarding the site. If the department finds after a site hazard assessment that the site requires no further action, it shall publish this decision in the *Site Register*.

WAC 173-340-330 Hazard ranking and the hazardous sites list.

- (1) Purpose.** The department shall maintain a list of sites where remedial action has been determined by the department to be necessary. This list, called the hazardous sites list, shall fulfill the department's responsibilities under RCW [70.105D.030](#)(2)(b) and (3). From this list, the department shall select those sites where action is anticipated and include those in the biennial program report under WAC [173-340-340](#).
- (2) Hazard ranking.**

 - (a)** The department shall give a hazard ranking to sites placed on the list. The purpose of hazard ranking is to estimate, based on the information compiled during the site hazard assessment, the relative potential risk posed by the site to human health and the environment. This assessment considers air, groundwater, and surface water migration pathways, human and nonhuman exposure targets, properties of the substances present, and the interaction of these variables.
 - (b)** The department shall evaluate each site on a consistent basis using the procedure described in the "*Washington Ranking Method Scoring Manual*," publication number 90-14, dated April 1992. The sediment component of a site shall be scored using the procedures described in "*Sediment Ranking System*," publication number 97-106, dated January 1990, and "*Status Report: Technical Basis for SEDRANK Modifications*," publication number 97-107, dated June 1991. The ranking procedure and major amendments to the manual shall be reviewed by the science advisory board established under chapter [70.105D](#) RCW. Information obtained in the site hazard assessment, plus any additional data specified in these publications, shall be included in the hazard ranking evaluation.
- (3) Site Register.** The department shall periodically provide notification of the results of hazard ranking in the *Site Register*. The department shall make available hazard ranking results for each site to the site owner and operator and any potentially liable person known to the department before publication in the *Site Register*.
- (4) Reranking.** The department may at its discretion re-rank a site if, before the initiation of state action at the site, the department receives additional information within the scope of the evaluation criteria which indicates that a significant change in rank may result.
- (5) Listing.** Sites shall be ranked and placed on the hazardous sites list if, after the completion of a site hazard assessment, the department determines that further action is required at the site. The list shall be updated at least once per year. Placement of a site on the hazardous sites list does not, by itself, imply that persons associated with the site are liable under chapter [70.105D](#) RCW.
- (6) Site status.** The hazardous sites list shall reflect the current status of remedial action at each site. The department may change a site's status to reflect current conditions. The status for each site shall be identified as one of the following:

 - (a)** Sites awaiting further remedial action;

- (b) Sites with remedial action in progress;
 - (c) Sites where a cleanup action has been conducted but confirmational monitoring is underway;
 - (d) Sites with independent remedial actions; or
 - (e) Other categories established by the department.
- (7) Removing sites from the list.**
- (a) The department may remove a site from the list only after it has determined that:
 - (i) For sites where the selected cleanup action does not include containment, all remedial actions except confirmational monitoring have been completed and compliance with the cleanup standards has been achieved at the site;
 - (ii) The listing was erroneous; or
 - (iii) For sites where the selected cleanup action includes containment, if all of the following conditions have been met:
 - (A) All construction and operation of remedial actions have been adequately completed and:
 - (I) Only passive maintenance activities such as monitoring, inspections and periodic repairs remain; or
 - (II) For municipal solid waste landfills only, a closure plan meeting the substantive requirements in chapter [173-351](#) WAC has been approved by the department as part of a remedial action under this chapter and the only remaining active maintenance activities are methane gas control, the operation of leachate collection and treatment systems, and/or surface water diversion;
 - (B) Sufficient confirmational monitoring has been done to demonstrate that the remedy has effectively contained the hazardous substances of concern at the site;
 - (C) All required performance monitoring has been completed;
 - (D) Any required institutional controls are in place and have been demonstrated to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action;
 - (E) Written documentation is present in the department files that describes what hazardous substances have been left on site, where they are located, and the long term monitoring and maintenance obligations at the site;

