# Regulatory Framework for Petroleum Hydrocarbon Site Cleanup

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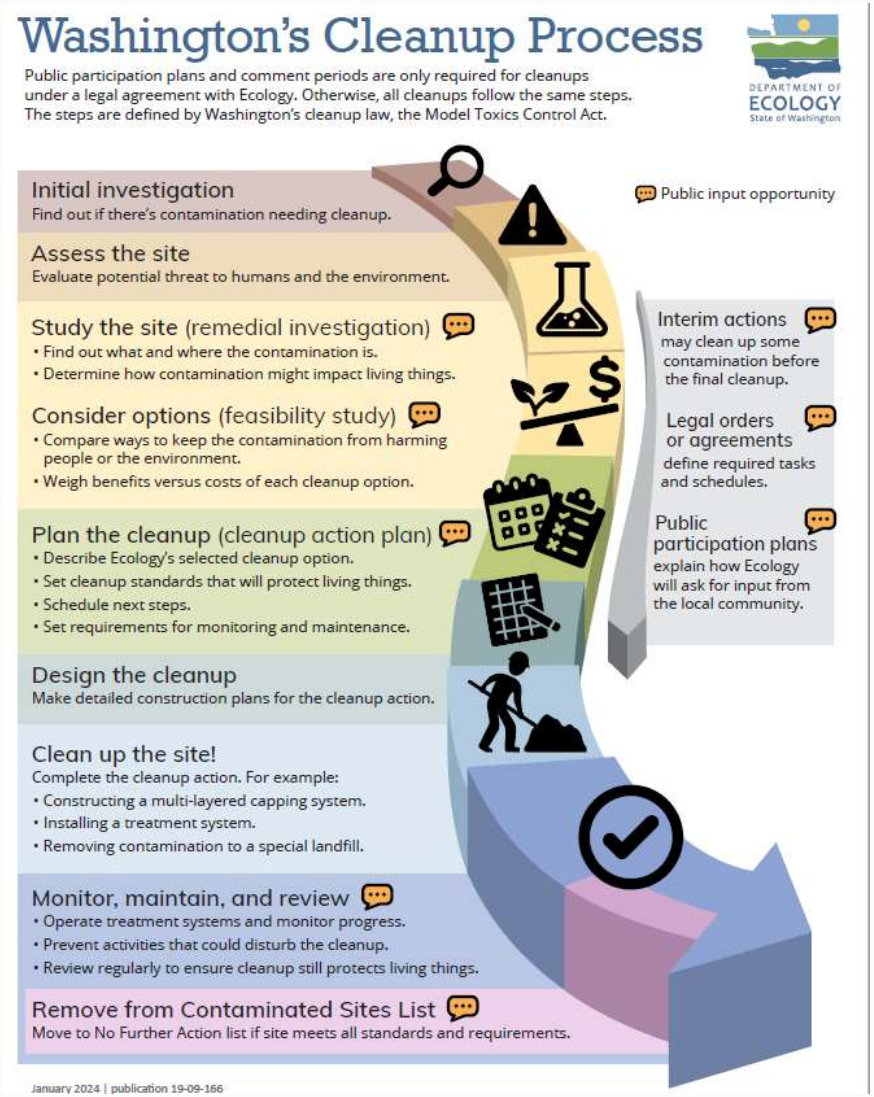
# Regulations

- Model Toxics Control Act WAC 173-340
- Underground Storage Tanks WAC 173-260A
- Underground Injection Control Program WAC 173-218


Washington's Cleanup Process
Public participation plans and comment periods are only required for cleanups under a legal agreement with Ecology. Otherwise, all cleanups follow the same steps. The steps are defined by Washington's cleanup law, the Model Toxics Control Act.
DEPARTMENT OF ECOLOGY State of Washington
Public input opportunity
Initial investigation
Find out if there's contamination needing cleanup.
Assess the site
Evaluate potential threat to humans and the environment.
Study the site (remedial investigation)
• Find out what and where the contamination is.
• Determine how contamination might impact living things.
Consider options (feasibility study)
• Compare ways to keep the contamination from harming people or the environment.
• Weigh benefits versus costs of each cleanup option.
Plan the cleanup (cleanup action plan)
• Describe Ecology's selected cleanup option.
• Set cleanup standards that will protect living things.
• Schedule next steps.
• Set requirements for monitoring and maintenance.
Design the cleanup
Make detailed construction plans for the cleanup action.
Clean up the site!
Complete the cleanup action. For example:
• Constructing a multi-layered capping system.
• Installing a treatment system.
• Removing contamination to a special landfill.
Monitor, maintain, and review
• Operate treatment systems and monitor progress.
• Prevent activities that could disturb the cleanup.
• Review regularly to ensure cleanup still protects living things.
Remove from Contaminated Sites List
Move to No Further Action list if site meets all standards and requirements.
Interim actions
may clean up some contamination before the final cleanup.
Legal orders or agreements
define required tasks and schedules.
Public participation plans
explain how Ecology will ask for input from the local community.
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# Pathways to No Further Action

- Ecology
  - Voluntary Cleanup Program (VCP)
  - Formal Process (Agreed Order, Consent Decree)
- VCP Eligibility Form
- Pollution Liability Insurance Agency (PLIA)

# Ecology Resources

- Guidance Documents
  - Remediation of Petroleum Contaminated Sites
  - Remediation of Petroleum-Contaminated Groundwater by Natural Attenuation
  - Silica Gel Cleanup
  - Soil and Groundwater Model Remedies

# Ecology Resources

- Guidance Documents
  - Empirical Demonstrations
  - Property Cleanups under the VCP
  - RI and FS Checklists
- Establishing Environmental Covenants under MTCA (TCP Procedure 440A)

# Ecology Resources

- Cleanup Levels and Risk Calculation (CLARC) Database
- What's In My Neighborhood
- Cleanup and Tank Search and Facility/Site Database
- Well Log Database
- Environmental Information Management (EIM) Database

# Keys to NFA Documentation

- Cleanup level evaluation
- Multiple lines of evidence
- Performance vs confirmation soil samples
- Groundwater time-series plots
- Statistical analysis options

# Helpful Hints

- Don’t forget the Terrestrial Ecology Evaluation (TEE)
- Keep EIM updated
- Use the NAVD88 vertical datum
- No need to send hard copies of reports for VCP sites (NWRO)

# Helpful Hints

- Non-secure PDF files are appreciated (for insertion of figures into response document PDFs)
- Check resolution of PDF figures with lots of detail
- Break PDFs into digestible files (< 100 MB)
- No 3-ring binders, please!

HI, I'M FROM THE GOVERNMENT AND I'M HERE TO HELP

# Thank you