



The **Hazard Evaluation and Emergency Response (HEER) Office** is part of the Hawai'i Department of Health's Environmental Health Administration whose mission is to protect human health and the environment. The HEER Office provides leadership, support, and partnership in preventing, planning for, responding to, and enforcing environmental laws relating to releases or threats of releases of hazardous substances.

The Process of Identifying and Managing Contaminated Media

Due to previous uses of properties for activities such as automotive repair, dry cleaners, agricultural, and other commercial or industrial activities, contamination has the potential to be present on a wide array of sites. Encountering or identifying contamination during re-development or a property transaction has the potential to cause unanticipated issues. Understanding the steps to identify and address contamination that may be present can allow you to better handle the situation.

Identifying Potential Contamination

Ideally, the potential for contamination to be present on a site is identified during a Phase I Environmental Site Assessment (ESA). The Phase I ESA relies on current and historical known and potential uses of the property and surrounding areas to determine the likelihood of potential contamination. If the potential for contamination has been identified in a Phase I ESA, then typically a Phase II ESA is conducted to investigate each area of concern. The results of the Phase II ESA can be used to aid in the planning and design of development activities conducted on the site, or to determine whether additional site characterization is needed.

Often, the scope of a Phase II ESA is insufficient to adequately identify and characterize contamination at the site, which may result in the later discovery of contamination during development activities, such as during construction or installation of geotechnical borings. This can lead to project delays and/or increased project costs not previously planned for. To better identify and characterize contamination prior to conducting any development activities, a thorough site assessment should be conducted following the guidance provided in the Hawaii Department of Health (HDOH) Hazard Evaluation and Emergency Response (HEER) Office Technical Guidance Manual (TGM).

HDOH Guidance

HDOH has prepared fact sheets outlining common workflow steps to follow when contamination is discovered at a site. These fact sheets may allow for a better understanding of the HEER Office oversight process based on Hawaii Administrative Rule 11-451, which can lead to better project planning and budgeting and fewer delays in development. Contamination is typically identified during one or more of the following activities.

- A Phase II ESA
 - See Attachment A: Common Workflow When Identifying Contamination Following a Phase II ESA or in the Design-Phase of a Project
- Geotechnical Borings
 - See Attachment A: Common Workflow When Identifying Contamination Following a Phase II ESA or in the Design-Phase of a Project
- During Construction Activities
 - See Attachment B: Common Workflow When Identifying Contamination During Construction Activities

Additional Resources

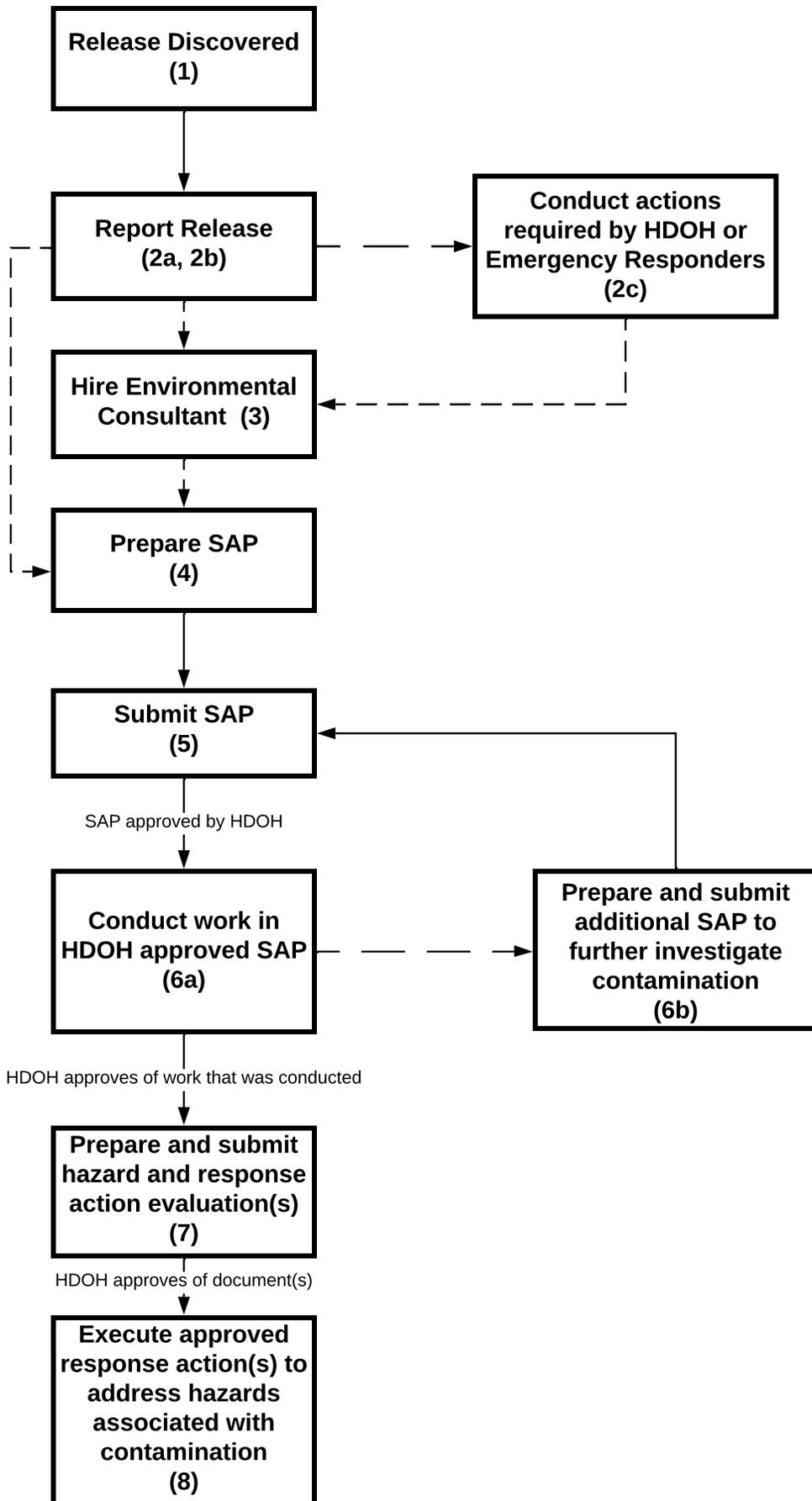
- HDOH iHEER Database Viewer - a tool that can be used to review documents submitted for release sites in Hawaii
 - <https://health.hawaii.gov/heer/siteinfo/iheer-information/>
- HDOH HEER Office website
 - <https://health.hawaii.gov/heer/>

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Attachment A: Common Workflow When Identifying Contamination Following a Phase II ESA or in the Design-Phase of a Project

1. Release (Contamination) Detected
 - a. Will typically be detected in pre-planning investigations such as geotechnical borings or limited Phase II Environmental Site Assessments conducted in accordance with the HDOH Technical Guidance Manual (TGM).
 - b. Any indication of contamination that may be hazardous to human health and the environment primarily through visual/olfactory observations or laboratory analytical results. This may include unnatural odor or staining, petroleum product, or sheen that are observed, or if laboratory results indicate analyte(s) present at a concentration above the most restrictive HDOH Environmental Action Levels (EALs).
2. Report the Release –
 - a. Contact the Hawaii State Emergency Response Commission (HSERC)/HEER Office by phone immediately or within 20 minutes of discovery of the release
 - i. Between 7:30 am and 4:30 pm – (808) 586-4249; After Hours – (808) 236-8200
 - b. You will also need to contact other appropriate agencies for your jurisdiction. More information on how to report a release is available at: <https://health.hawaii.gov/heer/how-to-report-a-release-spill/>
 - c. Conduct any actions required by the emergency responders or HDOH On-Scene Coordinators (OSCs). If immediate actions are not necessary, follow-up reporting may be required, and the case may be referred to HDOH HEER Office Site Discovery, Assessment, and Remediation (SDAR) Section for long-term oversight.
3. Hire an Environmental Consultant – To ensure that all environmental rules and regulations are complied with, HDOH strongly suggests hiring a qualified environmental professional (QEP) with direct relevant local experience, if one has not already been hired. HDOH is unable to provide references for a QEP; however, guidance for identifying an appropriate QEP can be found in the HEER Office *Choosing an Environmental Consultant* guidance. <https://health.hawaii.gov/heer/environmental-health/fact-sheets/#forproperty>
4. If referred to SDAR, prepare a thorough Sampling and Analysis Plan (SAP) (Phase II Environmental Site Assessment) to assess the nature and extent of the contamination. Discussion with SDAR Remedial Project Manager (RPM) about proposed scoping is recommended.
5. Submit the SAP to the SDAR RPM for review/comment **prior** to commencing work.
6.
 - a. Once approved, conduct the work outlined in the SAP. Prepare a report summarizing the work conducted and results. Submit to SDAR for review comment.
 - b. If it is determined that additional investigation into the nature and extent of contamination is needed, then a supplemental SAP should be prepared and submitted to HDOH. Proceed to Step 7 when supplemental SAP work is completed and approved.
7. Once HDOH determines that investigation into the nature and extent of contamination is sufficient (the extent of contamination has been delineated and all contaminants identified), then potential hazards posed by the contamination should be evaluated, as well as appropriate response actions to mitigate the identified potential hazards. After the degree of risk (hazard) to human health and the environment has been determined (e.g., via an Environmental Hazard Evaluation [EHE]) and response actions (typically referred to as remedial alternatives) have been evaluated and presented to HDOH, the appropriate response action must be approved by HDOH in accordance with Hawaii Administrative Rules 11-451-12, -13, and -15. The scope of the hazard and response action evaluation is dependent upon the magnitude and severity of the contamination and hazard(s) posed.
8. Once HDOH has reviewed and provided approval of the evaluation(s) of the potential hazards and appropriate response actions, the selected response action(s) should be completed to mitigate the potential hazards associated with the contamination prior to the start of, or potentially concurrently with construction as agreed to by HDOH.





Attachment B: Common Workflow When Discovering Contamination During Construction Activities

1. Release (Contamination) Detected – **STOP WORK IMMEDIATELY!** (unless the project already has a HDOH-approved Construction Environmental Hazard Management Plan)
 - a. Any indication of contamination that may be hazardous to human health and the environment primarily through visual/olfactory observations or laboratory analytical results. This may include unnatural odor or staining, petroleum product, or sheen that are observed, or if laboratory results indicate analyte(s) present at a concentration above the most restrictive HDOH Environmental Action Levels (EALs) in any environmental sample collected. When in doubt, report!
2. Report the Release –
 - a. Contact the Hawaii State Emergency Response Commission (HSERC)/HEER Office by phone immediately or within 20 minutes of discovering the release.
 - i. Between 7:30 am and 4:30 pm – (808) 586-4249; After Hours – (808) 236-8200
 - b. You will also need to contact other appropriate agencies for your jurisdiction. More information on how to report a release is available at: <https://health.hawaii.gov/heer/how-to-report-a-release-spill/>
3. a. Hire an Environmental Consultant – To ensure that all environmental rules and regulations are complied with, HDOH strongly suggests that hiring a qualified environmental professional (QEP) with direct relevant local experience. HDOH is unable to provide references for a QEP; however, guidance for identifying an appropriate QEP can be found in the HEER Office *Choosing and Environmental Consultant* guidance. <https://health.hawaii.gov/heer/environmental-health/fact-sheets/#forproperty>
 - b. Determine whether the release is an immediate threat to human health/environment – The HDOH On-Scene Coordinators (OSCs) or other emergency responders will determine whether immediate actions are necessary to address the release.
4. a. If immediate actions are not necessary – The case may be referred to the HDOH HEER Office Site Discovery, Assessment, and Remediation (SDAR) Section Remedial Project Manager (RPM) for long-term oversight.
 - b. If immediate actions are necessary – Conduct the actions as directed by the HDOH OSCs or any on-scene emergency responders. The case may then be referred to SDAR RPM.
5. For releases turned over to SDAR, determine whether the release requires investigation prior to continuing with construction activities to ensure protection of construction workers and the general public – The HDOH RPM will determine whether additional investigation is necessary prior to the re-start of construction activities.
6. a. If the release requires investigation prior to re-start of construction – Please see steps 4 through 7 of Attachment A, Common Workflow When Identifying Contamination in the Design-Phase of a Project.
 - b. If the release does not require investigation prior to re-start of construction – The RPM may require the preparation of a Construction Environmental Hazard Management Plan (C-EHMP). Alternatively, the RPM may permit the environmental investigation to be conducted concurrently with construction activities or following the completion of construction.
7. Re-Start Construction Activities – Following approval of the HDOH RPM, construction activities may restart.

