



# 2019 Construction Stormwater Training

## November 19, 2018

7:15 am to 11:30 am  
 Airport Conference Center Rooms 1-3



### State of Hawaii Department of Transportation – Airports Division

Event	Time	Session Topic	Speaker
Registration	7:15 – 8:00 am	Registration, Light Refreshments and Coffee	
Opening Remarks	8:00 – 8:30 am	DOTA Welcome and Opening Remarks	<b>Guy Ichinotsubo</b> Engineering Program Manager (DOT-AIR E)  <b>Stacy Paquette</b> Environmental Program Manager (DOT-AIR EE)
Session 1	8:30 – 9:00 am	DOTA’s new Environmental Hazard Evaluation – Environmental Hazard Management Plan (EHE-EHMP) and Contaminated Media Forms	<b>Stephanie Davis</b> Project Manager (Environmental Science International)
Session 2	9:00 – 9:30 am	Specification and Design Review Updates	<b>Brian Lum</b> Project Engineer (EnviroServices & Training Center, LLC)
Break	9:30 – 9:40 am		
Session 3	9:40 – 10:10 am	Department of Health’s Perspective on Contaminated Media Management	<b>Lauren Cruz</b> (Department of Health, Hazard Evaluation and Emergency Response Office)
Break	10:10 – 10:30 am		
Session 4	10:30 – 11:30 am	Asbestos Management Program	<b>Traci Sylva</b> Project Manager (Environmental Science International)  <b>Natasha Griswold</b> Environmental Scientist (Environmental Science International)

Presentation  
Of

DOTA New Environmental Hazard Evaluation –  
Environmental Hazard Management Plan (EHE-EHMP)  
and Contaminated Media Forms

By  
Stephanie Davis  
Environmental Science International, Inc.

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# AIRPORT EHE/EHMP & CONTAMINATED MEDIA REVIEW PROCESS TRAINING

15 AIRPORTS OPERATED BY HDOT-AIR



# INTRODUCTION

- Contaminated media (soil, groundwater, soil vapor, and free product) may be encountered during subsurface work associated with construction/maintenance projects.
- This training provides guidance for State of Hawaii, Department of Transportation, Airports Division [HDOT-AIR] Engineers, Designers, and Construction Managers during the design phase of a construction project, and during construction activities.
- Construction activities may include:
  - demolition/removal of existing structures, pavement, and infrastructure;
  - construction of new facilities;
  - subsurface work to relocate or install utilities, box culverts and storm drain laterals, sanitary sewers, street lights, traffic lights, grease traps, and septic tanks; and
  - grading, paving, and landscaping.

# INTRODUCTION

- Objective of this training:
  - ❖ Identify contamination that may be encountered during work activities
  - ❖ Control contaminant migration and dispersion
  - ❖ Prevent worker contact with contaminated media encountered during construction
- Two components of this training:
  - ❖ Programmatic Environmental Hazard Evaluation and Environmental Hazard Management Plan [EHE/EHMP]
  - ❖ Pre-Construction Environmental Screening



- Environmental Science International, Inc. [ESI] has been contracted to assist HDOT-AIR in reviewing construction projects for the potential to encounter contaminated media and in implementing the Programmatic EHMP.
- During this contract period, ESI will act as HDOT-AIR's Environmental Consultant, and can be contacted for questions.
  - Phone: (808) 261-0740
  - Email: [Environmental@esciencei.com](mailto:Environmental@esciencei.com)

# BACKGROUND

- In the past when contaminated media was discovered during construction activities, work was halted, the release was reported to the Department of Health [DOH] Hazard Evaluation and Emergency Response [HEER] Office, and the contractor had to wait for an inspection by a State On-Scene Coordinator.
- In some cases, a Site-Specific EHMP had to be prepared before work could continue, causing delays.
- The Programmatic EHE/EHMP was developed in cooperation with the DOH HEER Office to provide a general plan for managing contamination so that work may continue efficiently.
- Benefits:
  - ❖ Unlikely that work has to stop, thus saving time and money.
  - ❖ Site-Specific EHMPs not required for every small project.

# INTRODUCTION TO EHE/EHMP

## **Programmatic Environmental Hazard Evaluation and Environmental Hazard Management Plan**

**State of Hawaii  
Department of Transportation**

**AIRPORTS DIVISION**

Prepared for:

State of Hawaii Department of Transportation, Airports Division  
Engineering Environmental (AIR-EE)  
300 Rodgers Boulevard, Suite 700  
Honolulu, Hawaii 96819

- The HDOT-AIR operates under a Programmatic EHE/EHMP, in addition to several Site-Specific EHMPs.
- Site-Specific EHMPs are developed after completion of site characterization and contamination has been identified.
- The Programmatic EHMP is intended for locations that do not have an existing Site-Specific EHMP.

# PURPOSE OF PROGRAMMATIC EHE/EHMP

## Oahu District

- Daniel K. Inouye International Airport (HNL)
- Kawaihapai Airfield (HDH)
- Kalaeloa Airport (JRF)

## Maui District

- Kahului Airport (OGG)
- Kapalua Airport (JHM)
- Lanai Airport (LNY)
- Molokai Airport (MKK)
- Hana Airport (HNM)
- Kalaupapa Airport (LUP)

## Kauai District

- Lihue Airport (LIH)
- Port Allen Airport (PAK)

## Hawaii District

- Hilo International Airport (ITO)
- Ellison Onizuka Kona International Airport (KOA)
- Waimea-Kohala Airport (MUE)
- Upolu Airport (UPP)

- For use by contractors performing construction activities within any of the 15 airports owned by the State of Hawaii and operated by HDOT.
- EHE evaluates existing data and identifies associated human health and environmental hazards.
- EHMP provides guidance on the proper management of contaminated media that may be encountered during construction activities associated with smaller construction/maintenance projects at the Airports.

# HOW TO USE THE PROGRAMMATIC EHE/EHMP

- Intent of the document is to provide guidance when subsurface excavations encounter contaminated soil, groundwater, or soil vapor at locations within the Airports for which Site-Specific EHMPs have not been established.
- The EHMP provides a range of options for dealing with contaminated media.
- Prior to starting subsurface construction within the Airports:
  1. Read the EHE to become familiar with the potential hazards associated with contaminated soil, groundwater, and soil vapor.
  2. Develop a site-specific Health and Safety Plan [HASP].
- During subsurface construction work, if contaminated media or inactive pipelines or underground storage tanks [USTs] are encountered, follow the steps outlined in the EHMP to ensure proper handling of contaminated media

# MAIN ELEMENTS OF THE PROGRAMMATIC EHE/EHMP

1. Area Covered by Programmatic EHE/EHMP: Maps and Brief History of Airports
2. EHE: Contaminants of Concern [COCs] and Sources, Receptors, and Exposure Pathways
3. Release Response / Release Reporting Procedures
4. Management Plans for the specific potential source of COCs:

- Pipelines/USTs
- Soil
- Groundwater
- Free Product
- Vapor
- Stormwater



- Includes *Guidelines for Tenants, Utilities Companies, and Construction Contractors* that provides graphic and photographic examples of how to deal with contaminated soil and groundwater.
- Includes plan templates for preparing site-specific plans.

# DESIGN PHASE PROJECT SCREENING

## Pre-Construction Environmental Screening

- During design phase of construction project, HDOT-AIR Environmental Section will conduct environmental screening to identify known or suspected contaminated sites in the work area.
- ESI has been contracted to assist HDOT-AIR in reviewing construction projects for the potential to encounter contaminated soil and groundwater.
- ESI can be contacted for any questions.
  - Phone: (808) 261-0740
  - Email: [Environmental@esciencei.com](mailto:Environmental@esciencei.com)



# DESIGN PHASE PROJECT SCREENING

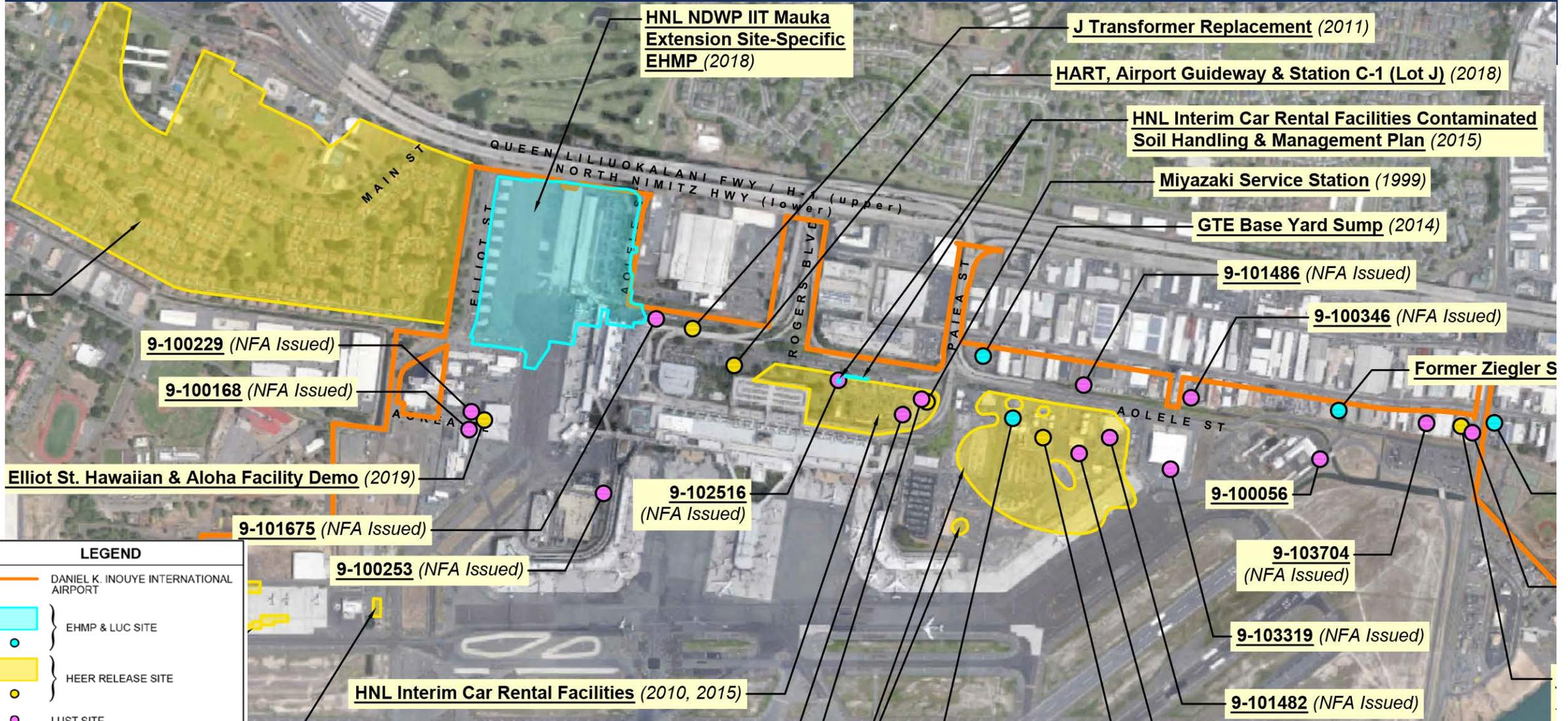
## Pre-Construction Environmental Screening (cont'd)

- Environmental database (for areas of known, suspected, or historical contamination) is being developed by ESI and HDOT-AIR.
- Screening process will determine if there is an existing Site-Specific EHMP or if the Programmatic EHMP should be implemented.
- **Construction bid specification will indicate whether the Programmatic EHMP or a Site-Specific EHMP is needed.**

# ENVIRONMENTAL DATABASE



# ENVIRONMENTAL DATABASE



# CONTAMINATED MEDIA REVIEW FORM

## State of Hawaii Department of Transportation – Airports Division Contaminated Soil and Groundwater Review Form

### Instructions:

1. Requestor (e.g., Designer) will complete Section 1 of the Contaminated Soil and Groundwater Review Form and submit to DOTA Environmental Section (AIR-EE). AIR-EE will then forward to Environmental Consultant at [Environmental@esciencei.com](mailto:Environmental@esciencei.com).
2. Environmental Consultant will review the HDOT-AIR Environmental Database and complete Section 2 of the Contaminated Soil and Groundwater Review Form and provide information back to DOTA Environmental Section and the Requestor.

*If you have any questions, contact the Environmental Consultant by email:  
[Environmental@esciencei.com](mailto:Environmental@esciencei.com), or Phone: (808) 261-0740 and request HDOT-AIR  
Environmental Consultant.*

### **SECTION 1. To Be Completed By Requestor**

Requestor: \_\_\_\_\_ Date: \_\_\_\_\_

Project Engineer: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Department: \_\_\_\_\_

Title: \_\_\_\_\_

Project No: \_\_\_\_\_

Project Name: \_\_\_\_\_

Brief Description of Project and Location (provide coordinates, address, or attach site plans):

Describe location  
& scope of project



# ROLES AND RESPONSIBILITIES

## DESIGNER

Provide project description & location on *Contaminated Soil and Groundwater Review Form* & submit to HDOT-AIR Environmental Section.

## HDOT-AIR ENVIRONMENTAL SECTION

Forward *Contaminated Soil and Groundwater Review Form* to Environmental Consultant (ESI). Inform ESI of new contaminated sites so that database can be updated.

## ENVIRONMENTAL CONSULTANT

Review environmental database to determine if project may encounter contamination, then complete and return *Contaminated Soil and Groundwater Review Form* to HDOT-AIR Environmental Section & Designer. Maintain & update environmental database as new information becomes available.





QUESTIONS?

Presentation  
Of

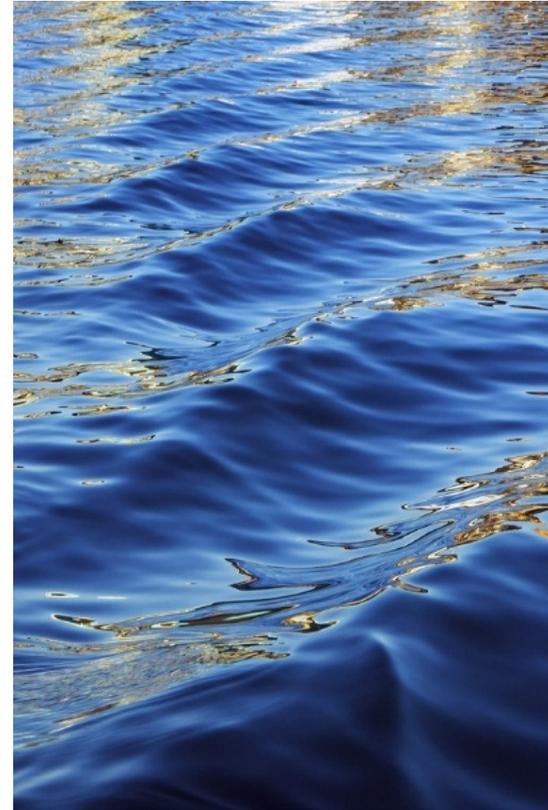
# Specifications and Design Review Updates

By  
Brian Lum  
EnviroServices & Training Center, LLC.

# Construction Stormwater Training

Department of  
Transportation,  
Airports Division

November 2019



# UPDATES TO CONSTRUCTION PLAN DESIGN AND REVIEW



**State of Hawaii**  
**Department of Transportation – Airports Division**  
**Standard Operating Procedures**

**Stormwater Requirements for Construction Plan Design and Review**  
**For Designers**

[https://hidot.hawaii.gov/airports/files/2019/09/EE\\_19.0117\\_CONSTRUCTION\\_PLAN\\_DESIGN\\_REVIEW\\_SOP\\_FOR\\_DESIGNERS\\_AND\\_TENANTS.pdf](https://hidot.hawaii.gov/airports/files/2019/09/EE_19.0117_CONSTRUCTION_PLAN_DESIGN_REVIEW_SOP_FOR_DESIGNERS_AND_TENANTS.pdf)

**Construction Project Review Package  
For  
PROJECTS LESS THAN ONE ACRE**

**Construction Project Review Package  
For  
PROJECTS LESS THAN ONE ACRE**

Project No. & Title:	
Designer/Tenant:	
Designer/Tenant Email:	
DOTA Project Manager:	
Date:	

This checklist is to be completed by the Project Designer or Tenant and submitted to the DOTA Project Manager with the items indicated on the list, below.

A full description of each item may be found on DOTA's Construction Site Runoff Control Program Webpage (<http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-program/>) in the Standard Operating Procedures for Construction Plan Design and Review document.

Item	SUBMITTED?			Comments (Is this a revision?)
	YES	NO	N/A	
1. Notification Form for Sites Disturbing Less Than One Acre.	<input type="checkbox"/>	<input type="checkbox"/>		
2. DOTA Contaminated Soil & Groundwater Review Form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Construction Plans and Specifications	<input type="checkbox"/>	<input type="checkbox"/>		
4. National Pollutant Discharge Elimination System (NPDES) Notice of Intent (NOI), NPDES permit application, or other permit applications under HAR 11-55.				
a. Appendix F, Discharges of Hydro-Testing Waters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Appendix G, Discharges Associated with Construction Activity Dewatering.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Other Permits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Stormwater Pollution Prevention Plan (SWPPP) or Site-Specific Best Management Practices Plan (SSBMP Plan)	<input type="checkbox"/>	<input type="checkbox"/>		

Item	SUBMITTED			Comments (Is this a revision?)
	YES	NO	N/A	
6. DOTA Permit to Discharge into the State Airport Drainage System Relating to Construction Projects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Underground injection control (UIC) permit application(s), if applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Anticipated Schedule	<input type="checkbox"/>	<input type="checkbox"/>		
9. Other Information and Documents	<input type="checkbox"/>	<input type="checkbox"/>		

ADDITIONAL NOTES:

**Construction Project Review Package  
For  
PROJECTS EQUAL TO OR GREATER THAN ONE ACRE**

Project No. & Title:	
Designer/Tenant:	
Designer/Tenant Email:	
DOTA Project Manager:	
Date:	

This checklist is to be completed by the Project Designer or Tenant and submitted to the DOTA Project Manager with the items indicated on the list, below.

A full description of each item may be found on DOTA's Construction Site Runoff Control Program Webpage (<http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-program/>) in the Standard Operating Procedures for Construction Plan Design and Review document.

Item	SUBMITTED?			Comments (Is this a revision?)
	YES	NO	N/A	
1. Design Review Checklist Form	<input type="checkbox"/>	<input type="checkbox"/>		
2. DOTA Contaminated Soil & Groundwater Review Form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Construction Plans and Specifications	<input type="checkbox"/>	<input type="checkbox"/>		
4. National Pollutant Discharge Elimination System (NPDES) Notice of Intent (NOI), NPDES permit application, or other permit applications under HAR 11-55.				
a. Appendix C, Discharges of Stormwater Associated with Construction Activities.	<input type="checkbox"/>	<input type="checkbox"/>		
b. Appendix F, Discharges of Hydro-Testing Waters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Appendix G, Discharges Associated with Construction Activity Dewatering.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Other Permits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Stormwater Pollution Prevention Plan (SWPPP) or Site-Specific Best Management Practices Plan (SSBMP Plan).	<input type="checkbox"/>	<input type="checkbox"/>		

**Construction Project Review Package  
For  
PROJECTS EQUAL TO OR GREATER THAN ONE ACRE**

Item	SUBMITTED			Comments (Is this a revision?)
	YES	NO	N/A	
6. DOTA Permit to Discharge into the State Airport Drainage System Relating to Construction Projects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Underground injection control (UIC) permit application(s), if applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Anticipated Schedule	<input type="checkbox"/>	<input type="checkbox"/>		
9. Other Information and Documents	<input type="checkbox"/>	<input type="checkbox"/>		

ADDITIONAL NOTES:

Item	SUBMITTED?		
	YES	NO	N/A
6. DOTA <i>Permit to Discharge into the State Airport Drainage System Relating to Construction Projects.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Underground injection control (UIC) permit application(s), if applicable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Anticipated Schedule	<input type="checkbox"/>	<input type="checkbox"/>	
9. Other Information and Documents	<input type="checkbox"/>	<input type="checkbox"/>	
Waters.			
c. Appendix G, Discharges Associated with Construction Activity Dewatering.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other Permits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Stormwater Pollution Prevention Plan (SWPPP) or Site-Specific Best Management Practices Plan (SSBMP Plan).	<input type="checkbox"/>	<input type="checkbox"/>	

Item	SUBMITTED			Comments (Is this a revision?)
	YES	NO	N/A	
6. DOTA Permit to Discharge into the State Airport Drainage System Relating to Construction Projects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Underground injection control (UIC) permit application(s), if applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Anticipated Schedule	<input type="checkbox"/>	<input type="checkbox"/>		
9. Other Information and Documents	<input type="checkbox"/>	<input type="checkbox"/>		
System (NPDES) Notice of Intent (NOI), NPDES permit application, or other permit applications under HAR 11-55.				
a. Appendix F, Discharges of Hydro-Testing Waters.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Appendix G, Discharges Associated with Construction Activity Dewatering.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Other Permits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Stormwater Pollution Prevention Plan (SWPPP) or Site-Specific Best Management Practices Plan (SSBMP Plan)	<input type="checkbox"/>	<input type="checkbox"/>		



## DESIGN REVIEW CHECKLIST



### Instructions:

- In accordance with DOTA's Construction Site Runoff Control Program, the Designer or Authorized Representative shall submit this Design Review Checklist with each design submittal phase.
- Please ensure to attach all pertinent documents associated with the Construction BMPs as well as Permanent / Post-Construction BMPs.
- AIR-EE will provide comments on the project submittals using a Review Comments spreadsheet. All review comments from AIR-EE have to be addressed to their satisfaction and closed prior to obtaining an approval from AIR-EE. AIR-EE approval is required to start construction activities.

### Checklist:

Project Name: \_\_\_\_\_ Date: \_\_\_\_\_

State Project # (if applicable): \_\_\_\_\_ Airport: \_\_\_\_\_

Designer Name: \_\_\_\_\_ Firm: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Contractor Name (if known): \_\_\_\_\_ Firm: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Site Location: \_\_\_\_\_

Project Description: \_\_\_\_\_

Does the project have additional phases planned? \_\_\_\_\_

Project Size: \_\_\_\_\_ acres

Total Land Disturbance Size (clearing, grubbing, grading, excavation and construction support activities including separate staging, equipment storage, and stockpile areas (as defined in HAR-11-55, App C):

\_\_\_\_\_ acres

Design Submittal (check one):

60% Submittal     90% Submittal     100% Submittal     Other

### DOCUMENTS SUBMITTED (CHECK ALL SUBMITTED)

- |  |   |
|--|---|
| <input type="checkbox"/> Project Plan and Specifications | <input type="checkbox"/> NPDES NOI Form G (Dewatering)      |
| <input type="checkbox"/> Project Schedule                | <input type="checkbox"/> DOTA Construction Discharge Permit |
| <input type="checkbox"/> BMP Plan                        | <input type="checkbox"/> PBMP Plans/Product Sheets          |
| <input type="checkbox"/> SWPPP                           | <input type="checkbox"/> PBMP O&M Cost Analysis             |
| <input type="checkbox"/> NPDES NOI Form C (Construction) | <input type="checkbox"/> PBMP O&M Plan                      |
| <input type="checkbox"/> NPDES NOI Form F (Hydrotesting) | <input type="checkbox"/> PBMP O&M Agreement                 |



**Notification Form for Sites Disturbing Less Than One Acre  
(Not Part of a Larger Common Plan of Development)**

PROJECT DESCRIPTION			
Date:			
Airport District:			
Project/Site Name:			
Projected Start Date (MM/DD/YYYY):		Projected Completion Date (MM/DD/YYYY):	
Describe the project:			
Yes	No	Does the project include the installation of any of the following?	
<input type="checkbox"/>	<input type="checkbox"/>	Steep slopes (i.e. grade of 20% or more).	
<input type="checkbox"/>	<input type="checkbox"/>	Parking lot or building adding 10,000 square feet or more of impervious area within 50' of surface water.	
<input type="checkbox"/>	<input type="checkbox"/>	Uncontained aircraft, vehicle, or equipment washing area.	
<input type="checkbox"/>	<input type="checkbox"/>	Fueling or petroleum storage area that exceeds requirement for SPCC (i.e. 1,320 gal for above-ground tank(s)).	
<input type="checkbox"/>	<input type="checkbox"/>	Modifying, replacing, or installing new MS4 drainage structures.	
If yes to any of the above, describe the permanent BMP to be implemented or provide explanation for exemption.			

PROJECT INFORMATION	
<b>TENANT OWNER / DOTA PROJECT MANAGER</b>	
Name:	
Project Point of Contact:	
Mailing Address:	
Phone:	
Email Address:	
<b>ENGINEERING / DESIGN COMPANY</b>	
Name:	
Point of Contact:	
Mailing Address:	
Phone:	
Email Address:	
<b>CONTRACTOR (if available at time of the Design Review)</b>	
Name:	
Point of Contact:	
Mailing Address:	
Phone:	
Email Address:	



Request No.: \_\_\_\_\_

**State of Hawaii Department of Transportation – Airports Division  
Contaminated Soil and Groundwater Review Form**

Instructions:

1. Requestor (e.g., HDOT-AIR Project Engineer) will complete Section 1 of the Contaminated Soil and Groundwater Review Form and submit to Airports Division Environmental section (AIR-EE).
2. AIR-EE will forward request to Consultant at [Environmental@esciencei.com](mailto:Environmental@esciencei.com).
3. Environmental Consultant will review the HDOT-AIR Environmental Database and complete Section 2 of the Contaminated Soil and Groundwater Review Form.

*If you have any questions, contact the Environmental Consultant by email: [Environmental@esciencei.com](mailto:Environmental@esciencei.com), or Phone: (808) 261-0740 and request HDOT-AIR Environmental Consultant.*

**SECTION 1. To Be Completed By Requestor**

Requestor: \_\_\_\_\_ Date: \_\_\_\_\_

Project Engineer: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Department: \_\_\_\_\_

Title: \_\_\_\_\_

Project No: \_\_\_\_\_

Project Name: \_\_\_\_\_

Brief Description of Project and Location (provide coordinates, address, or attach site plans):

**SECTION 2. To Be Completed By Environmental Consultant**

ESI Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_

Contaminated Soil or Groundwater Documented in Project Area (Yes/No): \_\_\_\_\_

Comments:

Attached Documents:

**PERMIT TO DISCHARGE INTO THE STATE AIRPORT DRAINAGE SYSTEM RELATING TO  
CONSTRUCTION PROJECTS**

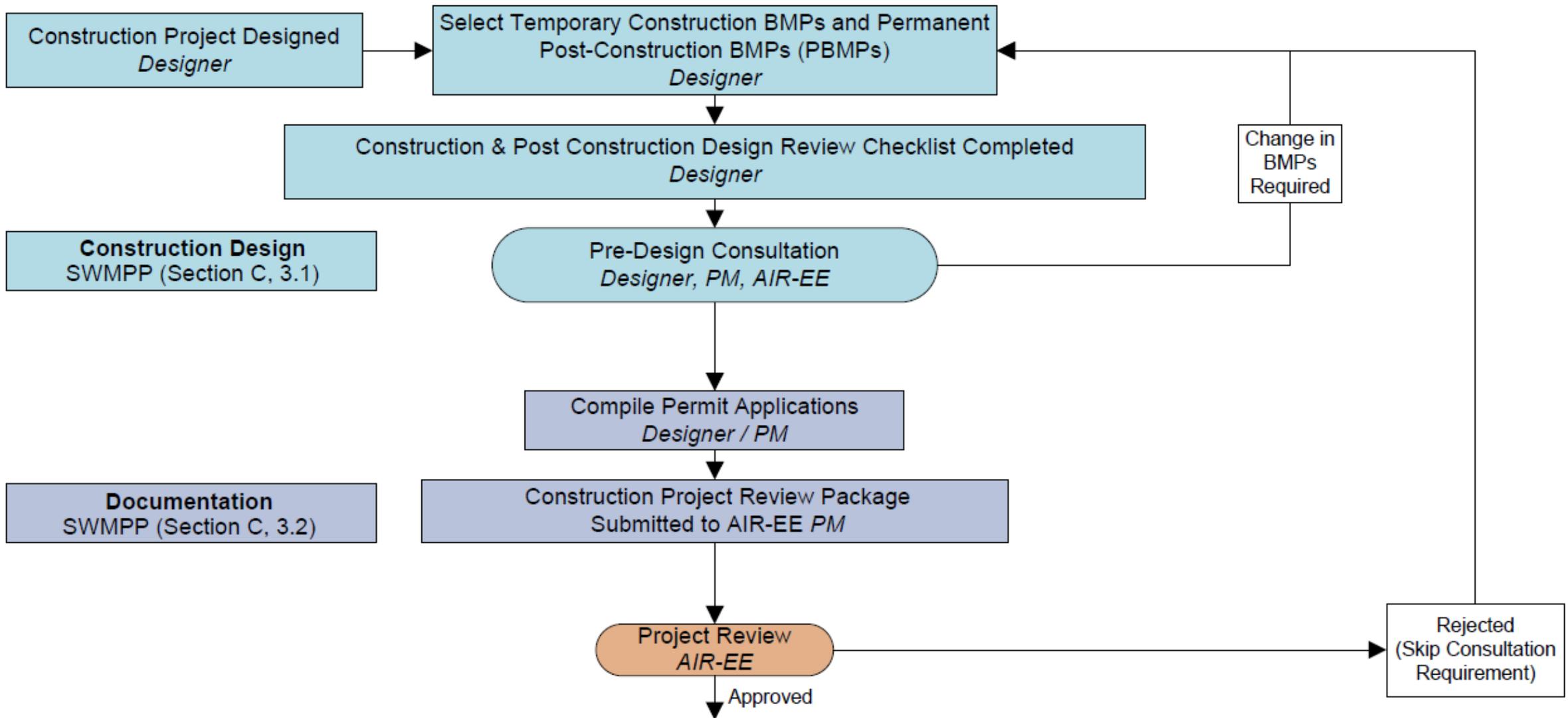
Pursuant to Hawaii Administrative Rules, Chapter 11-55, application is hereby made to discharge into the Airport drainage system at the location (s) specified below and at no other place. The permit shall expire within 5 years of issuance date.

1. Name of Airport: \_\_\_\_\_
2. Name of Tenant: \_\_\_\_\_
3. Name of Project: \_\_\_\_\_
4. PMID/TMK: \_\_\_\_\_
5. Basin ID: \_\_\_\_\_
6. Location: \_\_\_\_\_
7. Type of Discharge:
 

<input type="checkbox"/> Stormwater from construction site	<input type="checkbox"/> Construction Dewatering	<input type="checkbox"/> New Drainage Connection
<input type="checkbox"/> Other	<input type="checkbox"/> Hydrotesting	<input type="checkbox"/> Alteration to Drainage

Licensee\*, the undersigned, hereby agree to the following:

1. That the Licensee shall indemnify and hold the State free and harmless from all suits and actions resulting from the licensee's discharge operations.
2. That the Licensee will comply with all requirements of the DOTA SWMPP, including construction project plan review and inspections. The Licensee will promptly correct any deficiencies identified by DOH or DOTA.
3. That the Licensee shall provide appropriate best management practices and treatment devices for the removal of soil particles and other pollutant(s) in the discharge. Such discharge shall meet the basic water quality criteria applicable to all waters, as identified in Hawaii Administrative Rules, Chapter 11-54, Section 4 and any other applicable sections, at the point of discharge into State waters.
4. That the Licensee shall obtain National Pollutant Discharge Elimination System (NPDES) permit/permit coverage (if applicable) as required by the State Department of Health (DOH) and submit a copy to the State Department of Transportation, Airport Division (DOTA).
5. That the Licensee shall make all restoration to any State Airport or Airport tenant property damaged during the Licensee's discharge operations in accordance with DOTA.
6. That the Licensee shall discontinue the discharge should DOH determine that the receiving waters are being polluted, or the discharge does not meet the effluent requirements of the NPDES permit, or the Licensee's operations are not in the best interest of the general public. In addition, the Licensee shall be liable for any and all penalties as a result of discharges from the Licensee's operation.
7. That a copy of any effluent monitoring required by the NPDES permit shall be furnished to DOTA.
8. That the Licensee shall inspect and clean the inlets to the State Airport drainage system prior to discharging. If DOTA determines that any materials or substances from the Licensee's discharge operations have settled into any storm sewer, the Licensee shall immediately remove and clear any material and substance to the satisfaction of DOTA.
9. That the Licensee shall notify the DOTA Engineering Branch, Environmental Section (AIR-EE) of dewatering operations at least 24 hours before commencing discharge.
10. The Licensee shall require this permit to be a part of the contract with the contractor.



# SPECIFICATION SECTIONS UPDATES





# **SECTION 01561 – CONSTRUCTION SITE RUNOFF CONTROL PROGRAM**



# **SECTION 01562 - MANAGEMENT OF CONTAMINATED MEDIAS**

(Formerly, SECTION 01562 – MANAGEMENT OF CONTAMINATED MATERIALS)

# Contaminated Medias

Soil

Groundwater

Soil Vapors

For Both Known and Unknown Areas of  
Contamination



# RELATED DOCUMENTS



- DOTA Programmatic Environmental Hazard Evaluation and Environmental Hazard Management Plan (DOTA EHE-EHMP)
- Environmental Site Assessment, Phase II (ESA). If applicable
- Site-Specific Environmental Hazard Management Plan (Site-Specific EHMP)

# CONTAMINANTS OF POTENTIAL CONCERN, COPC



- Petroleum Substances (e.g. Jet Fuel, Oil)
- Chlorinated Solvents (e.g. VOC)
- Polychlorinated Biphenyls (PCB)
- Pesticides (e.g. Chlordane)
- Heavy Metals (e.g. Lead, Mercury, Chromium)



1. Pre-Construction Requirements
2. Reporting a Discovery or Release
3. Removal or Excavation
4. Temporary Storage
5. Testing
6. Handling, Disposal or Re-Use
7. Post-Construction Requirements (Close Out Report)

# PRE-CONSTRUCTION REQUIREMENTS



- Personal Protection Equipment, PPE
- Contractor's Qualified Environmental Professional
- Contractor's Work Plan for Known or Suspected Areas of Contaminated Media
- Contractor Training (e.g. 40-Hour HAZMAT Training)
- Notification of HDOH Before Commencing Work Activities in Known Areas of Contaminated Media

# REPORTING A DISCOVERY OR RELEASE



- The first call shall be to 911 for all spills and releases that causes an imminent threat to Human Health, Safety, or the Environment.
- Immediately contact DOTA Engineer, DOTA AIR-EE, and the Airport Duty Manager (Code 22) of All Discoveries, Releases, and Spills.
- Immediately contact HDOH HEER OFFICE when encountering Contaminated Soil or Groundwater in both previously Unknown and Known Areas of Contamination.

# REPORTING A DISCOVERY OR RELEASE



- Report Spills of a certain size (e.g. volume greater than 25 gallons of petroleum product, spill that are not contained and cleaned up within 72 hours.) to the HDOH HEER OFFICE.
- Immediately contact HDOH CWB of all Spills or Releases that enter a Body of Water, onto an adjoining shoreline, or discharges into the storm drain system. Also notify the National Response Center and U.S. Coast Guard.
- Complete the *Hawaii Hazardous Substance Written Follow-up Notification* Form.

# REMOVAL OR EXCAVATION



## FOR SOIL

- Segregate the Soil into three (3) Piles.
  - Clean
  - Contaminated or Suspected Contaminated
  - Grossly Contaminated (e.g. Free product is observed.)

## FOR GROUNDWATER

- Temporary Storage in watertight tanks or ponds.

# TEMPORARY STORAGE



## FOR SOIL

- Placed on 20-mil plastic sheeting.
- Underlay edges of the plastic sheeting with bermed soil.
- Cover the stockpile with 6-mil plastic sheeting.
- Place sediment control devices along the entire toe of each stockpile.

## FOR GROUNDWATER

- Remove any Free Product at least once daily until no free product is observed after 24-hours.

# TESTING



For Previously Unknown or Known or Suspected  
Areas of Contaminated Media:

**All Soil and/or Groundwater are to be tested to  
ensure proper handling and disposal.**

Reference the HDOH's *Guidance for Soil Stockpile  
Characterization and Evaluation of Imported and  
Exported Fill Material.*

# HANDLING, DISPOSAL, OR RE-USE

The Sample Test Results of the Soil and/or Groundwater will determine how the material may be allowed to be Handled, Disposed, or Possibly Re-Used.





## FOR SOIL

- Disposal at a HDOH-approved Facility (e.g. PVT Landfill)
  - Signed Agreement from the Receiving Facility acknowledging the Test Result and acceptance of the Contaminated Soil.
  - Copies of All Truck Tags.
  - Copies of All Waste Manifest from the Receiving Facilities.
  - The Quality of Soil shown in the Truck Tags must match the qualities shown in the Waste Manifest, and included in a Summary Log.
- Re-Use Offsite
  - Signed Agreement from the Receiving Facility/Landowner acknowledging the Test Result and acceptance of the Contaminated Soil.
  - Copies of All Truck Tags.

# FOR SOIL, continue

- Re-Use Onsite

- Contaminated Soil will not be allowed to be Re-used in an Uncontaminated Area.
- Cannot be place beneath or within the footprint of a planned building structure.
- Must be placed at least 1-foot above the tidally influenced high water table (high groundwater elevation.)
- The more highly impacted soil shall be placed at the bottom of the excavation and the cleanest soil at the top of the excavation.
- At least 1-foot of Clean Soil shall be placed as the final backfill layer at the top.
- The excavation shall, then, be capped with an impervious layer, such as concrete or asphalt.



# FOR GROUNDWATER

- Disposal at a HDOH-approved Facility
  - All Free Product shall be removed from the Water, prior to disposal.
  - Signed Agreement from the Receiving Facility acknowledging the Test Result and acceptance of the Contaminated Water.
  - Copies of All Truck Tags.
  - Copies of All Waste Manifest from the Receiving Facilities.



# FOR GROUNDWATER, continue

- Discharge to the Local or Municipal Sanitary Sewer System
  - All Free Product shall be removed from the Water, prior to disposal.
  - Acquire ALL appropriate permits from the Local or Municipal Government Agencies (e.g. CCH Industrial Waste Discharge Permit)
  - The Permit Application or Permit shall include the Allowable Quality of Discharged Water and Sample Test Results of the Groundwater.
  - Additional coordination with HDOH HEER OFFICE is required.
  - The Aquatic Habitat Criteria (Chronic Toxicity) shall apply to these discharges.
  - Water discharged to a sanitary sewer may be required to meet Water Quality Standards.



# FOR GROUNDWATER, continue

- Re-Infiltration Onsite

- Contaminated Groundwater will not be allowed to be Re-infiltrated into an Uncontaminated Area.
- Must be within 200-feet of its original location.
- Must be more than 150 meter from surface waters, drainage features, and drainage structures.
- Does not contain any gross contaminants.
- Re-infiltration shall be conducted at a slow enough rate so that it does not flow past the designated infiltration area.



# POST CONSTRUCTION REQUIREMENTS



## Close-Out Report

- Signed Certificate from the Contractor that the removal and disposal of all contaminated materials were completed in accordance with the Contractor's approved Work Plan or Site-Specific EHMP, and all applicable Federal, State, and local rules and regulations.
- All approved DOTA EHE-EHMP deviation request forms.
- All Site-Specific EHMP.

# Close-Out Report, continue

- Copy of All Sample Test Results
- All Disposal Forms, Truck Tags, Waste Manifest, and Summary Logs.
- Results of Project Air Monitoring.
- Copy of All Hawaii Hazardous Substance Written Follow-up Notification form, including Record of Field Observation and location maps.
- Copies of All signed agreements from Receiving Facilities and/or Landowners.





# **SECTION 01560 ENVIRONMENTAL** **CONTROLS**

# SPECIFICATION SECTION 01560



## Two (2) Versions of Section 01560

- Federally Funded Projects
  - (Lump Sum Payment Item)
  
- Non-Federally Funded Projects
  - (Not measured for payment – Incidental)

# SPECIFICATION SECTION 01560



- Air Pollution Control
  - Vehicle Emissions
  - Dust
  - Burning
- Water Pollution Control
- Noise Control
  - Mufflers for Equipment
- Disposal
  - Construction Waste
- Hazardous Material Control

Presentation  
Of

# Department of Health's Perspective on Contaminated Media Management

By

Lauren Cruz

Hawaii Department of Health

Hazard Evaluation and Emergency Response (HEER) Office

# Construction Activities and Contaminated Media



# Types of Contaminants Typically Encountered?

- Pesticides and Herbicides
- Metals
- Solvents
- Polychlorinated Biphenyls (PCBs)
- Petroleum
  - Gasoline
  - Diesel Fuel
  - Jet Fuel
  - Oil



# Why Identifying Contamination is Important

- Immediate Effects of Exposure (acute)
  - Headache
  - Nausea
  - Difficulty Breathing
  - Dizziness
  - Asphyxiation
- Long Term Effects of Exposure (chronic)
  - Cancer
  - Organ Damage

# How to Identify a Potential Contaminant in the Field

- Sight
  - Color (staining)
  - Dead/dying vegetation
  - Layers of ash or debris
- Smell
  - Petroleum odor
  - Solvent odor (sweet or acetone-like)
  - Rotten egg
- Effects on humans
  - Workers getting a rash or becoming nauseous or dizzy



# So You Identified Contamination During Construction Activities...



# When Should You Report a Release?

Any detection of a contaminant at a concentration greater than the most conservative DOH Environmental Action Levels

- Laboratory analytical samples
- Chemical or fuel odor
- Visual evidence of contamination

In accordance with HAR 11-451 this also includes:

- Any amount of oil causing a sheen to appear on surface water.
- Any amount of oil released to navigable waters of the State
- Any type of fuel on groundwater
- Any amount of oil greater than 25 gallons released into the environment
- Any amount of oil less than 25 gallons released to the environment and not cleaned up within 72 hours

# Release Reporting

**For Immediate Emergencies or UXO call 911**

**STATE:** Hawaii State Emergency Response Commission (HSERC)/ HEER Office

- Between 7:30 AM and 4:30 PM: 808-586-4249
- After Hours (State Hospital): 808-247-2191

**COUNTY:** Local Emergency Planning Committee (LEPC)  
City and County of Honolulu

- Between 7:30 AM and 4:30 PM: 808-723-8960
- After Hours: 911

**FEDERAL:** National Response Center (NRC)

- All Hours: 1-800-424-8802
- Only call if the release impacted navigable waters or adjoining shorelines.
- **\*FAILURE TO REPORT A RELEASE – \$10,000/day fine and criminal misdemeanor\***

## Maui County

- Main Number (all hours): 808-870-7404
- Alternate: 808-270-7911

## Kauai County

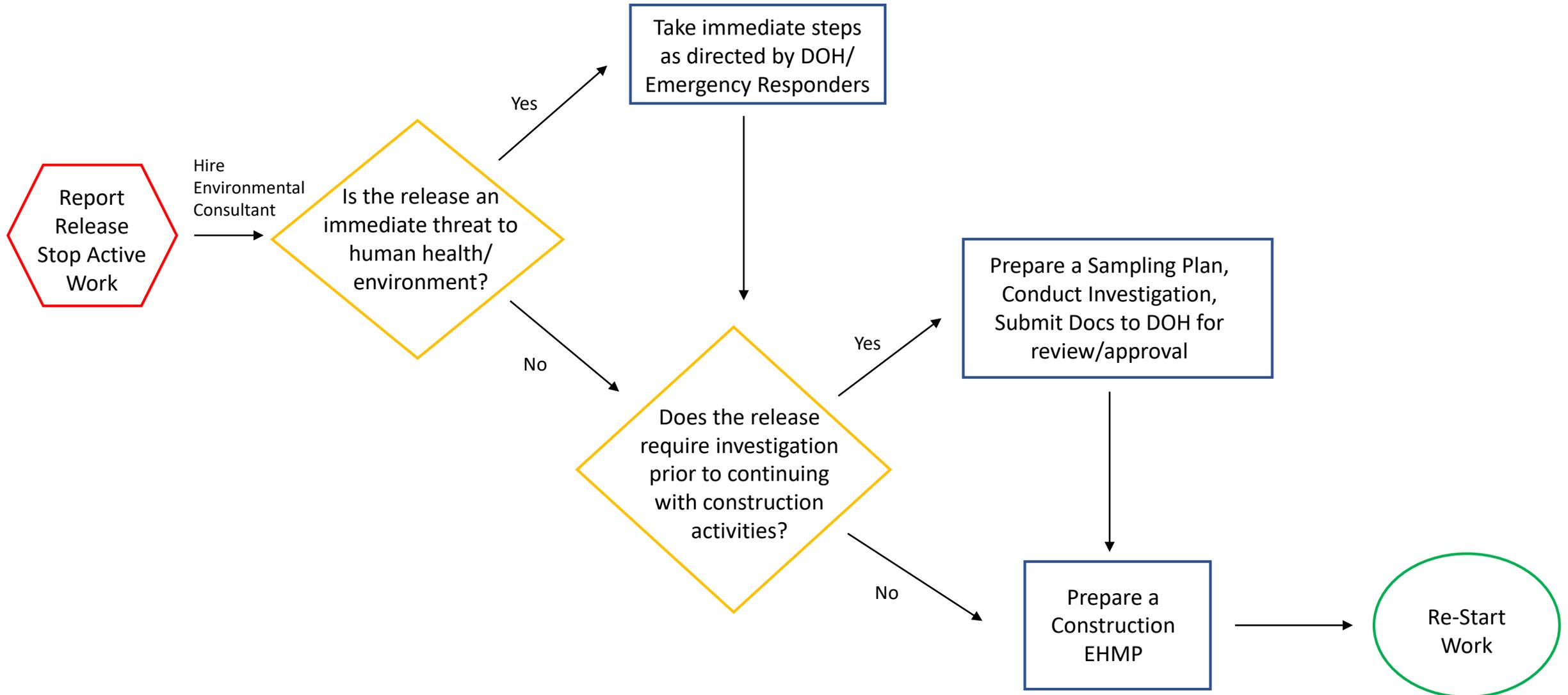
- 24 Hours: 808-634-0310
- After Hours/Unable to Contact (Dispatch): 808-241-1711

## Hawaii County

- Main Number: 808-936-8181/808-443-4150
- Alternate: 808-895-7318

LEPCs on the Neighbor Islands

# So You Discovered Contamination During Construction Activities...



# Downsides to Waiting Until Active Construction To Identify Contamination

- Potential delays in construction and associated delay costs
- Additional costs to address and manage the contamination not previously built into budget
- Potential liability for exposing workers to contaminants without their knowledge
- Potential for impacting stormwater run-off with contaminants
- If contaminated soil improperly disposed of can result in substantial fines



# How Can You Plan Ahead?

- **Identify the historic/current uses of the area.**

## Uses Where Contamination Likely

- Automotive Repair Shops
- Dry Cleaners
- Airports
- Harbors
- Industrial Areas
- Incinerators/burn pits
- Sugar Mills
- Metal Plating Plants



# How Can You Plan Ahead?

- Identify the historic/current uses of the area.
- **Identify Areas where there are existing Area-wide or Programmatic Environmental Hazard Management Plans**

# Current Area-Wide/Programmatic EHMPs

- Iwilei District Mauka of Nimitz Highway
- All State-Owned Airports
- Kahului Harbor Industrial District
- Honolulu Authority for Rapid Transportation
- Waikoloa Maneuver Area

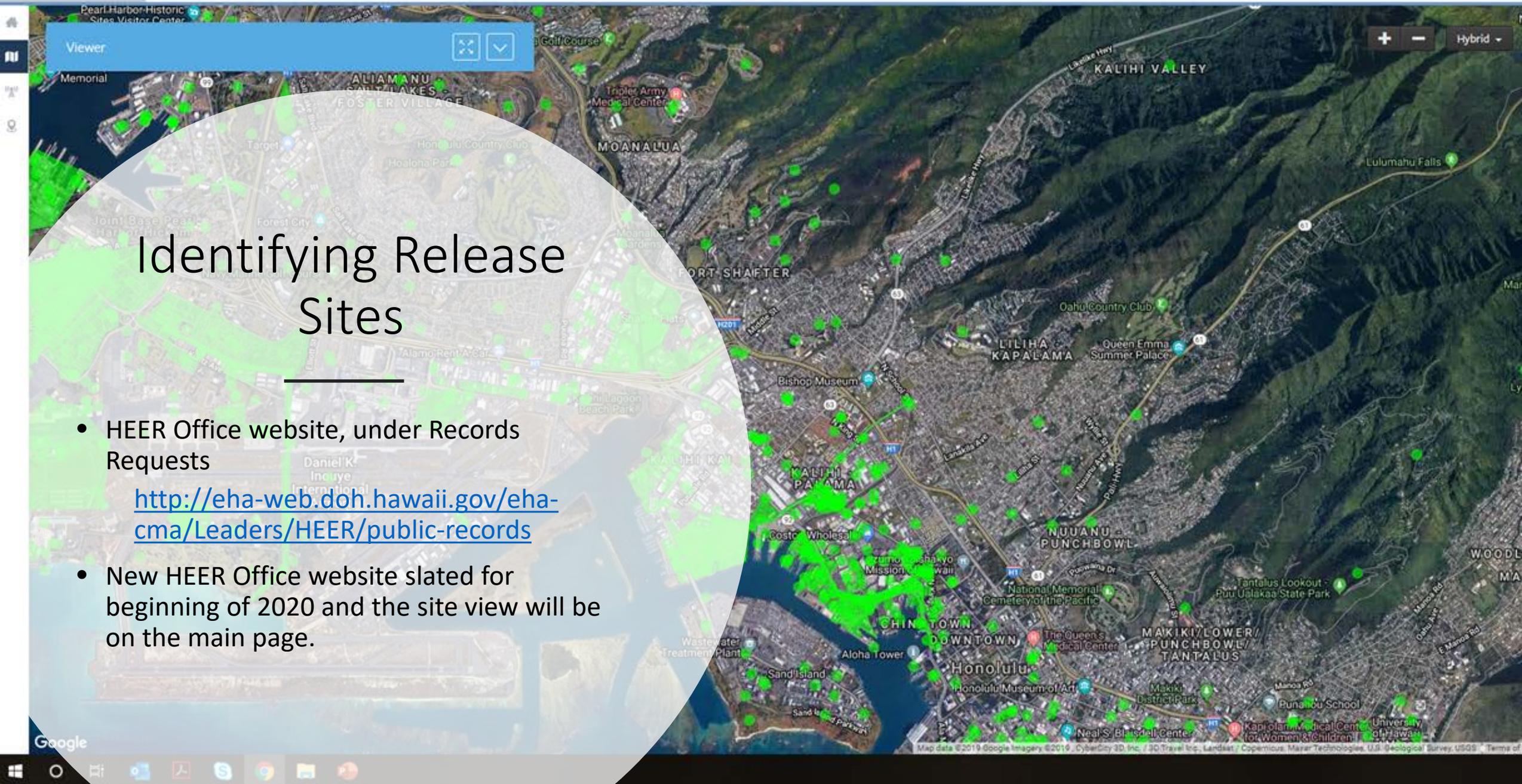
Links to these EHMPs are located in the What's New Section of HEER Office website:

<http://eha-web.doh.hawaii.gov/eha-cma/Org/HEER/>



# How Can You Plan Ahead?

- Identify the historic/current uses of the area.
- Identify Areas where there are existing Area-wide or Programmatic Environmental Hazard Management Plans
- **Determine if where you will be doing construction activities is a release site or near a reported release site**



# Identifying Release Sites

- HEER Office website, under Records Requests

<http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records>

- New HEER Office website slated for beginning of 2020 and the site view will be on the main page.

# How Can You Plan Ahead?

- Identify the historic/current uses of the area
- Identify Areas where there are existing Area-wide or Programmatic Environmental Hazard Management Plans
- Determine if where you will be doing construction activities is a release site or near a reported release site
- **Perform a Phase I Environmental Site Assessment, and if necessary, a substantial Phase II ESA**
- **Review geotechnical boring logs for evidence of contamination**

# Upsides to Identifying Contamination Prior to Starting Construction

- Fewer delays in construction
- Better control over project to ensure compliance with applicable State and Federal environmental rules and regulations
- Ensure that building materials and design are compatible with identified contaminants
- Allows for preparation of more detailed Bid Specs on how to properly handle contamination
  - Can reduce the number of change orders and cost overruns



# HDOH Available Tools

- HDOH HEER Office Technical Guidance Manual
  - <http://www.hawaiidoh.org/tgm.aspx>
- HDOH HEER Office Construction – Environmental Hazard Management Plan Template
  - Website Location: <http://eha-web.doh.hawaii.gov/eha-cma/Org/HEER/>
- Easily notify HDOH HEER Office of planned construction activities in contaminated areas
  - <https://eha-cloud.doh.hawaii.gov/epermit/Home/09e4679d-dd3a-4bee-b0d6-1112e0a9217d>

**RE: Excavation Ticket No: 19016892**

Ticket Priority:	MEET TIME	Work Date:	10/25/19
Work Address:	UU STREET, KAILUA-KONA	Work Done For:	UU STREET
Near Intersection:	AIRPORT ACCESS ROAD	Location Details:	ON UU STREET, AT THE INTERSECTION OF TAXIWAY K
Work Description:	CONSTRUCTION OF NEW ROADWAY AND TAXIWAY - Work Done For: DOT-AIRPORTS - ON UU STREET, AT THE INTERSECTION OF TAXIWAY K		

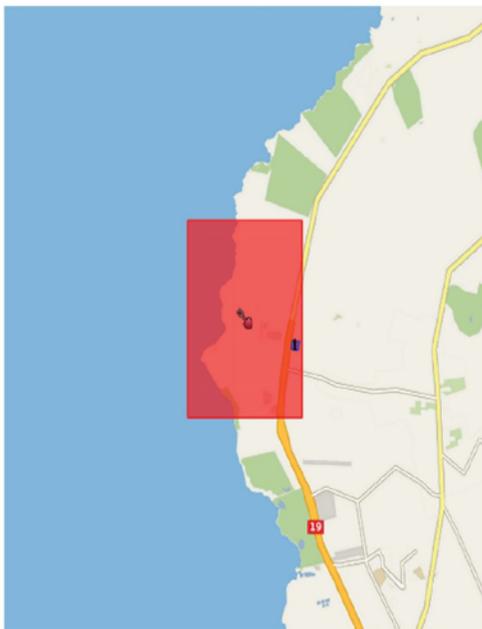
**Dig Clean Safety and Land Use Advisory 1396146**

The purpose of the Advisory is to notify you that your planned excavation is in the vicinity of a regulated site. For this site or sites, Environmental Hazard Management Plan (EHMP) is available from DOH.

The attached Advisory shows the location of the site or sites subject to this EHMP in relation to the planned excavation extent as reported by the HOCC call center.

Please screen your excavation extent against this map of sites impacted by an EHMP. To access the EHMP and learn more about the regulated site(s), please visit <https://eha-cloud.doh.hawaii.gov/iheer/#/home>, select "Viewer," tab "Sites". You can use the "Zoom" button on the top right to zoom to different islands. Then zoom closer to your site (or a neighboring site) and select the green marker area for your or the neighboring property to access the site "details". Under details you can access all documents via the "documents" tab. If your work appears near one of these sites, immediately contact the Hawaii Department of Health, Hazard Evaluation and Emergency Response Office at 808-586-4249 and ask for the Site Discovery and Response (SDAR) Section Supervisor. Please provide be ready to provide the Dig Clean Safety Advisory Number.

The map below identifies your proposed activity (in red) along with any sites affected by contaminated soil and/or groundwater contamination (in blue).



Red line/polygon indicate your work area as provided to Hawaii One Call.  
 1,2 .. Numbered Blue polygon(s) are the areas of the site(s) of concern.  
 Note, on occasion the area is outside of the map view.

**CONTAMINATED SITE SHOWN ON MAP:**

EC 1: Site Name HELCO Generating Station: Keahole (UID: 1343256)  
73-4249 Queen Kaahumanu Hwy Kailua-Kona, HI

**ALTERNATIVES TO VIEW INFORMATION:**

View on the Web: <https://dicclean.com>, enter under Option 2: 1396146

Form C

# Other Resources

- HDOH HEER Office notifications associated with 811 One-Call prior to digging
- Clean Water Branch NPDES permit applications for Construction and Dewatering

*Note: The HEER Office is currently updating site information for sites. Most, but not all sites may be displayed on the website. Site information is currently ongoing and not all documents may be currently available via this website. To get the complete record for the site, a record request form can be filled and submitted to the HEER Office. Users will then be notified when they are able to download all information via the iHEER system website.*

*Describe any existing pollution sources that have been checked above and from HEER Office Sites, Incidents and Records:*

*Describe any corrective measures that have been undertaken for any existing pollution source(s):*

*Note: You are required to contact the Department of Health, Office of Hazard Evaluation and Emergency Response at (808) 586-4249 and through e-permitting Form "Notification of Construction Activities" at Form Finder <https://eha-cloud.doh.hawaii.gov/epermit/finder> if contaminated soil, vapor, or groundwater is known to be present at your project site. Notify at least 90 days prior to surface and subsurface disturbing activities (demolition, building/site configuration changes, grading, excavation, or prior to any other activities) that may disturb the ground surface at HEER sites. If you missed the 90 days notification time frame, notify the HEER Office as soon as possible to avoid any potential delays regarding your project.*

## C.3 - Construction Site Preparation

Please provide the following estimates for the construction site.

Total project area including areas to be left undisturbed:

acres

# Hazard Evaluation and Emergency Response Office iHEER System

Signed in as  
**Lauren Cruz**  
[Sign Out](#)

**SITE DISCOVERY, ASSESSMENT AND REMEDIATION**

- Sites**  
Create or update discovery and remediation sites. Manage locations, documents, aliases and internal notes.

- Organizations**  
Create or update owners, operators and leasees. Find organizations, including related contacts, incidents and sites.

**SERVICES**

- Inbox
- Notifications

**TOOLS**

- Viewer
- Reports
- Documents

**Notice**

We are currently updating our site information. You are welcome to browse our viewer and site information for contaminated sites, but be aware that not all sites may be displayed on the viewer map, site information may not be exact and boundaries are hand drawn and approximate. Site Document data transfer is ongoing and not all documents are currently available via this website. If you need to get the complete record for the site, please fill out a [record request form](#) and submit it to us. You will then be notified when you will be able to download all information via this website.

HOME Find site using name, Site ID, location description or TMK Advanced Search

SITE DISCOVERY, ASSESSMENT AND REMEDIATION 856 sites. Use the keyword and/or advanced search to narrow the results.

Island	Location Description	Assigned RPM	Priority	Program	Status
(All)	<input type="text"/>	(All)	(All)	(All)	(All)

Oahu	1003 Kaheka St, 1013 Kaheka St	Eric Sadoyama	Unranked	State	Unreviewed	>
Oahu	1122 Makepono St	Eric Sadoyama	Unranked	State	Unreviewed	>
Maui	122 W Ahuliu Way	Unassigned	Unranked	State	Unreviewed	>
Oahu	1240 Mookaula St, 986 McGregor Ln and 1125 N King St	Lauren Cruz	Unranked	State	Unreviewed	>
Oahu	1305 Hart Street	Unassigned	Unranked	State	Unreviewed	>
Oahu	1310 Pensacola Street	Paul Chong	Unranked	State	Unreviewed	>
Oahu	1339 School Street	Unassigned	Unranked	State	Unreviewed	>
Oahu	1385 Colburn Street	Paul Chong	Unranked	State	Unreviewed	>
Oahu	1414 Kalakaua Avenue-Aloha/King LLC	Unassigned	Unranked	VRP	Unreviewed	>
Oahu	1510A Frear Street	Eric Sadoyama	Unranked	State	Unreviewed	>
Oahu	158 Sand Island Access Rd	Unassigned	Unranked	State	Unreviewed	>
Oahu	1609 Ala Wai Diesel Release	Laura Young	Unranked	State	Unreviewed	>
Oahu	180 Sand Island Access Rd	Unassigned	Unranked	State	Unreviewed	>

Viewer

- Incidents
- Sites

Keywords

Find site using name, Site ID or location description

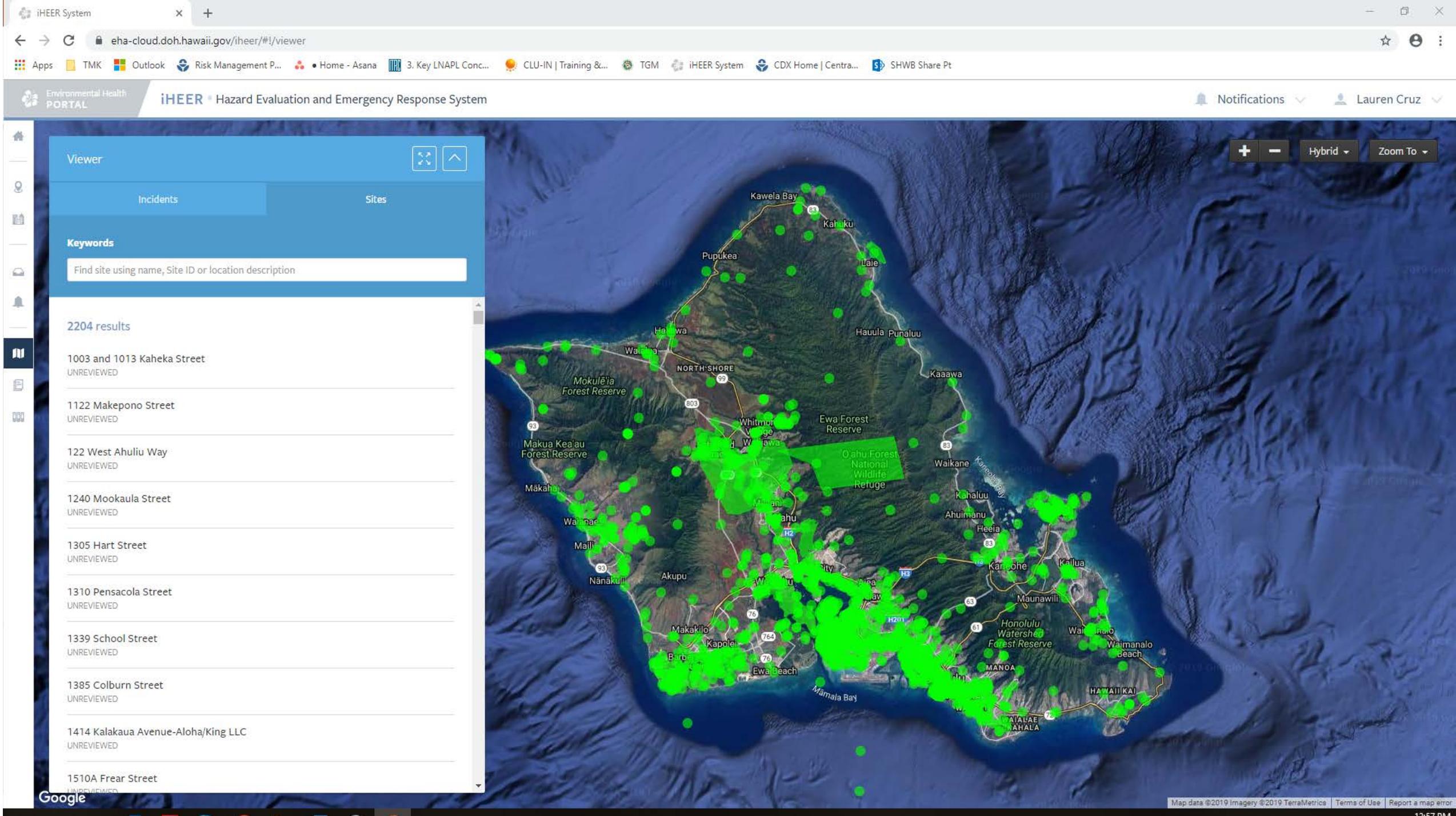
2204 results

- 1003 and 1013 Kaheka Street  
UNREVIEWED
- 1122 Makepono Street  
UNREVIEWED
- 122 West Ahuliu Way  
UNREVIEWED
- 1240 Mookaula Street  
UNREVIEWED
- 1305 Hart Street  
UNREVIEWED
- 1310 Pensacola Street  
UNREVIEWED
- 1339 School Street  
UNREVIEWED
- 1385 Colburn Street  
UNREVIEWED
- 1414 Kalakaua Avenue-Aloha/King LLC  
UNREVIEWED
- 1510A Frear Street  
UNREVIEWED



+ - Hybrid Zoom To

- outline-state
- Hawaii
- Kahoolawe
- Kauai
- Lanai
- Maui
- Molokai
- Niihau
- Oahu



Viewer

Incidents

Sites

Keywords

Find site using name, Site ID or location description

2204 results

1003 and 1013 Kaheka Street  
UNREVIEWED

1122 Makepono Street  
UNREVIEWED

122 West Ahuliu Way  
UNREVIEWED

1240 Mookaula Street  
UNREVIEWED

1305 Hart Street  
UNREVIEWED

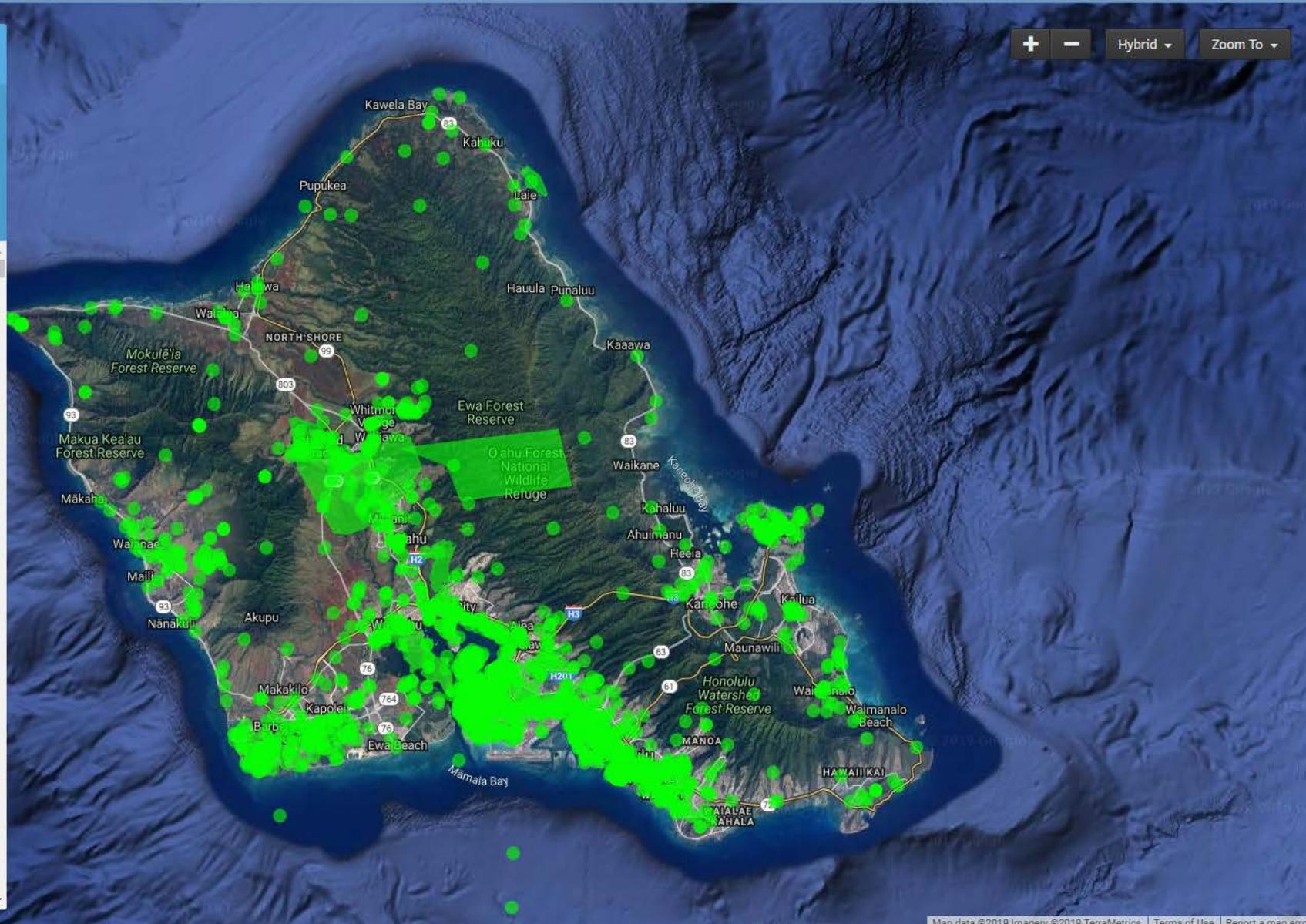
1310 Pensacola Street  
UNREVIEWED

1339 School Street  
UNREVIEWED

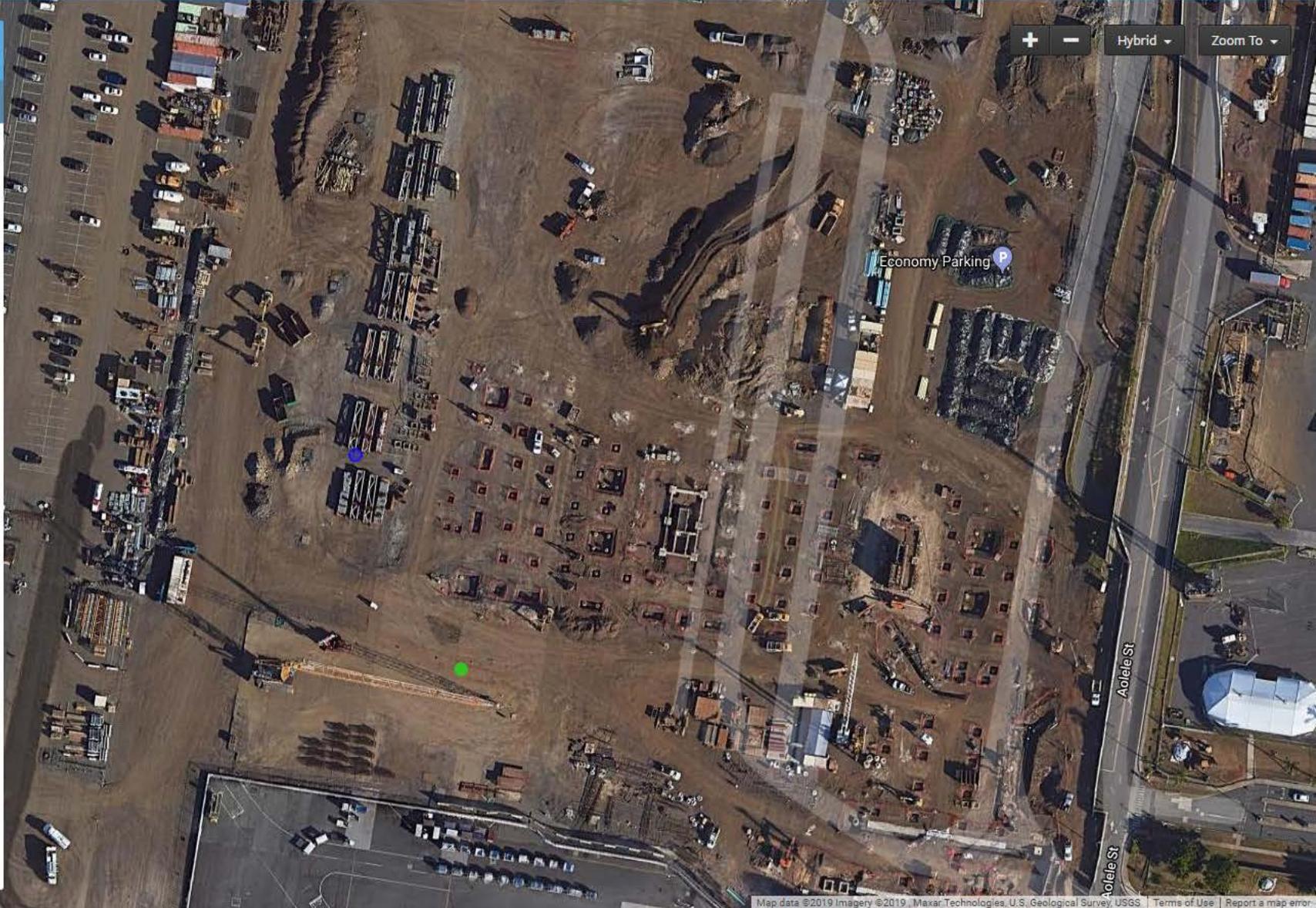
1385 Colburn Street  
UNREVIEWED

1414 Kalakaua Avenue-Aloha/King LLC  
UNREVIEWED

1510A Frear Street  
UNREVIEWED



Map navigation controls: + - Hybrid Zoom To



Viewer

< Back To Sites

### Honolulu Airport Former Commuter Terminal

Unreviewed

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ISLAND Oahu COUNTY Honolulu

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PRIORITY Unranked

LOCATION DESCRIPTION Daniel K Inouye Airport, Nimitz Hwy and Elliott Street

[Details >](#)

**SITES**

Honolulu Airport Former Commuter Terminal

UNREVIEWED

PRIORITY: Unranked

Details

TMK 4

Locations 1

Documents 31

Aliases 1

### Honolulu Airport Former Commuter Terminal

UNREVIEWED

**PRIORITY**  
Unranked

**LEAD AGENCY**  
HEER Office

**PROGRAM**  
State

**ASSIGNED RPM**  
Lauren Cruz

**LOCATION DESCRIPTION**  
Daniel K Inouye Airport, Nimitz Hwy and Elliott Street

**ADDRESS**  
Daniel K Inouye Airport  
Honolulu, HI 96819

**COUNTY**  
Honolulu

**ISLAND**  
Oahu

**SITE ID**  
2994

### LOCATIONS 1



### ALIASES 1

ALSO KNOWN AS

Honolulu International Airport

[VIEW NAME CHANGE HISTORY](#)

**SITES**

Honolulu Airport Former Commuter Terminal

UNREVIEWED

PRIORITY Unranked

Details >

TMK 4 >

Locations 1 >

**Documents 31**

Aliases 1 >

## Documents

Type	Title	Imported From	Date	Document No.	For Public	
Undetermined	Vapor Mitigation System Design		Aug 20, 2019	170843	Yes	
Review Letter	REview of Final Phase 2 Soil and GW Investigation WP		Jul 5, 2019	170839	Yes	
Undetermined	Response to comments on Draft Phase 2 Work Plan		Jun 27, 2019	170838	Yes	
Site Characterization Work Plan	Final Phase 2 Work Plan		Jun 25, 2019	170841	Yes	
Review Letter	Review of: Draft Phase 2 Soil and GW Investigation Work Plan		Jun 7, 2019	170840	Yes	
Undetermined	Draft Soil Vapor Mitigation System		May 31, 2019	170842	Yes	
Site Characterization Work Plan	Draft HIIT Mauka Extension Phase 2		May 17, 2019	170844	Yes	
Preliminary Assessment Report	Preliminary Draft Letter Report for Phase 1		May 17, 2019	170845	Yes	
Undetermined	Phase A Environmental Investigation, Daniel K Inouye International Airport Inter-Island Terminal (IIT) Mauka Extension, 300 Rodgers Boulevard, Honolulu, Oahu, Hawaii	135708#\Heersharepoint1\facilitiesite%20documents\135708.pdf	Feb 22, 2019	163685	Yes	
Undetermined	Review of: Phase A Environmental Investigation, Daniel K Inouye International Airport Inter-Island Terminal (IIT) Mauka Extension, 300 Rodgers Boulevard, Honolulu, Oahu, Hawaii dated February 22, 2019 by AECOM.	2019-079#Q:\2019 Final Correspondence (Day File)\19-079 LC.PDF	Feb 22, 2019	163680	Yes	
Undetermined	HNL IIT Mauka Extension - Sampling Report #S110718	135380#\Heersharepoint1\facilitiesite%20documents\135380.pdf	Jan 15, 2019	163682	Yes	

The background is a dark, textured surface, possibly a wall or floor, with a wooden pallet and scattered debris. The pallet is made of light-colored wood and is positioned in the center. There are several pieces of white paper or fabric scattered around the pallet, some of which are stained with brown liquid. A black plastic bag is also visible near the pallet. The overall scene suggests a construction or demolition site.

Questions?

Presentation  
Of  
Department of Health's Perspective on Contaminated Media  
Management

# Additional Reference Materials



The **Hazard Evaluation and Emergency Response Office (HEER Office)** is part of the Hawai'i Department of Health (HDOH) 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.

## Construction - Environmental Hazard Management Plans (EHMP)

### **What is a Construction-EHMP?**

A Construction-EHMP (C-EHMP) documents the presence of a contaminated environmental medium (e.g., soil, soil vapor, sediment, surface water, and/or groundwater) on a site and describes how the contamination must be managed during planned construction activities. C-EHMPs are typically for handling contamination during surface or subsurface construction activities that could expose construction workers, nearby people, or ecological receptors.

The C-EHMP presents all necessary information in a single, user-friendly, stand-alone document that identifies what contaminants have been identified to be present at the site above unrestricted/residential use screening criteria, where the identified contamination is located (if known),

potential environmental concerns posed by the contamination, appropriate handling and disposal instructions, and responsibilities of individual parties (owners and operators) to ensure that all requirements outlined in the C-EHMP are followed and nobody is harmed. The HDOH HEER Office requires all contaminant concentrations to be screened against unrestricted/residential land use criteria during environmental assessments, even if a site is located in an industrial zoned area, so that potential hazards for the most sensitive possible (or potential future) land use will be identified. Specific contaminants, potential environmental hazards, and the potential routes of exposure (i.e., a Conceptual Site Model) are documented in an Environmental Hazard Evaluation (EHE). A brief EHE is typically included as a section within the C-EHMP, although a more detailed EHE might be prepared in a separate document.



*Example of map noting specific areas of contamination onsite as well as types of contamination.*

### **Purpose of a C-EHMP**

- ✓ Provides protection to on-site workers, the general public, and ecological receptors from exposure to chemical hazards during construction activities
- ✓ Identifies specific chemicals of concern and their potential hazards, and provides a summary of site environmental investigations
- ✓ Informs landowners (and site users) about their responsibility to protect others on the site from exposure to contaminants
- ✓ Identifies construction activities that may be conducted at the site and provides contact information for those responsible for implementing the plan

### ***What is typically included in a C-EHMP?***

The C-EHMP documents the chemicals of concern associated with the site contamination, the location and depth of the soil, soil vapor, sediment, surface water, and/or groundwater contamination present, and the specific potential environmental hazards posed by those chemicals. These potential hazards might include direct exposure of construction workers to the chemicals, the potential for vapors from contaminated soil or groundwater to intrude into overlying buildings, the presence of contaminated groundwater that exceeds acceptable levels for drinking water or that could be toxic to aquatic life if discharged into storm sewers during underground utility work, or the presence of soil and water heavily contaminated with contaminants that could foul equipment, pose potential explosion/backflash risks, or cause odor and runoff concerns if handled improperly.

The C-EHMP must provide information on proper handling and disposal of contaminated material during construction activities. This includes identifying best management practices (BMPs) to prevent the spread of contamination, the planned re-use and disposal locations for soil and groundwater, the appropriate sampling frequency and methodology based on planned re-use/disposal location, and health and safety measures to be taken to protect human health during the disturbance of contaminated media. The C-EHMP should also include emergency and response actions if people are accidentally or unintentionally exposed to contamination or if a release of contaminants from the site occurs.

Most C-EHMPs require that a qualified environmental professional provide oversight during disturbance of any potentially contaminated media onsite. It is recommended that this professional have experience conducting environmental oversight during construction to ensure compliance with the C-EHMP and provide appropriate guidance to the contractors during construction.

### ***How long is the C-EHMP required to be maintained?***

The C-EHMP provides for management of onsite contamination during identified construction activities. Following completion of the construction activities, if residual contamination remains at the site, then an EHMP for long-term management of the residual contamination at the site is needed. This long-term EHMP must be maintained and management activities, notifications, and training followed unless site conditions change. To ensure human health and the environment will be protected, landowners must coordinate with HEER Office and get prior approval for activities that might disturb contamination managed under a long-term EHMP. If at a later time, a site is no longer believed to pose any hazards under unrestricted/residential use criteria, data supporting a change in status can be submitted to the HEER Office for review. If the data demonstrates that there are no further residual hazards under unrestricted land use, HDOH may issue a No Further Action (NFA) letter without institutional controls and an EHMP for the property would no longer be necessary.



***All on-site workers and contractors that expose soil (for example for utility repairs and even landscaping), must have access to and be informed of the C-EHMP on residual contamination at the site and what protection(s) may be needed.***

### ***What are the landowner's responsibilities under a C-EHMP?***

The landowner is the primary responsible party for the implementation of the C-EHMP at the site. The principle responsibility of the landowner is to make sure the requirements of the C-EHMP are accessible and properly carried out in order to protect people living and working on the property from the remaining contamination. Oversight and compliance with the requirements described in the C-EHMP are also the responsibility of the landowner to ensure protection of the environment.

Training and notification about the on-site environmental hazards for people living and working on the site, including temporary workers like construction workers, is a key responsibility of landowners. Even if there are on-site activities conducted at the site by parties other than the landowner, the landowner is responsible for notifying these parties of the C-EHMP, providing them with a copy of the C-EHMP, if appropriate, and ensuring they are following the necessary procedures to protect human health and the environment. The C-EHMP will provide direction on how to conduct site actions that could affect the on-site contamination. Following these directions, even if the work is done by contractors, is ultimately the responsibility of the landowner.

The landowner and contractors conducting work at the site should coordinate with HDOH, as necessary, to ensure that the C-EHMP is properly followed. In addition, if following the completion of construction activities, contamination remains at the site, the landowner is responsible for the preparation and implementation of a long-term EHMP.

### ***What are the contractors/lessees responsibilities?***

Even though the ultimate responsibility for the implementation of the C-EHMP falls to the landowner, lessees and contractors are also responsible for implementing the C-EHMP correctly to protect themselves, onsite workers, the general public, their loved-ones, and ecological receptors. In general, this means, keep contamination onsite, and if contaminated soil is transported offsite, ensure it is appropriately disposed of at a HDOH acceptable facility. Keep any documentation such as truck logs and manifests of subcontractor's trucking operations to keep yourself from accumulating fines. Press the importance of responsibly handling potential contaminated material onto your employees.

### ***How do you find out if a site you are working on is contaminated?***

To find out if a site has potential contaminated material, visit the HEER office's iHEER viewer at :

<https://eha-cloud.doh.hawaii.gov/iheer/#!/viewer>

Markers show the location of Sites (green markers) or Emergency Incidences (blue markers). Use the "zoom to" button on the top left to zoom to the island of interest and scroll to zoom closer to your project location. Note that contamination usually extends outside the marker. The marker is only a representative marker for the location.

### ***Does HDOH have a template for a C-EHMP?***

The HDOH has a template for a C-EHMP available on our website at the below link under the "What's New" section. To expedite approval of a C-EHMP it is recommended to use this template. Additional information

should be included as agreed to by the landowner and HDOH. An outline for an EHMP is also included in Section 18.5.16 of the HDOH Technical Guidance Manual (TGM).

C-EHMP Template - <http://eha-web.doh.hawaii.gov/eha-cma/Org/HEER/>

## Further Information

### ***For questions related to Environmental Hazard Management Plans contact:***

Hawai'i Department of Health,

Telephone: (808) 586-4249

Hazard Evaluation and Emergency Response Office

Website: <http://hawaii.gov/doh/heer>

2385 Waimano Home Rd #100

Pearl City, Hawai'i 96782

### ***Other Resources for Environmental Hazard Management Plans:***

The on-line HEER Office Technical Guidance Manual (TGM) provides information about EHMPs in Sections 18.5.16, 19.3, and 19.6.

The TGM is available at: <http://www.hawaiidoh.org>

HDOH, 2007. Hawai'i Department of Health, Office of Hazard Evaluation and Emergency Response. Long-Term Management of Petroleum-Contaminated Soil and Groundwater. June 2007. Website URL:

<http://www.hawaiidoh.com/references/HDOH%202007c.pdf>

HDOH, 2017. Hawai'i Department of Health, Hazard Evaluation and Emergency Response Office, Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material. October 2017. Website URL:

<http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/technical-guidance-and-fact-sheets>

***This fact sheet was created with assistance and funding from USEPA's Region 9 Superfund Division.***



Presentation  
Of

# Asbestos Management Program

By  
Traci Sylva & Natasha Griswold  
Environmental Science International, Inc.



# ASBESTOS MANAGEMENT PROGRAM TRAINING

HAWAII DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION



# INTRODUCTION

## Asbestos Management Program Plan

State of Hawaii  
Department of Transportation

AIRPORTS DIVISION

### Prepared for:

State of Hawaii Department of Transportation, Airports Division  
Engineering Maintenance (AIR-EM)  
300 Rodgers Boulevard, Suite 700  
Honolulu, Hawaii 96819

- The State of Hawaii, Department of Transportation, Airports Division [HDOT-AIR] operates under an Asbestos Management Program [AMP], March 6, 2019.
- Environmental Science International, Inc. [ESI] has been contracted to assist HDOT-AIR in implementing the AMP. 
- During this contract period, ESI will act as Airports Division Asbestos Program Manager, and can be contacted for any questions.
  - Phone: (808) 261-0740
  - Email: [asbestos@esciencei.com](mailto:asbestos@esciencei.com)

# ASBESTOS OPERATIONS AND MAINTENANCE PLANS

## **Operations and Maintenance Program**

**Daniel K. Inouye International Airport  
300 Rodgers Boulevard  
Honolulu, Hawaii 96819**

- Per the AMP, each HDOT-AIR facility that contains asbestos-containing materials [ACM] is required to develop and implement an Operations and Maintenance [O&M] Plan.
- The purpose of the O&M Plan is to mitigate the exposure of airport occupants, maintenance and custodial workers, contractors, and the general public to asbestos fibers while at the airport.

# MAIN ELEMENTS OF THE O&M PLAN

1. Roles and Responsibilities
2. **Periodic ACM Surveillance**
3. Notification and Labeling
4. **Work Classification and Work Permit System**
5. Training
6. Protection and Medical Surveillance
7. Specialized Work Practices and Procedures
8. Emergency Response Procedures
9. **Periodic Evaluation and Recordkeeping**



# ROLES AND RESPONSIBILITIES



- Together, the **HDOT-AIR Division Asbestos Program Manager [PM]** with assistance from the **District Asbestos Managers, Asbestos Coordinators,** and **Asbestos Consultant** are responsible for preparation, implementation, and updates to the AMP and O&M Plans.
- The Division Asbestos PM oversees the entire HDOT-AIR AMP.
- The District Asbestos Managers, work with the Asbestos PM to oversee the day to day implementation of the AMP and O&M programs.

# DIVISION ASBESTOS PROGRAM MANAGER

- Oversees the District Asbestos Managers, Asbestos Coordinators, and Asbestos Consultant to ensure:
  - AMP and O&M Plans are implemented and updated as needed, but no less than every 3 years
  - Proper reporting and handling of asbestos releases
  - HDOT-AIR employees are properly trained in accordance with applicable asbestos laws and regulations
  - Proper reporting and documentation by contractors
  - Contractors are qualified and accredited to perform ACM disturbance and abatement work
  - HDOT-AIR employees, tenants, and the public have been informed as necessary regarding the presence of ACM, work involving ACM, and the associated hazards of exposure to friable ACM.

# ASBESTOS CONSULTANT



- Creating and updating the HDOT-AIR Asbestos Program Database
- Prepare and update the AMP and O&M plans as needed, but no less than 3 years
- Processing asbestos clearance work orders for maintenance activities on buildings, utilities, and other structures
- Processing asbestos work orders for new construction, renovation, or demolition activities
- Coordinating with contractors performing ACM inspections
- Perform AMP audits and report findings to Division Asbestos PM, District Asbestos Managers, and appropriate Asbestos Coordinators
- Review contractor bid specification and plans related to sampling, abatement and exposure to ACM

# DISTRICT ASBESTOS MANAGERS

- The District Asbestos Managers are responsible for following the AMP and for implementation of Site-Specific O&M Plans.



# ASBESTOS COORDINATORS

- Asbestos Coordinators are responsible for implementation of Site-Specific O&M Plans in day-to-day operations with their unit.



# ACM AT THE AIRPORT AND PERIODIC VISUAL INSPECTIONS

- In accordance with this O&M Plan, visual re-inspection of all known ACM at the airport is to be performed every 3 years.
- The location and condition of ACM is tracked using an electronic environmental compliance software that includes a database and mapping of ACM.
  - The Asbestos Consultant is responsible for ensuring that the database is kept up to date.

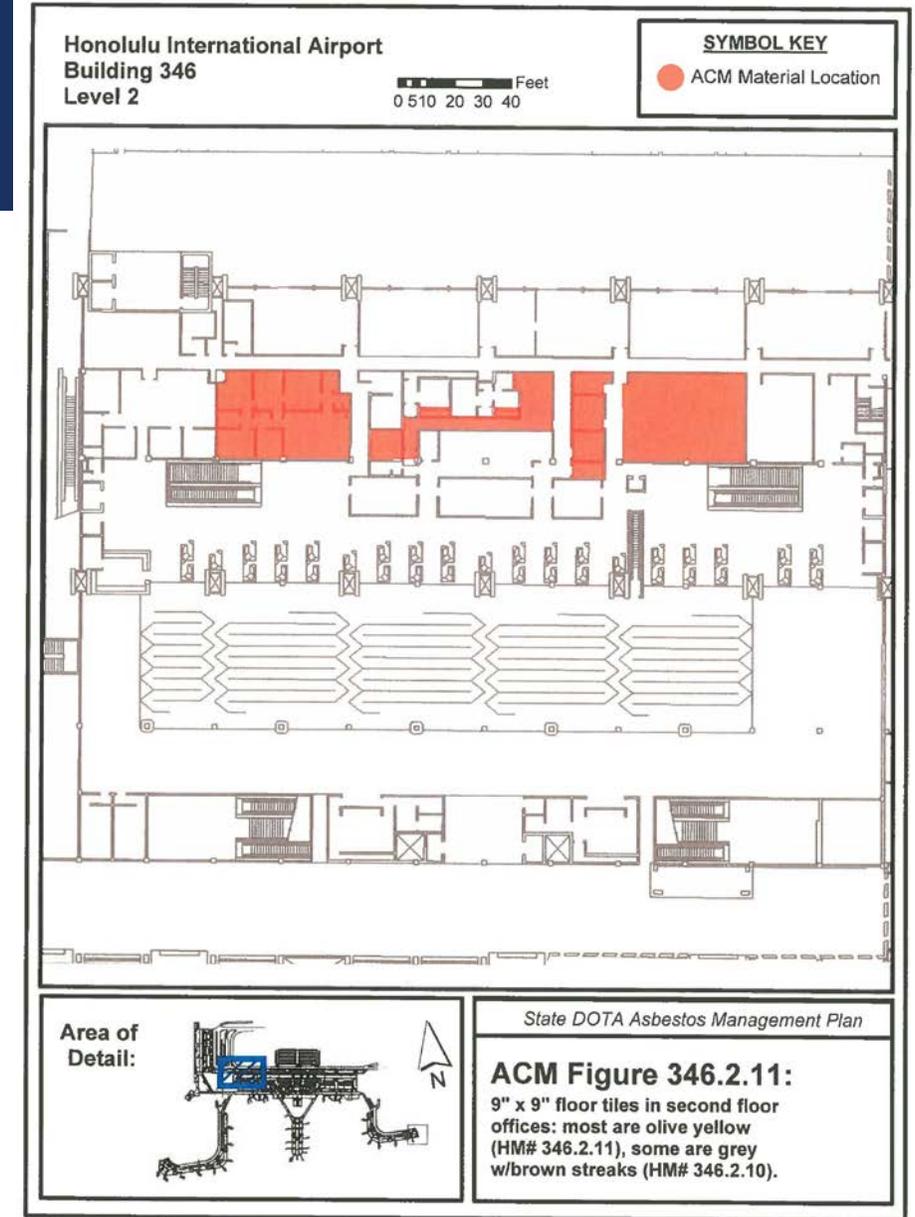
12/12/2018 All Locations Verdant

The screenshot displays the Verdant software interface for tracking Asbestos Contaminated Material (ACM) at the Daniel K. Inouye International Airport. The top navigation bar includes 'Locations', 'Resources', 'Reporting', 'Inbox', 'Administrator', and 'More'. The main area features a Google Map of the airport with several red location markers. To the right of the map is a control panel with options for 'Full Screen', 'Group' (HNL Daniel K. Inouye), 'Status' (Active), 'Module' (All), and buttons for 'Add Location', 'View Alphabetical List', 'View Numerical List', and 'Change Map'. Below the map is a table listing the tracked locations.

Loc #	Location Name	Location Type	ACM Info	
HNL	Daniel K. Inouye International Airport	Site	Y	<input type="button" value="Snap"/>
115	HNL Building 115	Building	Y	<input type="button" value="Snap"/>
120	HNL Building 120	Building	Y	<input type="button" value="Snap"/>
127	HNL Building 127	Building	Y	<input type="button" value="Snap"/>
135	HNL Building 135	Building	N	
150	HNL Building 150	Building	Y	<input type="button" value="Snap"/>
151	HNL Building 151	Building	N	
152	HNL Building 152 Continental Air Cargo	Building	Y	<input type="button" value="Snap"/>
168	HNL Building 168	Building	Y	<input type="button" value="Snap"/>

# ACM AT THE AIRPORT - INVENTORY

- Database is under-construction.
- The specific locations and conditions of ACM are available to HDOT-AIR employees, tenants, contractors, and the general public upon request.
- All HDOT-AIR employees, tenants, and contractors should forward asbestos related reports to the Asbestos Consultant (ESI), so that the most updated information is available in this database.
- Who would you like to have access (read-only) to this database?



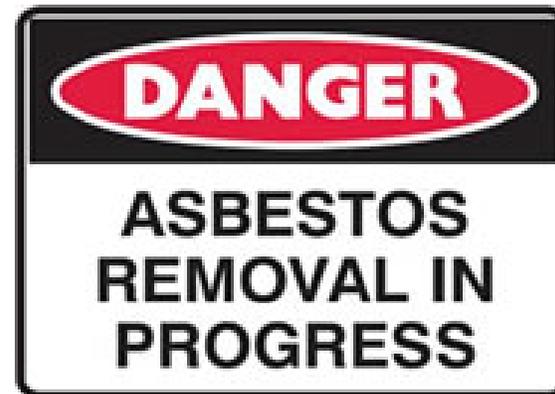
# PERIODIC VISUAL INSPECTIONS



- Purpose: to help ensure that any ACM damage or deterioration will be detected and corrective action taken in a timely manner.
- Performed every three years
- If suspect ACM is observed that has not been sampled, the location and material is noted.
- Response actions could include:
  - Continued monitoring by the Asbestos Consultant;
  - Replace missing ceiling tiles;
  - Repair, removal, or cleaning of the damaged material by an asbestos abatement contractor; or
  - In areas with damaged ACM, restricting access to authorized personnel.

# NOTIFICATION

- HDOT-AIR **employees, tenants, and contractors** shall be notified that ACM is present at the airport and that HDOT-AIR has an AMP and a Site-Specific O&M Plan.
- In addition, HDOT-AIR employees, tenants, and contractors shall be notified of the following:
  - The presence and location of ACM at the airport;
  - Prohibited practices associated with ACM; and
  - Available training.



# NOTIFICATION DESCRIPTION

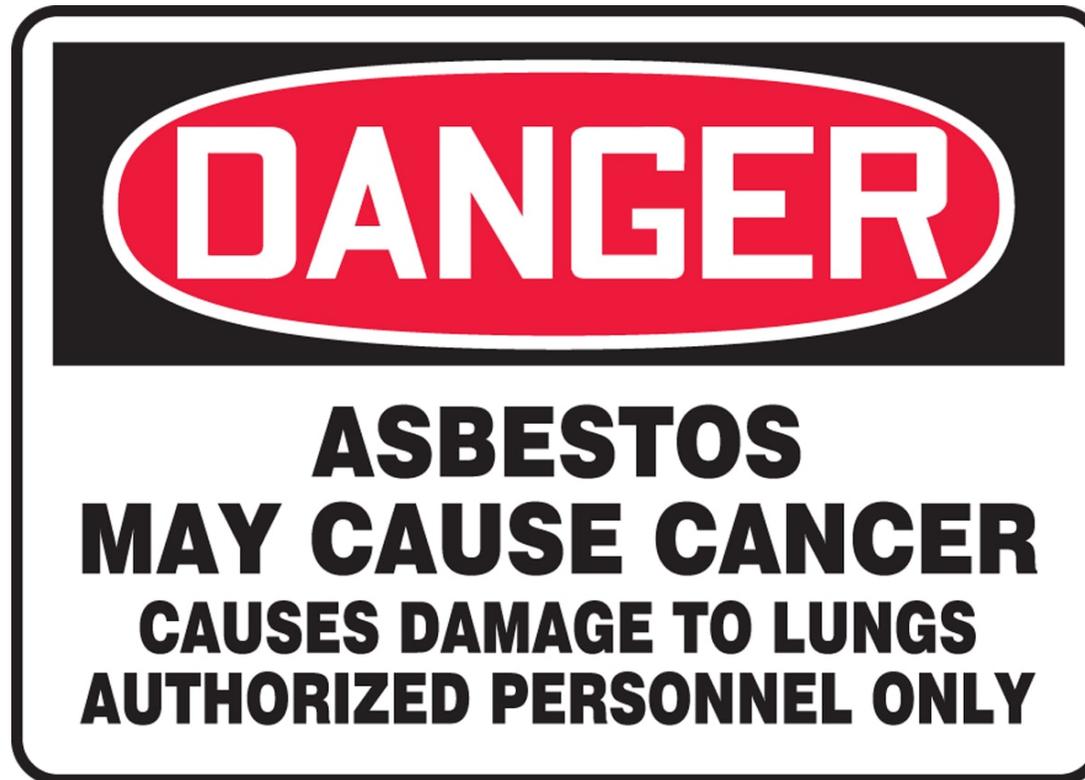
- Activities that have the potential to disturb ACM are prohibited unless the appropriate personnel are performing the work and have the appropriate training. Examples of these activities include the following:
  - Performing work above dropped ceilings where friable ACM is present;
  - Entering or penetrating utility shafts where friable ACM is present;
  - Disturbing floor tiles or floor mastics that contain asbestos;
  - Working in pipe chases that contain friable asbestos; and
  - Disturbing any ACM or suspect ACM.

Refer contractors and any personnel who will be conducting activities that have the potential to disturb ACM at HDOT-AIR facilities to Asbestos Program Manager/Consultant: ESI.



## WARNING SIGNS

- The following warning sign shall be displayed at the approach to all regulated areas so that an individual may read the sign and either
  - 1) avoid the area if not properly trained, or
  - 2) take the necessary protective steps before entering the area (if properly trained and authorized to enter).



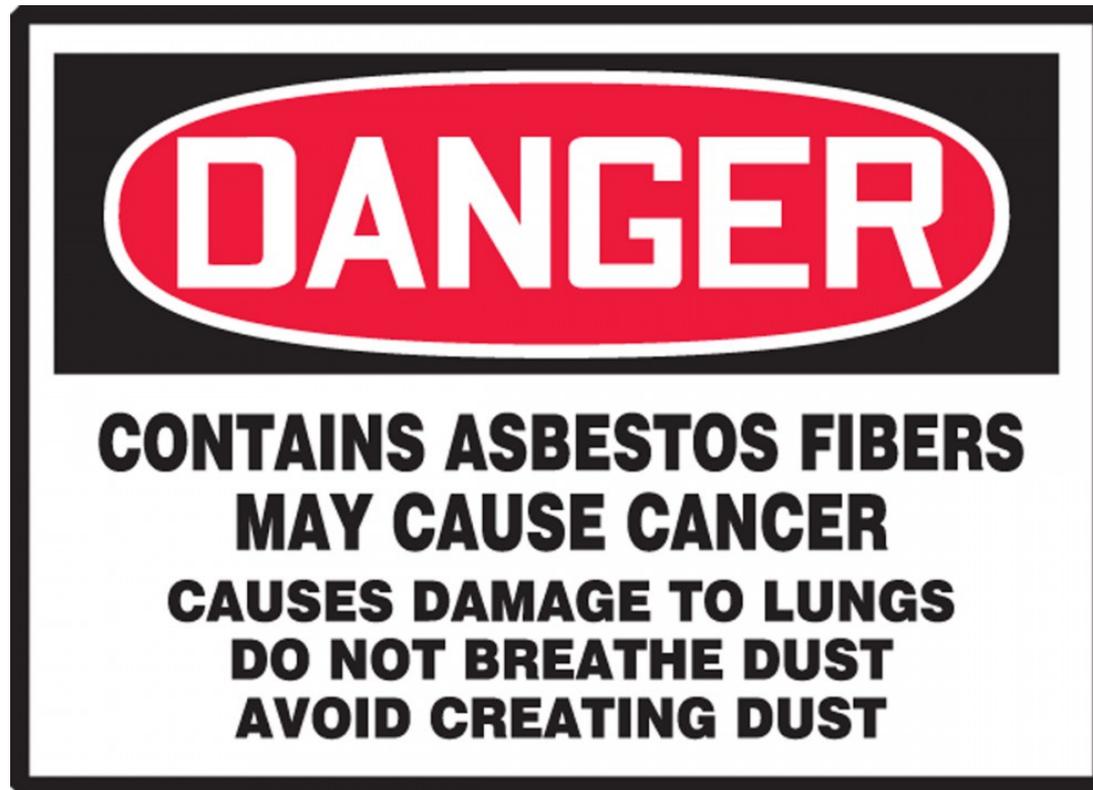
# REGULATED AREAS

- Pipe chases with friable ACM (e.g., friable asbestos-containing fireproofing or thermal system insulation [TSI]);
- Work areas where asbestos abatement is being performed;
- Work being performed above ceilings where ACM is present; and
- Work areas where demolition, renovation, or repair work is being performed and ACM is being disturbed.
- HDOT-AIR personnel and/or the designated Contractor performing the work are responsible for posting the appropriate warning signage.



## WARNING LABELS

- Bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers must be labelled as follows:



# WORK CLASSIFICATION

Class I	Class II	Class III	Class IV
Activities involving the removal of TSI, surfacing ACM, and presumed ACM.	Activities involving the removal of ACM which is not TSI or surfacing material.	Repair and maintenance operations where ACM is likely to be disturbed.	Maintenance and custodial activities during which employees <u>contact but do not disturb</u> ACM.
Performed by a licensed asbestos abatement contractor.	Performed by a licensed asbestos abatement contractor.	Persons who have been provided the 16-hour O&M Training may perform this work.	HDOT-AIR personnel may perform this work provided they have 2-hour Awareness Training.
Workers shall be State of Hawaii Certified Asbestos Abatement Workers.	Workers shall be State of Hawaii Certified Asbestos Abatement Workers.	Limits: must be less than 3 square feet or surfacing ACM, or less than 3 linear feet of TSI.	Example: activities to clean up dust, waste, and debris resulting from Class I, II, or III work.

# MAINTENANCE AND RENOVATION PERMIT SYSTEM - PROCEDURES FOR WORK POTENTIALLY DISTURBING ASBESTOS

Project Number \_\_\_\_\_

## State of Hawaii Department of Transportation - Airports Division Maintenance/Repair Asbestos Review Form

- For any maintenance and/or repair work where suspect ACM will be performed, submit the **Maintenance/Repair** to the Asbestos Consultant (ESI).

### Instructions:

1. Requestor (e.g., HDOT-AIR Project Engineer) will Complete Section 1 of the Maintenance/Repair Asbestos Review Form [M/RAR] and submit form to Division Asbestos Program Manager at Asbestos@esciencei.com. Attach plans and specifications.
2. Division Asbestos Program Manager will review HDOT-AIR Asbestos Database and complete Section 2 of the M/RAR. The M/RAR will be returned to the Requestor. Note, additional work or restrictions may be required (see comments and restrictions) prior to, or while performing the work.
3. The Requestor will be responsible for coordinating and scheduling the additional work and restrictions that may apply.
4. Requestor will Complete Section 3 of the M/RAR after completion of project and submit to Division Asbestos Program Manager. Include all ACM assessment, abatement, and clearance reports.
5. Division Asbestos Program Manager will complete Section 4 and update the HDOT-AIR Asbestos Database. A copy of the final Maintenance/Repair Asbestos Review Form will be returned back to the HDOT-A Project Engineer Manager.

If you have any questions, contact the Asbestos Coordinator by email: Asbestos@esciencei.com, or Phone: (808) 261-0740 and request HDOT Asbestos Coordinator

### SECTION 1: To be completed by Requestor

A. Requestor:

Date:

HDOT-A Project Engineer or Manager:

Department:

Project No:

Project Name:

Email:

Work Phone:

Cell Phone:

B. Location of Work (attach plans):

Airport:

Building, Level, Floor, Area:

C. Description of Work (Check one category and provide brief description)

Demolition/Construction

Renovation

Repair

Abatement

Description of work (attach plans and specifications):

# DEMOLITION/CONSTRUCTION/RENOVATION PLAN APPROVAL

Project Number \_\_\_\_\_

- For all demolition, construction, or renovation work, the plans shall be submitted to the asbestos consultant along with the completed **Construction Asbestos Review Form**. All guidelines provided by the asbestos consultant must be followed, including an evaluation of ACM prior to the beginning of work and a consideration of abatement of existing ACM as part of the project.
- All OSHA and EPA required guidelines, and guidelines provided in the AMP for handling asbestos must be followed.

## State of Hawaii Department of Transportation - Airports Division Construction Asbestos Review Form

### Instructions:

1. Requestor (e.g., HDOT-AIR Project Engineer) will Complete Section 1 of the Construction Asbestos Review Form [CAR] and submit form to Division Asbestos Program Manager at [Asbestos@esciencei.com](mailto:Asbestos@esciencei.com). Attach plans and specifications.
  2. Division Asbestos Program Manager will review HDOT-AIR Asbestos Database and complete Section 2 of the CAR. The CAR will be returned to the Requestor. Note, additional work or restrictions may be required (see comments and restrictions) prior to, or while performing the work.
  3. The Requestor will be responsible for coordinating and scheduling the additional work and restrictions that may apply.
  4. Requestor will Complete Section 3 of the CAR after completion of project and submit to Division Asbestos Program Manager. Include all ACM assessment, abatement, and clearance reports.
  5. Division Asbestos Program Manager will complete Section 4 and update the HDOT-AIR Asbestos Database. A copy of the final Construction Asbestos Review Form will be returned back to the Project Engineer.
- If you have any questions, contact the Asbestos Coordinator by email: [Asbestos@esciencei.com](mailto:Asbestos@esciencei.com), or Phone: (808) 261-0740 and request HDOT Asbestos Coordinator

### SECTION 1: To be completed by Requestor

A. Requestor: \_\_\_\_\_ Date: \_\_\_\_\_  
Project Engineer: \_\_\_\_\_  
Department: \_\_\_\_\_  
Project No: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Email: \_\_\_\_\_ Work Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

### B. Location of Work (attach plans):

Airport: \_\_\_\_\_  
Building, Level, Floor, Area: \_\_\_\_\_

### C. Description of Work (Check one category and provide brief description)

Demolition/Construction      Renovation      Repair      Abatement

# ASBESTOS MANAGEMENT DECISION MATRIX

Submit *HDOT-AIR Maintenance/Repair Asbestos Review Form* or *Construction Asbestos Review Form* to Asbestos Consultant

Is ACM or suspect ACM present?

No

Proceed with work.

Yes

Is sufficient data available to confirm the presence of ACM?

Yes

Perform Asbestos Disturbance Work by Asbestos Contractor\*

Perform Clearance Inspection and Testing by Asbestos Monitoring Consultant\*

No

Perform asbestos survey.\* Do results indicate presence of asbestos?

Yes

No

Proceed with work.

\*Documents generated in the steps described in green-colored boxes need to be kept for AMP records. Provide to asbestos consultant.

Proceed with work following clearance.

Notify Asbestos Consultant Following Completion of Work

Asbestos Consultant Performs Final Inspection

# CONTRACTOR NOTIFICATION AND REQUIREMENTS

- Before a Contractor may begin work at the airport, the **Construction Asbestos Review** form must be submitted to the Asbestos Consultant and all procedures referred to in the completed review form must be followed.
- The Contractor should verify that all employees have received proper training for the work which they will perform.
- If the Contractor encounters any unanticipated ACM or suspect ACM during the course of their work, the Contractor shall notify by phone the Asbestos Consultant within 24 hours of the initial discovery.
  - Work shall not continue until approval has been granted by the Division Asbestos PM.

Refer contractors and any personnel (who haven't received this training) who will be conducting activities that have the potential to disturb ACM at HDOT-AIR facilities to Asbestos Program Manager/Consultant: ESI.



# CLASS I AND II WORK PERMITTING AND APPROVAL

- Prior to performing Class I and II work, an Asbestos Disturbance Work Request Form must be submitted to the HDOT-AIR Asbestos Consultant.
- The Contractor is responsible for preparing and submitting the Asbestos Disturbance Work Request Form.
- The form must be reviewed and completed by the Asbestos Consultant before the ACM disturbance work may begin.
- If the contractor is to perform work that involves the disturbance of friable or RACM greater than 260 linear feet, 150 square feet, or 25 cubic feet, then the abatement contractor shall make the necessary notifications to the regulatory agency.



# CLASS III WORK PERMITTING AND APPROVAL



- Prior to performing Class III asbestos work, an Asbestos Disturbance Work Request Form must be submitted to the Asbestos Consultant.
- The form must be reviewed and completed by the Asbestos Consultant before the ACM disturbance work may begin.
- The Asbestos Coordinator is responsible for preparing and submitting the Asbestos Disturbance Work Request Form.

# OSHA TRAINING

<b>Type 1: Awareness Training</b>	<b>Type 2: Special O&amp;M Training</b>	<b>Type 3: Abatement Worker Training</b>
For custodial staff performing Class IV work.	For maintenance workers performing Class III work.	For workers who perform abatement activities.
2-hour Training	14-hour Training	Ranges from 32 to 40-hour Training
Refresher is required on an annual basis.	Refresher is required on an annual basis.	Abatement Contractors and their employees are required to have current Type 3 Abatement Worker Training.

# EPA AND HDOH TRAINING REQUIREMENTS

- In addition to OSHA training requirements, there are certain EPA and HDOH training requirements and certification required by law.
  - Asbestos Inspector
  - Asbestos Management Planner
  - Asbestos Project Designer
  - Asbestos Project Monitor
  - Asbestos Contractor/Supervisor
  - Asbestos Abatement Worker



*The Division Asbestos Program Manager and Asbestos Consultant should have completed one or more of these requirements.*

- HDOT-AIR personnel are not required to have the training listed nor are they required to perform tasks associated with the training description.

# WORKER PROTECTION PROGRAM

- The worker protection program (part of the O&M plan) establishes written procedures for protecting employees from asbestos exposure in the work environment. HDOT-AIR is responsible for the implementation of and the adherence to the provisions of the medical surveillance and respiratory protection program.
- Compliance to the program includes the following:
  - Recordkeeping;
  - Medical screening of employees;
  - Respirator selection and fit-testing;
  - Purchase of approved equipment;
  - Issuance and use of equipment and associated maintenance;
  - Proper storage and repair of equipment; and
  - Appropriate monitoring of work area conditions.



# RECORDKEEPING

- Records pertaining to the medical examinations, respirator usage (types used), respirator fit-tests, and all personal air monitoring performed will be maintained.
  - These records will be kept on file for at least 30 years beyond the period of employment for affected employees.
- Records to be kept include, but are not limited to:
  - Medical records;
  - List of employees given respirator training, including provider and date;
  - A pre-placement exam and yearly follow-up exam files for each employee performing Class III work; and
  - All personal air monitoring results;



# MEDICAL SURVEILLANCE PROGRAM



- A medical surveillance program is used to:
  1. Determine employees' baseline health status (i.e., health status before beginning asbestos-related work activities);
  2. Monitor their health during the duration of their employment; and
  3. Provide documentation of their health status along with their work history upon completion of their employment.
- Medical monitoring is required for employees who are, or will be, exposed to airborne concentrations of asbestos fibers at or above the TWA and/or excursion limit (i.e., HDOT-AIR employees that perform Class III work).
- Medical exams pertaining to the medical surveillance program shall be provided without cost to the employee at a reasonable time and place.

# RECORDKEEPING

- HDOT-AIR will maintain the following records for each employee subject to medical surveillance.
  - Name and social security number of each employee
  - Employees medical examination results, including the medical history, questionnaire responses, results of any tests, and physicians recommendation
  - Physicians written opinion
  - Employee medical complaints related to asbestos
  - Information provided to physicians
- The above records shall be retained for the duration of employment, plus 30 years
- The training records shall be maintained for one year beyond the last date of employment



# RESPIRATORY PROTECTION PROGRAM

- The Respiratory Protection Program defines procedures for the proper selection, use, and maintenance of respiratory protective equipment.
- The Asbestos Coordinator, with assistance from the Asbestos Consultant, is responsible for establishing, implementing, and updating the Respiratory Protection Program.
- As back up protection, in case engineering controls fail in any way, respiratory protection should be used for handling ACM.
- HDOT-AIR will provide, at no cost to the employee, the appropriate respirator and respirator training.



# RESPIRATOR TRAINING

- Employee training in the use of respirators and their limitations should be conducted by a qualified person before issuing respirators and periodically thereafter.
- Training should include how to conduct fit-checks, how to clean and maintain the respirator, and how to properly don and doff the respirator.



# PROTECTIVE CLOTHING

- Protective clothing must be worn whenever employees may come into contact with asbestos, including going above suspended ceilings, performing any repair or any removal with a glove bag and cleaning of any asbestos-contaminated area.
- Protective clothing consists of disposable coveralls, foot and head coverings, gloves, and eye protection.
- Proper procedures must be followed when removing protective clothing.



# PERSONAL AIR MONITORING

- Personal air-monitoring shall be conducted to determine and document the level of employee exposure, and to assess whether appropriate respirators are being worn.
- If any air monitoring results indicate that an employee is exposed to airborne asbestos fibers at concentrations above 0.1 fibers/cm<sup>3</sup> [f/cc] (OSHA PEL), the engineering and respirator controls will be immediately reevaluated.
- A certified Project Monitor will perform personal air monitoring and simultaneously observe work practices.



# CLASS IV WORK PRACTICES AND PROCEDURES



- Many routine maintenance and custodial activities may be conducted without disturbing ACM. The following general work practices should be followed:
  - Workers should have the appropriate training (Type I Asbestos Awareness Training), be familiar with the O&M Plan, and be familiar with locations of ACM in the building.
  - Contact the Division Asbestos PM if it is suspected that ACM has been disturbed.
  - Be familiar with emergency procedures for minor and major asbestos release episodes.

# CLASS III WORK PRACTICES AND PROCEDURES

- Workers should have appropriate training (Type 2 Special O&M Training), be familiar with the O&M Plan, and be familiar with locations of ACM in the building.
- Conduct an initial site inspection of the work area and complete the necessary “Request for Authorization to Perform Asbestos Disturbance Work” form.
- Workers should always wear PPE.
- Moveable objects will be moved from the vicinity.
- Work area will be contained.
- Wet methods will be used.
- Negative pressure should be maintained.



# EMERGENCY RESPONSE



- Asbestos fibers can be released either spontaneously due to aging or water damage, or through physical disturbance (e.g., maintenance or construction work that disturbs ACM).
- A clear, simple, step-by-step plan that all trained personnel are thoroughly familiar with is essential to control the asbestos hazard quickly and with minimal disruption.
- Asbestos-related problems should immediately be reported directly to the Division Asbestos PM.

# MINOR FIBER RELEASE EPISODE

- Minor fiber release episode: one in which less than 3 square feet of friable ACM or less than 3 linear feet TSI is dislodged.
- Minor fiber release episodes can be treated with standard wet cleaning and HEPA vacuum techniques by HDOT-AIR personnel that have Type 2 Special O&M Training.
- Examples:
  - A small number of fallen or dislodged ceiling tiles.
  - Three or less broken or dislodged floor tiles.
  - Minor water leaks on unabated floors.



# MAJOR FIBER RELEASE EPISODE



- Major fiber release episode: one in which more than 3 square feet of friable ACM or more than 3 linear feet of TSI is dislodged.
- Major fiber release episodes can be serious events, and require a licensed asbestos contractor to be used for clean-up and decontamination.
- Examples:
  - A section of ceiling collapses on an unabated floor.
  - A major water leak occurs on an unabated floor.

# EQUIPMENT AND MATERIALS

- The Asbestos Coordinators will ensure that the following equipment and materials are in stock, clean, well-maintained, and easily accessible.
- This will facilitate efficient operations for any planned asbestos-related work, and if a fiber release episode should occur, the initial response actions will be accomplished in an orderly and timely fashion.
- All manufacturer's information, instructions, and Material Safety Data Sheets will be maintained in an easily accessible file.

# EQUIPMENT

- HEPA vacuums
- Water sprayer
- Ladders
- Plastic drums
- Other tools and equipment: hand-held scrapers, utility knives, carts, buckets, wire saws, and nylon brushes.



# MATERIALS

- Disposable clothing manufactured of Tyvek
- HEPA cartridges
- Polyethylene bags with preprinted Asbestos Caution Labels (OSHA requirements), 6-mil thick
- Polyethylene sheeting (6-mil thick)
- Industrial duct tape (3" width)
- Surfactant mixtures
- Spray adhesive
- Glove bags
- Warning signs
- Other materials: sponges and clean cloths.



# ACM DISPOSAL REQUIREMENTS

- Waste bags will be placed in a covered bin.
- Asbestos waste will be transported to the final dumpsite as soon as possible (no later than one month).
- The asbestos waste will not leave the building until confirmation is received that an approved landfill for asbestos-contaminated debris will accept the waste.
- Properly completed waste disposal manifests shall accompany each load.
- All asbestos waste will be disposed of at a disposal facility licensed to accept asbestos waste.
- A copy of the final waste disposal manifest (i.e., manifest signed by disposal facility) shall be submitted to the Asbestos Coordinator and Division Asbestos Manager.

# EVALUATION SCHEDULE

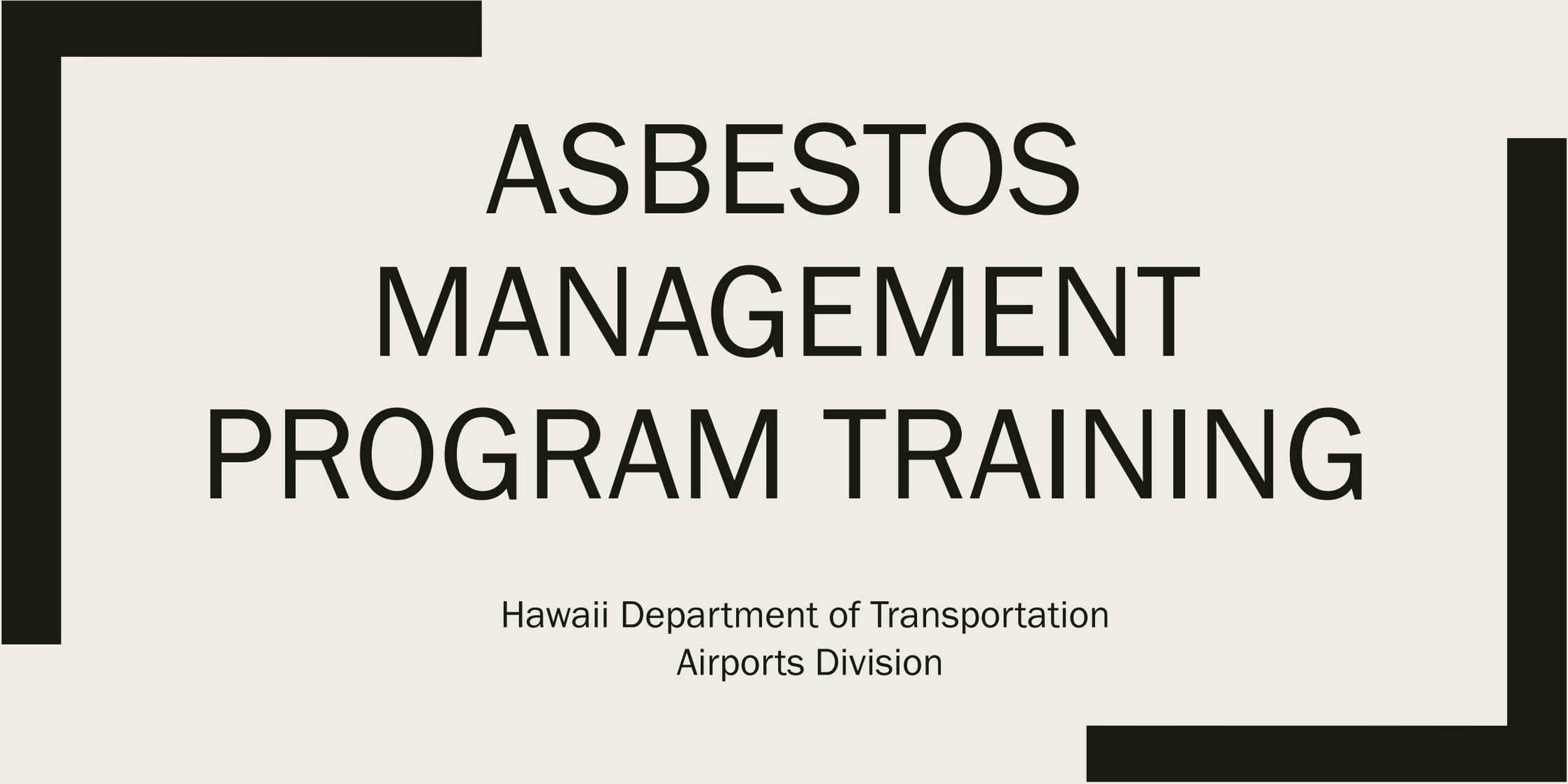
- The O&M Program will be evaluated at the following times:
  - Annually (after each periodic visual inspections). This will encompass any changes in the condition of known ACM and suspect ACM since the previous evaluation.
  - Whenever there is a significant change in federal or state regulations or a significant change in HDOT-AIR policies.
  - Every three years, a full evaluation will be conducted. This will encompass any changes including any addendum, air monitoring results, asbestos surveys, and any other asbestos-related documentation issued since the previous O&M revision.



# DOCUMENTATION AND RECORDKEEPING

- Documentation of ACM Inspections, abatement, and sampling must be maintained within the AMP database. Records include:
  - ACM training and certification records.
  - Inspection reports and ACM inventory.
  - Air monitoring data.
  - Abatement reports.
  - Waste manifest and shipment records.
  - Medical Surveillance records, if necessary, is maintained by HDOT-AIR Personnel Services.



A large, thick black L-shaped graphic is positioned on the left and bottom right sides of the slide, framing the central text.

# ASBESTOS MANAGEMENT PROGRAM TRAINING

Hawaii Department of Transportation  
Airports Division

# Why Asbestos Management Training?

- Asbestos has been identified in several HDOT airport facilities

(i.e., fireproofing, vinyl floor tiles, acoustical ceiling materials, pipe insulation, etc.)



HDOT-AIR must protect its employees, contractors, the general public, and other users of HDOT-AIR facilities from exposure to asbestos found at its facilities.

- United States Environmental Protection Agency [EPA] has training and procedural requirements for all K-12 schools, and for demolition and renovation of any building with asbestos-containing materials [ACM] present.
- Occupational Safety and Health Administration (OSHA) has training and procedural requirements for workers who may contact or disturb ACM during their work activities.



# OSHA Asbestos Standards

- General Industry (29 CFR 1910) Subpart Z, Toxic and Hazardous Substances 1910.1001, Asbestos:
  - [http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=standards&p\\_id=9995](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=9995)
- Safety and Health for Construction (29 CFR 1926) 1926.1101 Asbestos Construction Standards:
  - [http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_id=10862&p\\_table=STANDARDS](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=10862&p_table=STANDARDS)



# AHERA and NESHAPs Asbestos Standards

- **AHERA** (40 CFR 763) Asbestos Hazard Emergency Response Act (K-12 Schools):
  - [https://www.epa.gov/sites/production/files/documents/2003pt763\\_0.pdf](https://www.epa.gov/sites/production/files/documents/2003pt763_0.pdf)
- **NESHAPS** (40 CFR 61, Subpart M) National Emission Standard for Hazardous Air Pollutants (Demolition and renovation of buildings that contain ACM)
  - <https://www.epa.gov/stationary-sources-air-pollution/asbestos-national-emission-standards-hazardous-air-pollutants>



# HDOT-AIR Asbestos Program

## Asbestos Management Plan

State of Hawaii  
Department of Transportation

AIRPORTS DIVISION

Prepared for:

State of Hawaii Department of Transportation, Airports Division  
Engineering Maintenance (AIR-EM)  
300 Rodgers Boulevard, Suite 700  
Honolulu, Hawaii 96819

Prepared by:

Environmental Science International, Inc.  
354 Uluniu Street, Suite 304  
Kailua, Hawaii 96734

ESI Project No. 117019:DO-2

March 6, 2019

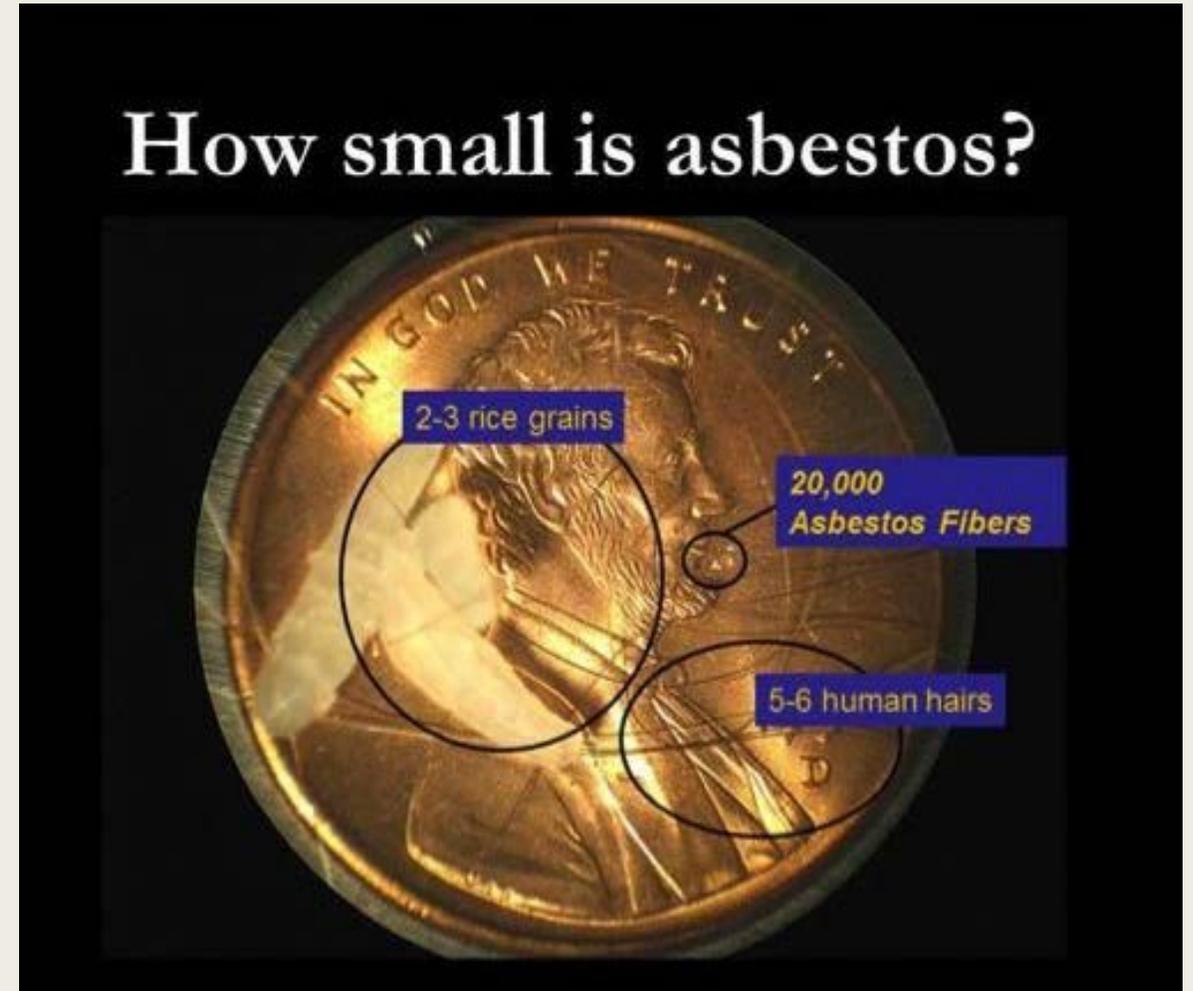
## Operations and Maintenance Plan

Daniel K. Inouye International Airport  
300 Rodgers Boulevard  
Honolulu, Hawaii 96819



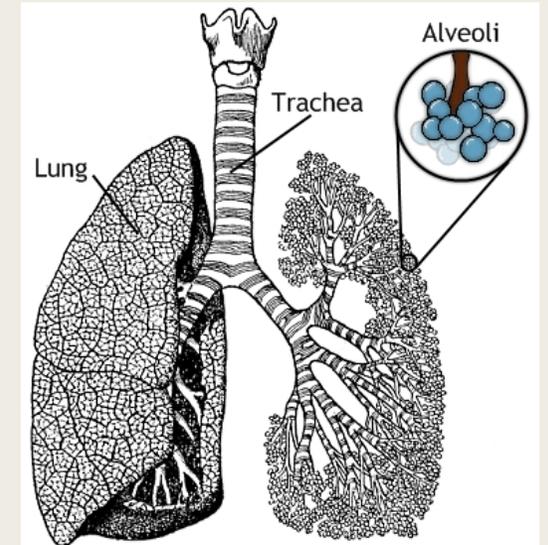
# What is Asbestos?

- It is a naturally occurring mineral made up of long, thin fibers.
- These individual fibers are so small they must be identified using a microscope.
- Because asbestos fibers are so small, once released into the air, they may stay suspended there for hours or even days.



# Asbestos is an Inhalation Hazard

- Airborne asbestos fibers inhaled deep into the lung can cause damage.
- Tiny breathable asbestos fibers are deposited into the alveoli, the ending small air sacs in the lungs.
- The body's defense mechanisms cannot break down the fibers.
  - *Asbestosis*
  - *Mesothelioma*
  - *Lung Cancer*
- Could take 20 years for one asbestos fiber to turn into one of these deadly diseases.
- **The severity of the disease in a person is determined by how many fibers entered their body; the duration of exposure; and whether they smoked cigarettes.**



# Presence of ACM in the Daniel K. Inouye International Airport

- Vinyl floor tile and associated mastic
- Sheet vinyl flooring (linoleum)
- Acoustic fiberboard ceiling tiles
- Plaster walls and overspray
- Transite wall panels
- Window caulking
- Spray-on fireproofing
- Acoustical ceiling finish
- Sink insulation
- Roofing materials (felt paper and asphaltic roofing compounds)

# Building 332

- Ewa Domestic Ticket Lobby
  - *Asbestos-Containing Black Tar Sealant on Piping on the first floor*
  - *Asbestos-Containing Black Thermal System Insulation on Piping on the second floor*



# Building 339

- Diamond Head Ticket Lobby
  - *Asbestos-Containing Black Tar Sealant on Piping on the first floor*
  - *Asbestos-Containing Vinyl Floor Tiles on the third floor*



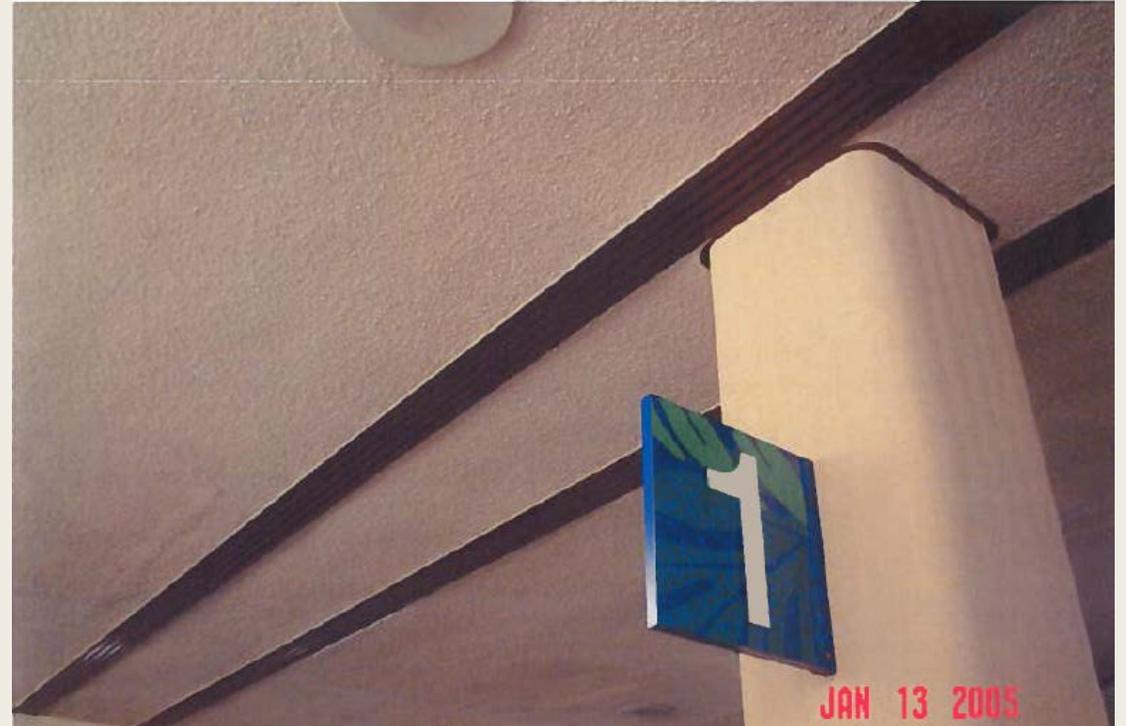
# Building 346

- International Arrivals Building
  - *Asbestos-Containing Acoustic Plaster in the plenum on first floor*
  - *Asbestos-Containing Plaster on ceiling on first and second floor*



# Building 346

- International Arrivals Building
  - *Asbestos-Containing Plaster Ceiling on second floor*
  - *Asbestos-Containing Fireproofing above plenum on second floor*



# Building 346

- International Arrivals Building
  - *Asbestos-Containing Plaster on ceiling beams on third floor (Aloha Lounge)*



# Building 360

- Ewa Concourse
  - *Asbestos-Containing Vinyl Floor Tiles on first floor*



# Building 360

- Ewa Concourse
  - *Asbestos-Containing Vinyl Floor Tiles on first floor*
  - *Asbestos-Containing 12"x12" Ceiling Tiles on first floor ceiling.*



# Friability of ACM

- Asbestos is present in two states: Friable and Non-Friable
- **Friable**
  - *When dry, ACM is considered friable, it can be crumbled, pulverized, or reduced to powder by hand pressure.*
  - *Releases fibers with slightest contact.*
  - *If friable ACM is damaged or disturbed, it presents an inhalation risk.*
- Non-Friable
  - *Not easily crumbled by hand, but can be crumbled by mechanical means.*
  - *Possibility of airborne exposure.*
  - *Safer to be around if not disturbed.*

# Vinyl Floor Tiles

Non-Friable



Friable



# Ceiling Tiles

Non-Friable



Friable



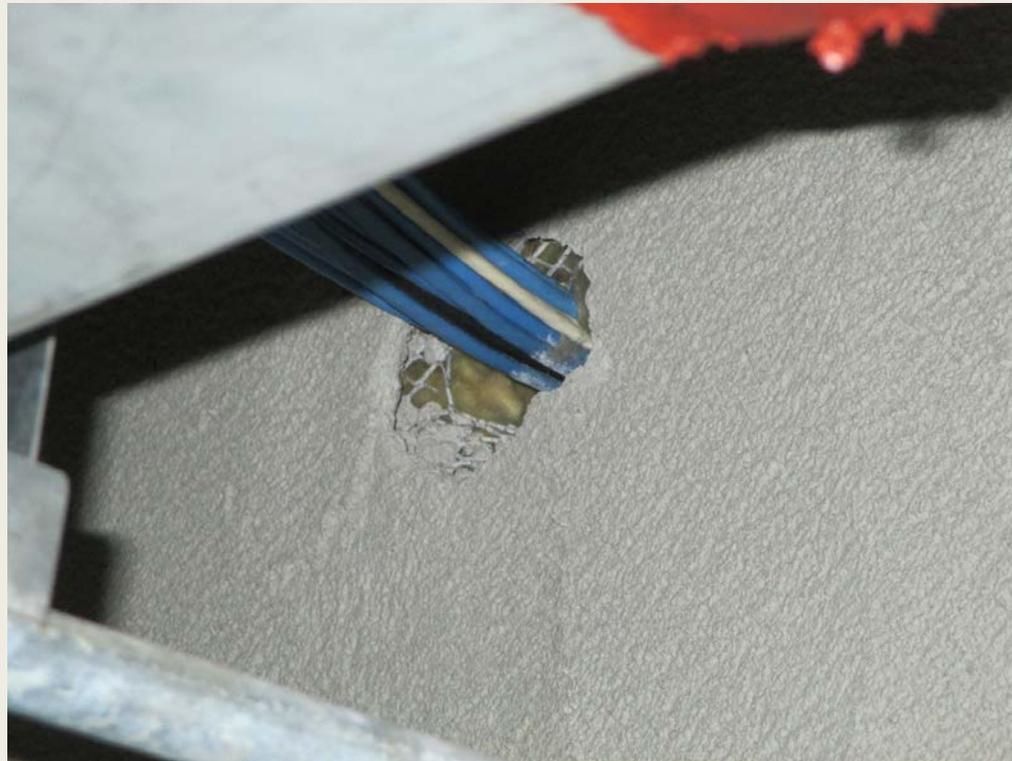
# Fireproofing

Friable



# Plaster Coating

Potential to become friable



# Overspray

Potential to become friable



# Recognition of ACM Damage



FRIABLE VS.  
NON-FRIABLE



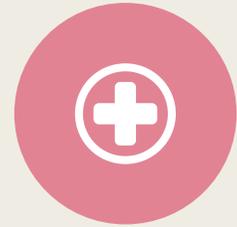
WATER DAMAGE



DELAMINATION



DETERIORATION



PHYSICAL  
DAMAGE

# Friability



# Water Damage



# Corrosion



# Delamination



# Deterioration



# Physical Damage

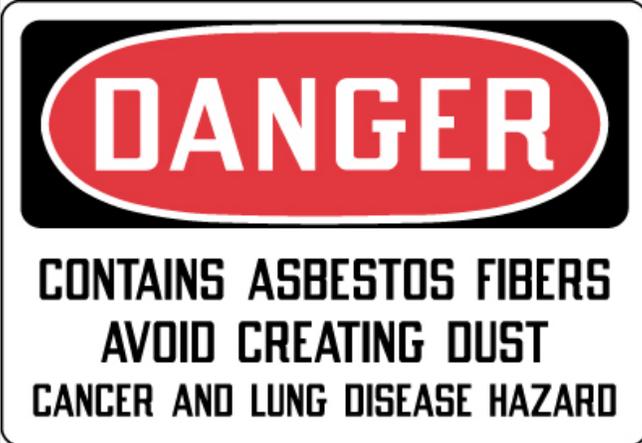
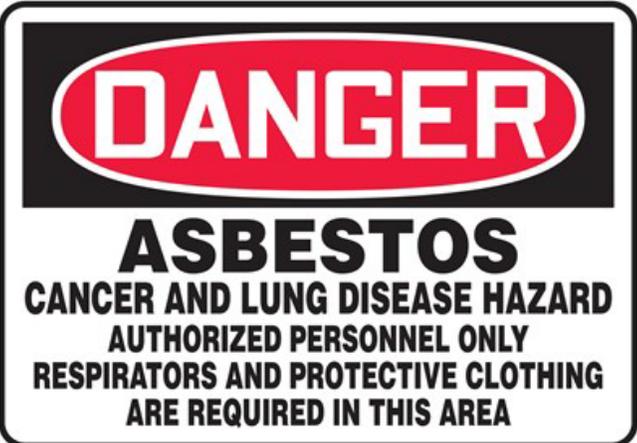


# How to Avoid Asbestos Exposure

- If you do not know that a building material is asbestos free, **do not** disturb it.

If it is ACM, <i>never</i> do the following:	
Drill	Break
Hammer	Damage
Cut	Sand
Saw	Disturb

# Warning Signs

Waste Disposal	Work Area	ACM Material Warning Sign
 <p><b>DANGER</b> CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD</p>	 <p><b>DANGER</b> <b>ASBESTOS</b> CANCER AND LUNG DISEASE HAZARD AUTHORIZED PERSONNEL ONLY RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA</p>	 <p><b>CAUTION</b> <b>ASBESTOS</b> <b>— HAZARDOUS —</b> DO NOT DISTURB WITHOUT PROPER TRAINING &amp; EQUIPMENT</p>

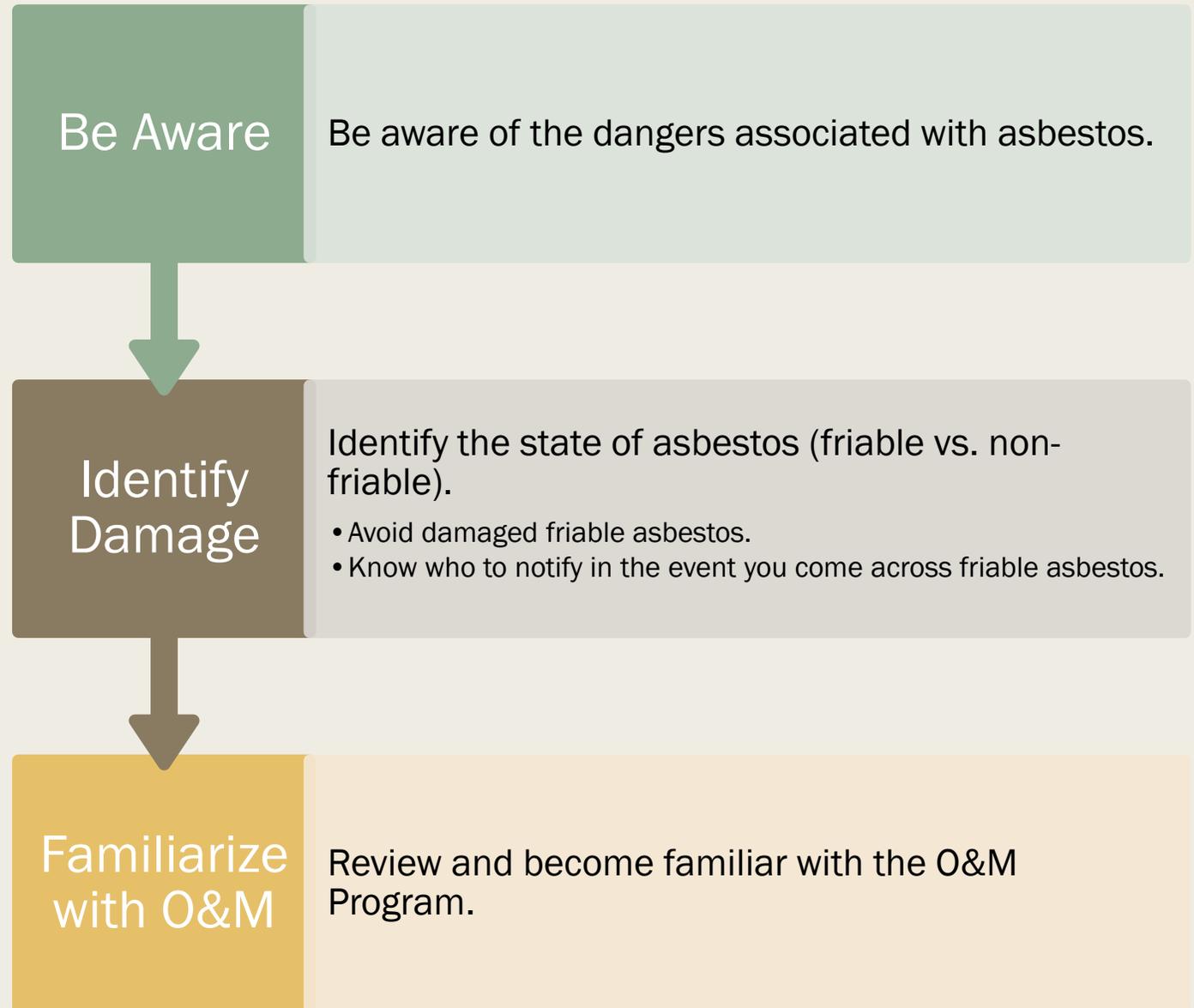
# Fiber Release Procedures

1. Contact the Division Asbestos Program Manager if it is suspected that ACM has been disturbed.
2. Restrict access to the area. Evacuate everyone in the area.
3. Wet the material to prevent further fiber release.
4. Evaluate the impact to ventilation system.
5. Clean up the debris and place into air-tight containers.
6. Repair the damaged ACM.
7. Spray affected area with encapsulant.
8. Collect air samples, if necessary, to verify the air quality is safe.
9. **Write an incident/clearance report to document the response activities.**

# Worst Case Scenario: Asbestos Abatement

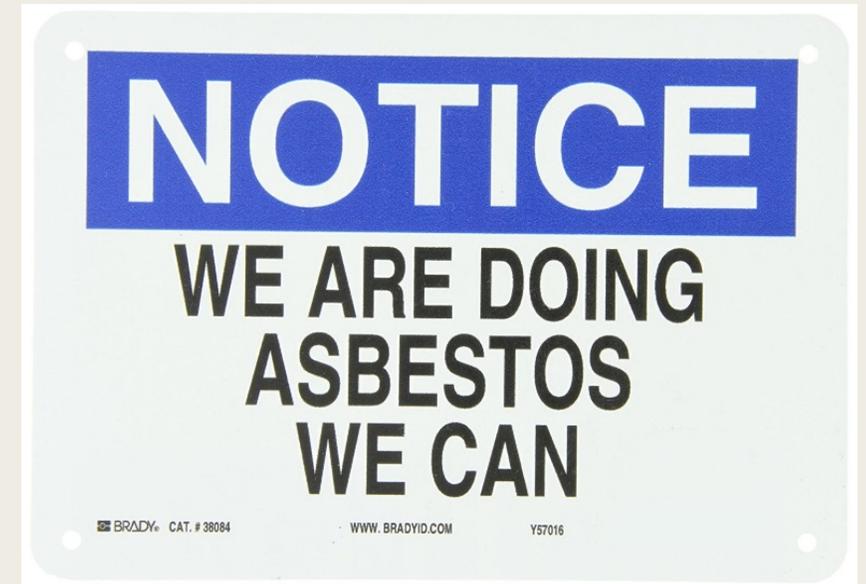


# How to Protect Yourself



# Summary

- We talked about the definition of asbestos and its background
- Describe where asbestos can be found
- Explain associated health hazards
- Recap on protection measures for yourself and coworkers against asbestos hazards
- Review the regulations associated with asbestos and know who to contact if suspect ACM is encountered



# Contact Information

- **We are here to help:**
- Division Asbestos Program Manager [ESI]
  - *Phone: (808) 261-0740*
  - *Email: [Asbestos@esciencei.com](mailto:Asbestos@esciencei.com)*
- Robert Chong, Program Manager
  - *[Rchong@esciencei.com](mailto:Rchong@esciencei.com)*
- Traci Sylva, Asbestos Coordinator
  - *[Tsylva@esciencei.com](mailto:Tsylva@esciencei.com)*
- Natasha Griswold, Asbestos Inspector
  - *[Ngriswold@esciencei.com](mailto:Ngriswold@esciencei.com)*



Presentation  
Of  
Asbestos Management Program

# Additional Reference Materials



## Daniel K. Inouye International Airport Asbestos Awareness Training

### Background

#### **What is Asbestos?**

- It is a naturally occurring mineral, made up of long thin fibers.
- Asbestos is divided into two groups, *serpentine* and *amphibole*.
- Chrysotile is the only type of asbestos in the serpentine group. It accounts for approximately 93% of the asbestos found in buildings and is commonly known as the "white asbestos."
- The other five types of asbestos are in the amphibole group: Amosite, Crocidolite, Anthophyllite, Tremolite, and Actinolite.

#### **Definition of Asbestos-Containing Materials [ACM]: >1% asbestos**

##### **Friable**

- When dry, an ACM is considered friable if it can be crumbled, pulverized, or reduced to powder by hand pressure.
- Releases fibers with slightest contact.
- If friable ACM is damaged or disturbed, it presents an inhalation risk.

##### **Non-Friable**

- Not easily crumbled by hand, but can be crumbled by mechanical means.
- Possibility of airborne exposure.
- Safer to be around if not disturbed.

#### **EPA's Three Categories of ACM:**

- Surface Materials: friable, ACM spray-on or troweled on surfaces, fireproofing.
- Thermal system insulation: friable, pipe lagging or wrap, insulation, and gaskets.
- Miscellaneous: non-friable products, floor or ceiling tiles, roofing tiles, concrete pipes, siding, or fabric.

#### **Where is asbestos commonly used?**

- Asbestos can be found in over 3,000 products. Asbestos is commonly found in floor and ceiling tiles, mastics and adhesives, roof shingles and flashing, siding, insulation, pipe cement, joint compound, fireproofing material, and automobile brakes and clutch linings.

### Health Affects

#### **How are people exposed to asbestos?**

Asbestos can enter the body by inhalation, ingestion, and skin contact. Inhaling asbestos is the most important hazard.

#### **Asbestos-Related Diseases**

Asbestosis – scarring of the lung

Lung Cancer – malignant tumor of the bronchi covering

Mesothelioma – Cancer of the chest lining or abdominal wall

#### **Determining Factors of Developing Asbestos-Related Diseases**

- Amount and duration of exposure
- Whether or not you smoke

#### **Smoking and Asbestos**

- Cigarette smokers are 50 to 90 times more likely to contract lung cancer than the average non-smoker.

## **How to Protect Yourself**

- Be aware of the dangers associated with asbestos
- Identify the state of asbestos (friable vs. non-friable)
  - Avoid damaged friable asbestos
  - Know who to notify in the event you come across friable asbestos
- Review and become familiar with the AMP and O&M Program

## **Presence of ACM in the Building:**

Types of ACM identified in the inspection reports for the Daniel K. Inouye International Airport:

- Vinyl- asbestos floor tiles and mastic
- Sheet vinyl flooring (Linoleum)
- Asbestos containing ceiling tiles
- Transite asbestos wall panels
- Roofing materials (felt paper and asphaltic roofing compounds)
- Fire-proofing material on the ceiling

## **Recognition of ACM Damage and Deterioration**

- Friability
- Water Damage
- Delamination
- Deterioration
- Physical Damage

## **O&M Program for the Building**

It is the policy of the Daniel K. Inouye International Airport employees to not conduct any activity that intentionally disturbs known ACM. This type of work should be performed by qualified asbestos abatement contractors using SOPs designed for these activities.

## **Regulations**

- 29 CFR 1910.1001
  - Occupational Safety and Health Standards for Asbestos
- 29 CFR 1926.1101
  - Safety and Health Regulations for Construction for Asbestos
- Hawaii Administrative Rules, Title 11
  - Chapter 501 – Asbestos Requirements
  - Chapter 502 – Asbestos-Containing Materials in Schools
  - Chapter 503 – Fees for Asbestos Removal and Certification
  - Chapter 504 – Asbestos Abatement Certification Program
- 40 CFR 61, Subpart M
  - National Emission Standard for Hazardous Air Pollutants
  - Demolition and renovation of buildings that contain ACM

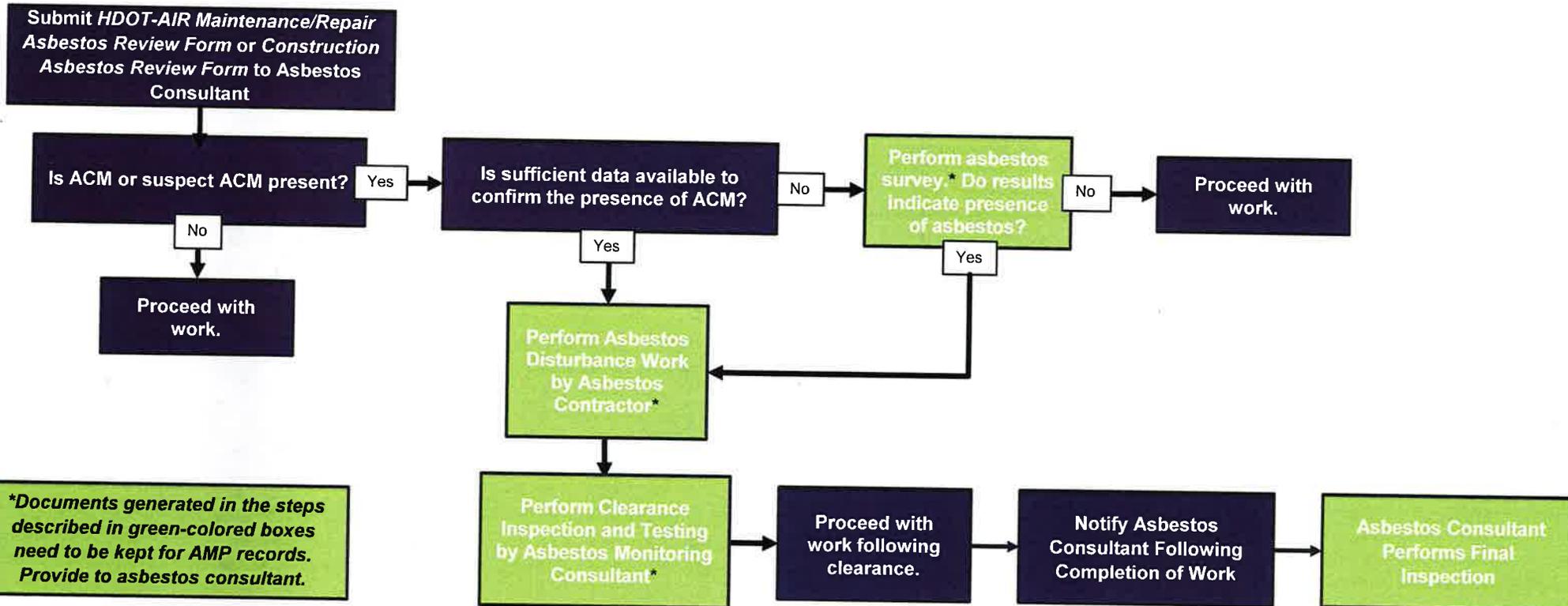
**Please contact ESI with any questions or concerns at:**



E-mail: [asbestos@esciencei.com](mailto:asbestos@esciencei.com)

Phone: (808) 261-0740 Ext. 134, ask for the DOT-Airports Asbestos Consultant.

# ASBESTOS MANAGEMENT DECISION MATRIX



**State of Hawaii Department of Transportation - Airports Division  
Maintenance/Repair Asbestos Review Form**

**Instructions:**

1. Requestor (e.g., HDOT-AIR Project Engineer) will Complete Section 1 of the Maintenance/Repair Asbestos Review Form [M/RAR] and submit form to Division Asbestos Program Manager at Asbestos@esciencei.com. Attach plans and specifications.
  2. Division Asbestos Program Manager will review HDOT-AIR Asbestos Database and complete Section 2 of the M/RAR. The M/RAR will be returned to the Requestor. Note, additional work or restrictions may be required (see comments and restrictions) prior to, or while performing the work.
  3. The Requestor will be responsible for coordinating and scheduling the additional work and restrictions that may apply.
  4. Requestor will Complete Section 3 of the M/RAR after completion of project and submit to Division Asbestos Program Manager. Include all ACM assessment, abatement, and clearance reports.
  5. Division Asbestos Program Manager will complete Section 4 and update the HDOT-AIR Asbestos Database. A copy of the final Maintenance/Repair Asbestos Review Form will be returned back to the HDOT-A Project Engineer Manager.
- If you have any questions, contact the Asbestos Coordinator by email: Asbestos@esciencei.com, or Phone: (808) 261-0740 and request HDOT Asbestos Coordinator

**SECTION 1: To be completed by Requestor**

**A. Requestor:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**HDOT-A Project Engineer or Manager:** \_\_\_\_\_

**Department:** \_\_\_\_\_

**Project No:** \_\_\_\_\_

**Project Name:** \_\_\_\_\_

**Email:** \_\_\_\_\_ **Work Phone:** \_\_\_\_\_ **Cell Phone:** \_\_\_\_\_

**B. Location of Work (attach plans):**

**Airport:** \_\_\_\_\_

**Building, Level, Floor, Area:** \_\_\_\_\_

**C. Description of Work (Check one category and provide brief description)**

\_\_\_\_\_ Demolition/Construction \_\_\_\_\_ Renovation \_\_\_\_\_ Repair \_\_\_\_\_ Abatement

**Description of work (attach plans and specifications):**

**SECTION 2: Review - To be completed by the Division Asbestos Program Manager**

\_\_\_\_\_ ACM is present.

\_\_\_\_\_ ACM is not present.

\_\_\_\_\_ The presence of ACM is unknown

Comments or Restrictions:

**Section 3: Completion Notification - To be completed by Requestor and returned to Division Asbestos Manager after completion of project.**

\_\_\_\_\_ This work was cancelled

\_\_\_\_\_ This work described above was complete on the following date \_\_\_\_\_

Attached all ACM assessment reports, abatement documentation, and clearance reports

**Section 4: Final Inspection - To be completed by Asbestos Division Program Manager after completion of project.**

A final inspection of ACM was performed, and the database was updated.

**Date of Inspection:** \_\_\_\_\_ **Asbestos Consultant:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**State of Hawaii Department of Transportation - Airports Division  
Construction Asbestos Review Form**

Instructions:

1. Requestor (e.g., HDOT-AIR Project Engineer) will Complete Section 1 of the Construction Asbestos Review Form [CAR] and submit form to Division Asbestos Program Manager at Asbestos@esciencei.com. Attach plans and specifications.
  2. Division Asbestos Program Manager will review HDOT-AIR Asbestos Database and complete Section 2 of the CAR. The CAR will be returned to the Requestor. Note, additional work or restrictions may be required (see comments and restrictions) prior to, or while performing the work.
  3. The Requestor will be responsible for coordinating and scheduling the additional work and restrictions that may apply.
  4. Requestor will Complete Section 3 of the CAR after completion of project and submit to Division Asbestos Program Manager. Include all ACM assessment, abatement, and clearance reports.
  5. Division Asbestos Program Manager will complete Section 4 and update the HDOT-AIR Asbestos Database. A copy of the final Construction Asbestos Review Form will be returned back to the Project Engineer.
- If you have any questions, contact the Asbestos Coordinator by email: Asbestos@esciencei.com, or Phone: (808) 261-0740 and request HDOT Asbestos Coordinator

**SECTION 1: To be completed by Requestor**

**A. Requestor:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Project Engineer:** \_\_\_\_\_  
**Department:** \_\_\_\_\_  
**Project No:** \_\_\_\_\_  
**Project Name:** \_\_\_\_\_  
**Email:** \_\_\_\_\_ **Work Phone:** \_\_\_\_\_ **Cell Phone:** \_\_\_\_\_

**B. Location of Work (attach plans):**

**Airport:** \_\_\_\_\_  
**Building, Level, Floor, Area:** \_\_\_\_\_

**C. Description of Work (Check one category and provide brief description)**

\_\_\_\_\_ Demolition/Construction    \_\_\_\_\_ Renovation    \_\_\_\_\_ Repair    \_\_\_\_\_ Abatement

**Description of work (attach plans and specifications):**

**SECTION 2: Review - To be completed by the Division Asbestos Program Manager**

\_\_\_\_\_ ACM is present.  
 \_\_\_\_\_ ACM is not present.

Comments or Restrictions:

**Section 3: Completion Notification - To be completed by Requestor and returned to Division Asbestos Manager after completion of project.**

\_\_\_\_\_ This work was cancelled  
 \_\_\_\_\_ This work described above was complete on the following date: \_\_\_\_\_  
 Attached all ACM assessment reports, abatement documentation, and clearance reports.

**Section 4: Final Inspection - To be completed by Asbestos Division Program Manager after completion of project.**

A final inspection of ACM was performed, and the database was updated.

**Date of Inspection:** \_\_\_\_\_ **Asbestos Consultant:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

# Training Quiz

2019 DOTA Construction Stormwater Training Workshop  
(November 19, 2019)



## Hawaii Department of Transportation, Airports Division 2019 Construction Training Quiz



NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

COMPANY: \_\_\_\_\_

AIRPORT: \_\_\_\_\_

1. What is (are) the contaminated media(s) of concern at the airport?
  - a. Groundwater
  - b. Soil
  - c. Soil vapor
  - d. All of the above
2. All excavated soils and groundwater from areas of known or suspected contamination shall be tested to ensure proper handling and disposal.
  - a. True
  - b. False
3. All of the following documents must be included in the Construction Project Review Package, EXCEPT:
  - a. Current Project Drawings and Specifications
  - b. Application for the Permit to Discharge into the State Airport Drainage System Relating to Construction Projects
  - c. Contractor's Site-Specific BMP Plan
  - d. Design Review Checklist Form or Notification Form for Sites Disturbing Less Than One Acre
4. The Programmatic EHE/EHMP is applicable to all 15 airports operated by DOTA.
  - a. True
  - b. False
5. Which of the following statements is TRUE?
  - a. The Construction Project Review Package should be submitted for AIR-EE's review with or after the 60% Design Submittal Package.
  - b. The Construction Project Review Package should be submitted for AIR-EE's review when the Project is advertised for Bid.
  - c. The Construction Project Review Package should be submitted for AIR-EE's review before or with the 90% Design Submittal Package.
  - d. Answers a and c
6. What is the primary information needed on the Contaminated Soil and Groundwater Review Form?
  - a. Estimated project cost
  - b. Location and scope of project
  - c. Project schedule
  - d. Types of building materials
7. The Programmatic EHE/EHMP does not include release response and release reporting procedures.
  - a. True
  - b. False
8. Soils excavated from areas of known or suspected contamination shall be segregated by the Contractor's Qualified Environmental Professional into three (3) separate piles that are classified as:
  - a. Re-use on-site, haul-out / disposal, and re-use off-site
  - b. Contaminated with metals, contaminated with petroleum, and contaminated with pesticides.
  - c. Clean, Contaminated / Suspected Contaminated, and Grossly Contaminated.
  - d. None of the Above.
9. A Notice of General Permit Coverage (NGPC) under HAR 11-55 Appendix C is required for any construction project disturbing 1 or more acres of land.
  - a. True.
  - b. False.
10. The need for a Site-Specific EHMP will be indicated in the construction bid specification.
  - a. True
  - b. False