

PIPELINE SAFETY PUBLIC AWARENESS

As a part of Hawaiian Electric's Pipeline Public Awareness Program, you are receiving this safety brochure because you live or work in the vicinity of our pipeline. Hawaiian Electric utilizes the pipelines to transport fuel required to generate power reliably and efficiently, while maintaining a commitment to operate in a safe and environmentally responsible manner. We are committed to complying with all safety and environmental protection requirements for our customers, employees, and our community.

Hawaiian Electric's pipeline is registered with the National Pipeline Mapping System (NPMS). The NPMS Public Map Viewer is a web-based mapping application designed to assist the general public with displaying data related to gas transmission pipelines, hazardous liquid pipelines, and liquefied natural gas plants. For a list of pipeline operators in your area, visit: www.npms.phmsa.dot.gov.

For more information about the Kahe and Waiau pipelines, please visit: www.hawaiianelectric.com and click on "Safety & Outages", then "Outdoor Safety", and finally "Pipeline and Digging Safety".



PIPELINE MARKERS

With the majority of the Kahe and Waiau pipelines buried underground, Hawaiian Electric uses marker signs to identify that there are pipelines located in the near vicinity. Pipeline markers help identify the approximate location of underground pipelines. The markers contain important information such as type of product transported in the pipeline, the pipeline operator, and the number to call in case of an emergency. The markers may not be present in all areas; however, they can be found where a pipeline intersects a street, fence line, highway, or railway.

The safety aspects of Hawaiian Electric's pipeline operations are audited and inspected frequently by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (U.S. DOT PHMSA).

For more information, call 1-202-366-4595 or visit www.phmsa.dot.gov/pipeline



EXAMPLE OF PIPELINE MARKER

Important Emergency Numbers

Hawaiian Electric 808-543-7685

(24-hour pipeline emergency number)
Call if you detect a leak or to report a damaged pipeline marker.

PIPELINE SAFETY

Pipelines are considered to be the safest way to transport fuels. Before pipelines are placed into service, they are tested to a much higher pressure than used in actual day-to-day use. The primary federal agency responsible for the safety of pipelines is the Pipeline and Hazardous Materials Safety Administration (PHMSA) of the U.S. Department of Transportation. PHMSA develops, maintains, and enforces these regulations. These regulations are in place to ensure that the pipelines are installed correctly and operated safely to provide years of safe and reliable service. PHMSA also has the responsibility of inspecting pipeline companies periodically to ensure compliance with all regulations.

As public safety is the highest priority for a pipeline operator, Hawaiian Electric diligently monitors and inspects the pipelines in Kalaeloa, Ko Olina, Kapolei, 'Ewa, Waipahu, and Pearl City with regular bi-weekly inspections along the pipeline to check for any damage or changes in surrounding conditions that might indicate a potential hazardous condition.

Hawaiian Electric developed and maintains an Integrity Management Plan (IMP) that outlines how we assess, inspect, and repair the pipelines to ensure safe operations and to keep the surrounding communities and environment safe. This plan, its operating procedures, and pipeline records are frequently audited by PHMSA.

An Emergency Response Plan is also maintained to keep appropriate Federal and State emergency officials and public officials in your area informed about the status of our pipelines and what to do in case of an emergency.

Our pipelines carry Low Sulfur Fuel Oil (LSFO). LSFO is a combustible liquid that is used as a source of thermal energy. Our pipelines can also carry Diesel that is used during certain maintenance activities.

There are three primary indicators to recognize the signs of a potential leak in a pipeline:

The sight, sound, and smell test:



Sight

Dead or off-colored vegetation, pools of liquid, or clouds of vapor



Sound

Unusual noises such as a hissing or "bubbling" sound



Smell

An unusual or strong petroleum odor

What should you do if there is a pipeline emergency, such as a leak?

If you should detect a leak, remember:

- First, leave the area immediately on foot. Low sulfur fuel oil is combustible. Do not create sparks by lighting a match, smoking, or starting vehicles; turn off all equipment, vehicles, lights and cell phones.
- Avoid contact with visible liquid and vapor clouds.
- After leaving to a safe location, call 911 to request the local fire department or other emergency services.
- If it is safe to do so, warn others to stay away from the area and to extinguish sources of ignition.
- Call Hawaiian Electric's 24-hour pipeline emergency phone number at (808) 543-7685. Provide your name, phone number, a description of the leak, and its location. We will immediately dispatch personnel to the site to handle the emergency.

EXCAVATION SAFETY

While every precautionary measure is taken to safeguard pipelines, accidents do occur. Simple activities such as installing a mailbox or fence, landscaping, general construction and other excavation type activities can cause damage to the pipeline and its protective coating. Records show that damage from excavation-related activities, particularly from equipment digging into pipelines, is the number one cause of pipeline accidents. Without proper coordination, excavation activities in the vicinity of underground pipelines can result in very dangerous situations.

To prevent pipeline emergencies, please call before you dig:

- Hawaii One Call Law requires all excavators planning to conduct an excavation on public or private property to notify the Hawaii One Call Center (HOCC) five working days prior to digging. The Hawaii State law (HRS 269E) and additional resources can be found by visiting: https://digsafelyhawaii.com and www.callbeforeyoudig.org/hawaii.
- Before digging near or around any buried pipeline, contact the HOCC at 1-866-423-7287 or 811. The call center is available 24 hours a day, seven days a week, and will alert Hawaiian Electric and other utility operators so we can properly mark or indicate the underground pipeline path, provide information about the route, or give clearance to dig. Online submittals may also be made at: https://hi.itic.occinc.com.
- A federally-mandated national "Call Before You Dig" number, 811, was created to help protect you from unintentionally hitting underground utility lines while working on digging projects. Smart digging means calling 811 before each job to get the underground utility lines marked for FREE. To learn more about 811, visit www.call811.com.

WHEN DO I NOTIFY 811?

Every digging project, whether it is large or small, commercial or as a homeowner, requires a notification to 811 at least one week before digging, but no more than 28 days prior to the start of work.

Common examples of when to notify 811 include:

- Installing a mailbox, fence, or rock/CMU wall.
- Planting trees or shrubbery.
- Building a deck or patio.
- Excavating a new garden area.
- Installation of a water line, sewer line, electrical conduit, or storm drain piping.

Did you know?

Nationwide, an underground utility line is damaged every 9 minutes because a call to 811 is not made before digging?

Don't be a statistic - Notify 811 before you dig!

Who Should Call 811?

The company or person who is doing the actual excavation work should be the one calling in or doing the locate request.

Notifications need to include:

- County, place, and address or description of where the excavation will take place.
- The nearest intersecting street and distance from the intersection.
- Who the work is for.
- A description of the work.

STEPS TO SAFER DIGGING

marking underground utility lines

STEP I - Plan your Project & Identify the Excavation Area

Determine the area(s) to be excavated and mark the boundaries of the proposed excavation in "white".

All markings shall follow the APWA Uniform Color Code for

WHITE - Proposed Excavation

PINK - Temporary Survey Markings

RED - Electric Power Lines, Cables, Conduit and Lighting Cables

YELLOW - Gas, Oil, Petroleum, or Gaseous Materials

ORANGE - Communication, Alarm or Signal Lines, Cables or Conduit

PURPLE - Reclaimed Water, Irrigation, and Slurry Lines

GREEN - Sewer and Drain Lines

BLUE - Potable Water

STEP 2 - Submit a Locate Request

Contact the Hawaii One Call Center (HOCC) at I-866-423-7287 or 811 or online at https://hi.itic.occinc.com

Make certain that you have all required information ready before you place the call.

STEPS TO SAFER DIGGING

STEP 3 - Wait for Marks & the Required Amount of Time

Notice must be provided five (5) business days prior to digging. Keep in mind that this excludes the day of the notice, weekends, and holidays.

NOTICE CALENDAR						
SUN	MON	TUE	WED	THU	FRI	SAT
	Ticket Request	Day I	Day 2	Day 3	Day 4	Weekends Excluded
Weekends Excluded	Day 5	Check Response / Okay to Start				
		Ticket Request	Day I	Day 2	Day 3	Weekends Excluded
Weekends Excluded	Holidays Excluded	Day 4	Day 5	Check Response / Okay to Start		

EXAMPLE OF HAWAII ONE CALL RESPONSE DAYS

STEP 4 - Know When to Dig: Check Ticket Responses

Before digging, check your ticket to verify that all utilities have marked their lines.

Excavation work can begin after five (5) working days.

Note: The Hawaii One Call law shall not be construed as affording the excavator any immunity or protection from claims for damages or injuries relating to the excavation.

STEPS TO SAFER DIGGING

STEP 5 - Confirm the Marks / Maintain the Marks

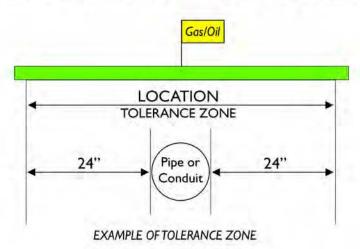
Once you have received responses from all members, you are ready to prepare for work.

Before you start digging, compare the ticket responses to the marks that you see at the dig site. If the markings do not match the responses, contact the utility company for clarification.

Upon starting your project, you are required to keep and maintain the markings throughout the duration of the project. If the markings are destroyed by weather or another company, call 811 to have the appropriate utility mark their lines again.

STEP 6 - Dig with Care

Once it's safe to dig, remember that the marks are approximate and you must dig carefully near them. The tolerance zone is 24 inches on either side of the utility mark + 1/2 the diameter of the buried utility. Only hand digging, no mechanized equipment, is allowed within the tolerance zone until the utility lines are visually identified or confirmed not present at the depth of excavation.



EXCAVATION DAMAGE

Minor damage to the pipeline and/or its coating can have serious consequences. If you cause, witness or suspect any pipeline damage regardless of how minor it may seem, please do the following:

- Stop excavation activities.
- Call Hawaiian Electric's 24-hour pipeline emergency phone number at (808) 543-7685.
- Provide your name, phone number, location of the damage, and a description of the damage.
- Do not backfill or cover the damaged pipeline.
- · Do not attempt to perform any inspection or repair.
- Do not move the equipment especially if the damage appears to be severe.
- A company representative will contact you with further instructions.

How Can You Help?

You can help keep your community safe by becoming familiar with the pipelines in your area and how to recognize potential pipeline abonormal conditions. Additional actions that you can take include:

- Understanding the Hawaii One Call law and Nationwide 811
 Call Before You Dig" program.
- · Reporting unauthorized excavations taking place near pipelines.
- Reporting vandalism to pipelines, pipeline signs, and equipment.

For more information on digging safely, visit:

The Common Ground Alliance - www.commongroundalliance.com
The U.S. Department of Transportation - www.transportation.gov

Pipeline 101 - www.pipeline101.org

About Hawaiian Electric



Established in 1891, Hawaiian Electric is committed to empowering its customers and communities by providing affordable, reliable, clean and sustainable energy. While our company has evolved to offer more than electricity, we remain committed to the safety and well-being of our communities. We prepared this brochure to inform you about a Hawaiian Electric pipeline in your neighborhood and to provide important safety advice.

The Kahe and Waiau Pipelines

Hawaiian Electric has safely and reliably operated our pipelines since 1962 to transport low-sulfur fuel oil (LSFO) to the Kahe and Waiau Power Plants. The Kahe pipeline travels from Kalaeloa through Ko Olina and the Waiau pipeline travels from Kalaeloa through Kapolei, Waipahu, and Pearl City. The State of Hawai'i established the route to minimize the impact to the surrounding communities and meet strict Federal and State Regulations. The pipelines provide energy security for our customers – including government, businesses, and residents. You may never see the pipelines, but they are a vital connection to energy and the power to do the activities of everyday life.