MARINE PIPELINE DAMAGE PREVENTION AND AWARENESS

The Greater Lafourche Port Commission, exercises jurisdiction over an area of Lafourche Parish south of the Intracoastal Waterway, including Port Fourchon. The Port Fourchon is located near the mouth of Bayou Lafourche in Lafourche Parish, and within the Barataria – Terrebonne National Estuary. The Estuary is home to over 725 species, several of which are either categorized as threatened or endangered, this area is unusually sensitive environmental damage from a hazardous liquid pipeline release.

These materials have been produced to enhance marine pipeline damage prevention and public awareness about pipelines among mariners navigating in coastal Louisiana and the Gulf of Mexico. The objective of the program is to educate the maritime community about pipeline locations, damage prevention and how to respond appropriately in the event of an emergency.

Port Fourchon services about 90 percent of all deepwater rigs and platforms in the Gulf of Mexico and it is also the host for the Louisiana Offshore Oil Port (LOOP). Marine natural gas and oil pipelines in the Gulf of Mexico are vital to meeting the Nation's energy needs. These products are transported through an estimated 63,000 mile of pipelines located on the OCS and within the State waters of Louisiana.

Each day approximately 270 large supply vessels traverse the port's channels and 1.15 million barrels of crude oil is transported via pipelines through the port.

On April 20, 2010 a gas release and subsequent explosion occurred on the Deepwater Horizon oil rig working on an exploration well in the Gulf of Mexico. Tragically, eleven lives were lost and others were injured in the accident. Within moments after the accident, the thirteen crewman of the PSV Damon B. Bankston undertook a massive search and rescue effort which resulted in the recovery of 115 survivors. We commend the crew of the Bankston for their heroic actions, along with the mariners aboard 6,890 vessels who responded to the spill. Over 48,000 individuals were involved in the Deepwater Horizon response at a cost of 17.7 billion dollars. Recovery of the Gulf of Mexico and our communities continues today. This accident did not involve a pipeline but, it does underscore the need for emergency preparedness. Please review the safety information provided and retain onboard your vessel as reference material. Many of the recommendations in these materials were direct result of investigations into marine accidents conducted by the National Transportation Safety Board including; Fire On Board Construction Barge Athena / Report No.MBR-96/01.

Fire On Board F/V Northumberland, Gulf of Mexico. Report No. M-90-66.

Fire on Board the U.S.MODU Rowan Odessa, Gulf of Mexico. Report No. MBR-96/01.

Please work safely to protect your crew, protect the environment, protect your vessel and protect our way of life. Pipeline safety is a shared responsibility.

Natural Gas Pipeline Rupture and Fire During Dredging of Tiger Pass, LA. Report No.PAR98-01

In your voyage plan, plan for pipelines.

Know what's below, before you go.

IN STATE WATERS:

Call 811 before you...

Dig, Spud, Anchor, Dredge, Wheel Wash or Jack-up etc.

ON THE OCS:

Call GulfSafe 1-888-910-4853 Pipelinesnearby.Org

IN THE EVENT OF A NATURAL GAS RELEASE OR HYDROCARBON SPILL CONTACT:

USCG National Response Center 1-800-424-8802

Pipeline Safety is a shared Responsiblility







Marine Pipeline Damage PREVENTION AND AWARENESS

MESSAGE FROM GREATER LAFOURCHE PORT COMMISSION – GULF OF MEXICO INFRASTRUCTURE









VESSELS. ANCHORS, SPUD BARGES AND JACK UP RIGS

Marine pipelines' most serious risks to human life and the environment are due to anchors, spud barges and collisions of vessels with pipelines in shallow water. The intensity of all types of offshore use increases near the coast where water is shallowest and pipelines are most densely distributed. We are concerned about threats to life and the environment resulting from pipeline damage. The data below and information included in this calendar was compiled from the Pipeline and Hazardous Materials Administration, Bureau of Ocean Energy Management, Regulation and Enforcement, United States Coast Guard and the National Transportation Safety Board reports. Interactions between Vessels / Anchors / Pipelines (1987 - 2007)

Pipeline Strikes Reported 118

Fatalities 25

Injuries 17

Environmental Impact from Spills 100,000 bbls

Property Damage to Regulated Pipelines \$100,000,000

COAST GUARD - MESSAGE TO MARINERS

- Ensure you have appropriately detailed navigation charts on board.
- Review the most recent Coast Pilot 5 information to plan your voyage.
- Ensure your vessel's draft is appropriate for the entire area you plan to navigate.
- Utilize the USCG Notice to Mariners to identify new hazards.
- Confirmed a minimum of 1 foot of water and 3 feet of mud clearance under the vessel's draft for safe passage over pipelines.
- Assess the potential effects of tides and weather on the navigable depths. Continue to monitor tides and weather throughout the job.
- Review recent hazard surveys for your work locations, if available.
- When working in shallow waters confirm that all known hazards have been identified with visible markers or survey, including pipeline crossings, obstructions, shallow or exposed pipelines that are identified in the USCG Notice to Mariners Report.

PREVENTING A PIPELINE INCIDENT

From complex operating environments to tight deadlines, today's vessel operators face a variety of challenges. To meet these challenges, a focus on safe operations, day in and day out, is critical. That's why it's important that you remember underwater pipelines as you develop your safety, work, and voyage plans. Submerged pipelines can be damaged by a spud, wheel washing, pile driving, anchor, the pads of a jack up rig, or any heavy activity, causing delays to your job, and, potentially, injuries to your crew.

- In state waters, call 811, the national call before you dig number, to have pipelines located and operators notified of your activity. It's free and it's the law.
- Offshore or in OSC waters, contact Gulfsafe.com or call 1-888-910-4853 to report your work locations.
- Use the Marine Pipeline Hazard Avoidance Checklist to help reduce the potential for pipeline damage during your next operation.

UNDERSTAND THE SIGNS OF A PIPELINE LEAK

Although pipeline failures are very rare, you and your crew members should be aware of the signs of a possible pipeline leak:

- A blowing or hissing sound; blowing water or continuous bubbling that may resemble wheel wash; a gaseous, hydrocarbon, or other unusual odor; or liquids bubbling to the surface
- Rainbow sheen

ACT IMMEDIATELY IF YOU SUSPECT A LEAK

If you recognize any of the signs of a pipeline leak, please follow these steps.

- Immediately minimize the use of potential ignition sources such as cell phones, motors, switches, cigarettes, lighters, lights, etc.
- Quickly and calmly assess the situation. Ask yourself the following questions.
- What caused the damage? Was it a spud, vessel, or anchor?
- How large does the leak appear to be? Is it getting worse?
- What are the weather conditions? Are you experiencing lightening, rough seas, etc.?
- Where will you and your crew be safest?
- If you evacuate, move personnel to a safe location upwind as far as possible from the affected area, but not less than one-quarter mile away
- Prevent unsuspecting vessels or parties from entering the area.
- Don't attempt to extinguish a natural gas fire.
- If you see a pipeline crossing sign, call the 1-800 number and provide your general location and coordinates to allow the pipeline's Operation Control personnel to isolate the pipeline.

KNOW WHAT'S BELOW - 48 HOURS BEFORE YOU GO, CALL 811 AND GULF SAFE. IT'S ERFE AND IT'S THE LAW

• To make a locate request in State waters call 811. Call 811 or Register at laonecall.com to submit online pipeline locate tickets.

Information you will need:

Date work is to be performed Location of the Work
Type of work being done Coordinates of the Work
Who work is being done for Coordinate Type

• To make a locate request on the OCS call <u>1-888-910-4853 (GULF)</u> 24 hours a day.

Information you will need:
Date work is to be performed
Type of work being done
Who work is being done for
Uncertainty of the Work
Coordinates of the Work
Coordinate Type

• Familiarize yourself with GEOCall. www.GulfSafe.com, allows GulfSafe members to submit "One Calls" online, but the web-based system requires training. If you are interested in using the on-line system, please call Shakheana Fields at 972-280-8791 to schedule a 30-minute training overview. Otherwise, to make a locate request call 1-888-910-4853 (GULF) 24 hours a day.

EMERGENCY PREPAREDNESS

- Conduct a safety meeting with your crew that covers the hazards of working near pipelines.
- Prepare and review with your crew an emergency response and evacuation plan in the event you make contact with an underwater pipeline.
- Confirm that life-saving devices, including life vests, are placed at multiple, convenient, on-deck locations.
- Ensure you have the information you need to account for all your personnel in the event of a pipeline incident.
- Conduct regular drills to ensure your crew is ready to respond to an emergency.

JACK UP BARGES AND BOATS

- Confirm that all barge spuds and legs have been secured and all safety devices have been engaged to prevent lowering while underway.
- · Request the pipeline operator place personnel onboard to help ensure safe placement.
- Confirm that designated safe spud or jack-up areas near platforms and pipelines have been approved by the appropriate pipeline operators.
- Prepare and review with your crew an emergency response and evacuation plan in the event you make contact with an underwater pipeline

WHAT IF THERE IS A SPILL OR RELEASE OF NATURAL GAS?

The goal is to stop the flow of product or natural gas as quickly as possible. If you are in a bayou or marsh and there is a pipeline marker nearby, contact the operator using the emergency number on the signage. They will quickly dispatch personnel to isolate the pipeline and provide emergency instructions.

Always contact The National Response Center. The NRC is able to quickly locate and contact pipeline operators to isolate pipeline facilities. If you suspect that you have grounded your vessel on a pipeline, please state in your call that this is a "potential release" so that the pipeline operator can be contacted to isolate the pipeline facility prior to trying to free your vessel.

National Response Center ~ <u>1-800-424-8802</u>

Any person in charge of a vessel or a facility is required to make

Any person in charge of a vessel or a facility is required to make Federal notifications to the NRC for any discharge of oil or natural gas.

If direct reporting is not practicable to the NRC, reports can be made to the U. S. Coast Guard (USCG) On-Scene Coordinator (OSC) for the geographic area where the release occurred.

What questions will the NRC Ask?

Incident Description

Incident Type: PIPELINE

Incident Cause:
Affected Area:

Date and Time:

Affected Medium: Air / Water

Incident Location:

Material Released: Natural Gas / Liquid Hydrocarbons

Pipeline Type: (Do you see bubbles or liquid?)

Is there a Fire?
Are there Fatalities?

If there is a sheen in the water, what is the estimated size:

What are the weather Conditions?

ENSURING SAFE OPERATIONS - PIPELINE AND PLATFORM INSPECTIONS

Production and Transportation Pipelines and Platforms are regulated by multiple regulatory agencies that may include the U.S. Department of Transportation Pipeline and Hazardous Materials Administration, the U.S. Coast Guard and Bureau of Ocean Energy Management, Regulation and Enforcement. These agencies conduct frequent inspections to ensure operations and maintenance are being conducted in accordance with the applicable regulations.

Natural Gas and Liquid Hydrocarbon pipelines located in the Gulf of Mexico and its Inlets in 15' of water or less, and regulated by Pipeline and Hazardous Materials Administration, must be inspected to ensure that adequate waterbottom cover is present as specified in the regulations. Recently surveyed pipelines may be identified by the placement of cane marker poles along the pipeline route.

Pipelines that have become exposed or have less than adequate cover must be reported to the U.S. Coast Guard and marked with yellow buoy with flashing light until remediation has been completed. These locations should be avoided and represent a potential hazard.

PIPELINES AND THE SAFE HARVESTING OF SHRIMP, OYSTERS AND POGIES

As a part of original construction or as an expansion activity, pipeline companies often have installed subsea attachments or interconnecting piping and valves to their subsea pipelines. These facilities are typically installed on the side or top of an existing pipeline. For facilities with less than 3 feet of cover and near or just below the surface, protective barriers or guards are installed.

Protective barriers are designed and occasionally modified to accommodate piping additions, sometimes a mixture of protective measures are used including metal cages, 3:1 sand cement bags, concrete mats and sea domes.

The barriers provide for effective means to: ensure public safety, maintain joint use enjoyment, protect critical interconnecting points and maintain uninterrupted transportation service. Occasionally during inspection or maintenance activities the guards are missing, damaged or ineffective due to joint use activities, outside forces or an environmental event. When this happens, fishing gear could become entangled with the assembly.

Avoid activities within 150' of coastal and marsh pipeline platforms where coastal erosion or storms may have removed waterbottom cover from pipelines and subsea assemblies.

If your gear becomes entangled and you see bubbling or a liquid rise to the surface, you may have snagged a subsea assembly. Do not attempt to free your gear, placing yourself and your vessel at risk. Record the vessel position and contact the U.S. Coast Guard.

Know what's below, before you go.

PIPELINE SAFETY IS A SHARED RESPONSIBLILITY