Operations Division
Regulatory Branch

GENERAL CRITERIA FOR PIPELINE AND UTILITY LINE BURIAL IN WATERWAYS WITHIN THE NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

To assist the general public in applying for Department of the Army permits, the following general criteria list burial depths for pipelines and other utility crossings in waterways within the New Orleans District, Corps of Engineers. Deviations from the stated criteria may occur on infrequent occasions should we find it necessary for a particular project and these burial depth criteria are subject to change at the discretion of the New Orleans District. The terms “pipeline” and “utility line” include petroleum lines, flow lines, gas lines, chemical lines, water lines, brine lines, power cables, telephone cables, television cables, and similar lines. These general criteria do not supersede the pipeline and utility line burial requirements of other federal, state or local government agencies, nor do they necessarily represent the general pipeline and utility line burial criteria of other Department of the Army, Corps of Engineers districts.

1. GULF OF MEXICO

a. Open Waters: In areas where the water depth is 200 feet or greater, the line may be placed on the seabed floor. In waters less than 200 feet deep, burial will be at least 3 feet below the mud line (Top of pipe will be a minimum of 3 feet below the existing mud line. With jetting of pipelines it is understood that there may be a depression in the mud line over the pipeline immediately after installation, but the depression will soon be naturally filled with bottom material to establish the required 3 feet of cover.)

b. Fairways and Anchorages: In designated anchorages and fairways in areas where the water depth is 200 feet or greater, the line may be placed on the sea bed floor. In waters less than 200 feet, burial will be at least 10 feet below the mud line. Crossings of fairways should be perpendicular or near perpendicular to the fairway.

c. Gulf of Mexico Beaches: New pipeline and utility line crossings of Gulf of Mexico beaches in New Orleans District will be directionally bored. The purpose of the general rule is to maintain the integrity of barrier islands and beaches that protect the fragile coast line and to address the tendency of beaches to recede, thereby exposing existing pipelines to the surf zone. The directional bore length is to be decided on a case-by-case basis and would include consideration of impacts to the beach or island habitat, areas of previously disturbed beaches, adjacent water impacts, engineering feasibility, and cost considerations.
2. MISSISSIPPI RIVER AND MISSISSIPPI RIVER GULF OUTLET

In the Mississippi River up to Baton Rouge and in the Mississippi River Gulf Outlet, pipelines and utility lines will be buried at least 25 feet below the mud line or 25 feet below the authorized channel depth, whichever gives the greater clearance. Burial depths on the side slopes will also be 25 feet below the mud line or authorized channel slope.

3A. FEDERAL CHANNELS HAVING LESS THAN 30-FOOT DEPTH

Burial depths on federally maintained navigation channels with a bottom depth of less than -30 feet MLG are to be at least 15 feet below the authorized project depth or 4 feet below the mud line, whichever gives the greater clearance, and extend at this depth at minimum 100 feet* beyond the project width on both sides. (0.0 feet MLG = -0.78 feet mean sea level or NGVD.) See Enclosure 1 titled “P/L Burial Depths for Federal Project Waterways (other than the Mississippi River)” for more information.

3B. FEDERAL CHANNELS HAVING 30-FOOT OR GREATER DEPTH

Burial depths on federally maintained navigation channels with a bottom depth at or greater than -30 feet MLG are to be at least 15 feet below the authorized project depth or 10 feet below the mud line, whichever gives the greater clearance, and extend at this depth at minimum 100 feet* beyond the project width on both sides. See Enclosure 1 titled “P/L Burial Depths for Federal Project Waterways (other than the Mississippi River)” for more information.

* If the extension of the minimum burial depth to include a width of 100 feet minimum on both sides of the defined project width is not practicable, you may, on a case by case basis, request variance to this requirement. All such variance requests and justifications for said variances must be included in your permit application and drawings and should strive to meet the following criteria:

Extended coverage on either side of the defined project width dimension should be no less than 20% of the authorized width, or no less than 20 feet, whichever is greater. For example:

<table>
<thead>
<tr>
<th>Bottom Width</th>
<th>Required Extension on Both Sides of Project Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>400'</td>
<td>80'</td>
</tr>
<tr>
<td>250'</td>
<td>50'</td>
</tr>
<tr>
<td>125'</td>
<td>25'</td>
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<tr>
<td>100'</td>
<td>20'</td>
</tr>
<tr>
<td>Less than 100'</td>
<td>20'</td>
</tr>
</tbody>
</table>
4. NON-FEDERALLY MAINTAINED WATERWAYS AND OPEN WATER AREAS

Except for flowlines and activities in the Gulf of Mexico, pipelines and utility lines are to be buried at least 4 feet below the mud line. This policy would be applicable to most rivers, bayous, canals, lakes, bays, etc.

5. FLOWLINES

Flowlines are generally the small diameter lines that are used in oil and gas exploration and production and carry petroleum, brine, gas, and similar products between oil and gas wells, gathering stations, production platforms, and similar facilities in established oil and gas fields, or at exploration sites. Flowlines are to be buried at least 3 feet below the mud line in open waters. Flowlines in marsh areas may be placed on the marsh surface and/or on support structures in lieu of burial.

The above burial criteria define the minimum burial depths, however, greater burial depth is allowed. Reburial of older lines is considered maintenance under the terms of the original permits and under the terms on nationwide permit number 3. Replacement of an existing line with a new parallel line is not considered maintenance if the older line is not removed. In areas where line cover has been reduced or lost to erosion, our general policy is to have the line reburied to conform to the minimum burial depth criteria. We will, however, consider formal requests, on a case-by-case basis, for approval to cover the line with grout bags, riprap, or similar materials, or other methods to protect the lines in instances where we find burial impractical.

Operators who propose to lay new pipelines or utility crossings, or perform work on existing lines, across general navigation channels are requested to notify the U.S. Coast Guard so that a Notice to Mariners, if required, may be prepared. Notification, with a copy of your permit approval and drawings, should be mailed to the U.S. Coast Guard, Sector New Orleans Command Center, 201 Hammond Highway, Metairie, Louisiana 70005, about 1 month before you plan to start work. Telephone inquiries can be directed to (504) 846-5923.

Pete J. Serio
Chief, Regulatory Branch

Enclosure
P/L BURIAL DEPTHS FOR FEDERAL PROJECT WATERWAYS (OTHER THAN THE MISSISSIPPI RIVER)

NOTE: SEE WRITTEN DESCRIPTION ON PAGE 2 UNDER 3A AND 3B FOR ADDITIONAL INFORMATION