

# PIPELINE MAINTENANCE

## IN A COASTAL ENVIRONMENT

BY ALAN L. SMITH, Ph.D., CEP and  
VAL K. HATLEY, SR/WA

**M**ost people think about new construction when the issue of environmental permits is discussed in relation to pipelines. However, many of the same permits are also required for performing maintenance on existing pipelines. This area of permitting is becoming more complex, and many routine maintenance activities now require a permit. Therefore, it is increasingly necessary that pipeline operators use the same level of advance planning for these activities as they do for new construction. For purposes of this discussion, "construction" will refer to both the installation of new facilities and for maintenance-related activities (unless indicated otherwise).

This article provides an overview of permitting issues to assist in planning onshore asset integrity and maintenance activities in coastal areas within Louisiana. These guidelines were originally prepared by the Land and Permit Department of Shell Pipeline Company LP (Shell) to assist maintenance personnel. Since the article was written solely as a reference tool in planning asset integrity/maintenance projects, it is recommended that you consult your in-house regulatory authority regarding which environmental permits are required for specific projects.

### Pipeline Testing

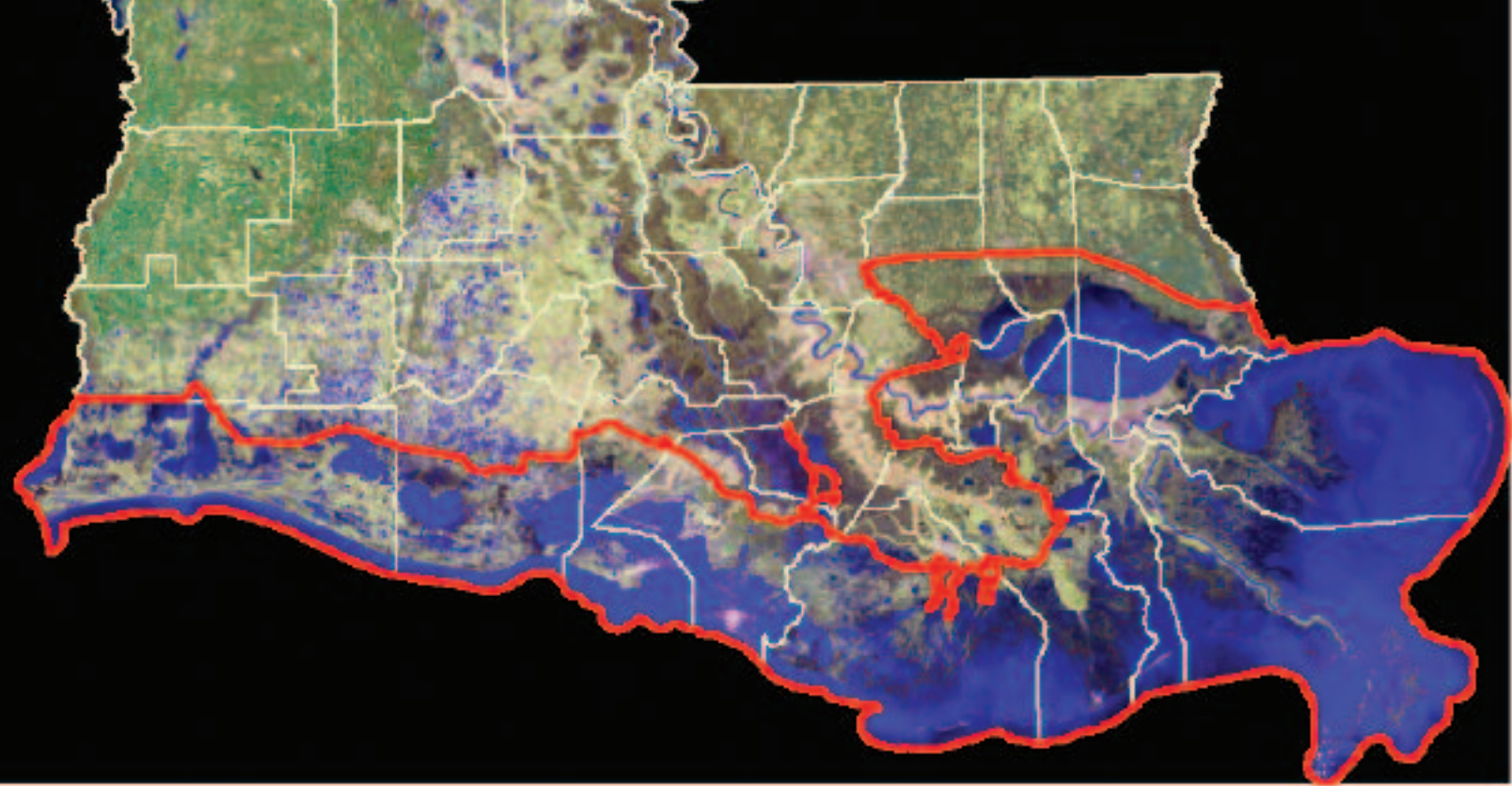
Asset Integrity projects consist of two activities: testing and any associated repairs of the pipelines. Pigging (a pig is a device inserted in a pipeline that is used for cleaning and/or internal inspection of a pipeline), close interval surveys and cathodic protection surveys are not typically permitting events (i.e., no permit is needed) unless the testing is on national park service lands, federal or state wildlife refuge/management areas, and/or scenic streams (see section on "Special Use/Class B Permits").

Environmental permits are required where repairs must be made in natural water bodies and/or adjacent wetlands. Any dredge or fill operation (including digging to expose a line or prop washing to access a location), clearing trees from the right of way, or the use of wheeled or tracked vehicles in wetlands are also permitting events.

### State Agencies

The two principal permitting agencies in Louisiana include the Coastal Management Division (CMD) of the Louisiana Department of Natural Resources and the U.S. Army Corps of Engineers (Corps). CMD acts as the lead agency for projects in the Coastal Zone of Louisiana under a Memorandum of Understanding (MOU) with the New Orleans District office of the Corps. If a pipeline lies both inside and outside of the Coastal Zone, the Corps will be responsible for the portion outside of the Coastal Zone. They will also issue a permit for work inside the Coastal Zone.

The Galveston District of the Corps has jurisdiction within the Sabine River watershed and that boundary is about 12 miles east of the Sabine River on a line perpendicular to the Intracoastal Waterway. The Vicksburg, Fort Worth and Mobile Districts also regulate activities in parts of Louisiana. Vicksburg has some regulatory authority within the Coastal Zone. The foregoing districts, however, do not have a MOU with the CMD so there is no cooperative permitting efforts between the CMD and these Corps districts. The lack of an MOU requires the applicant to work with two lead agencies, which increases the permitting effort on the part of the applicant. The Public Notice is issued as a joint Public Notice where a MOU is in place. Without a MOU, the CMD and the Corps District issue their Public Notice separately which can lead to additional time in the permit process if the Public Notices are issued on different dates.



### Parish Agencies

The coastal zone covers all or portions of 19 parishes in Louisiana (a parish is the equivalent of a county in other states) and extends out to the boundary between state and federal waters. The offshore boundary is basically the three-mile limit. Ten parishes have approved Local Coastal Zone programs and two more are in development. Applications received by CMD are forwarded to the respective parish Coastal Zone Environmental committee.

While CMD solicits input from the parishes, coastal use permitting authority for oil and gas activities explicitly rests with the state program. The parishes specifically cannot regulate oil and gas activities under their approved local Coastal Programs. That does not, however, preclude them from requiring local approval for the work under the auspices of other parish ordinances. The committees review the application and make a recommendation to the parish council for approval. The approval is made at the regularly scheduled parish council meetings. Shell's practice has been to have the project Land Agent and the Project Lead attend these parish meetings to discuss the proposal and answer any questions that council members may have. Although both pre and post application meetings with responsible parish officials are routinely conducted for new construction projects, applicants should consider whether these meetings are also appropriate for maintenance-related activities.

Parishes with active programs include Calcasieu, Cameron, Lafourche, Jefferson, Orleans, Plaquemines, St. Bernard, St. James, St. Tammany, and Terrebonne. St. Charles and St. John the Baptist are preparing programs. Each parish has a fee associated with processing a permit. Plaquemines Parish also requires a detailed construction permit application be submitted detailing work, equipment to be employed, and a map showing ingress/egress routes.

### Area Wide/General Permits

All Corps permits issued before 1972 covered only water crossings but many had a "maintenance" clause. These permits did not cover wetlands. These permits will be reviewed by CMD to determine jurisdiction, so a copy of the permit should be submitted with the permit application. If the CMD determines they have jurisdiction, a new permit will be needed. If the CMD determines the Corps has jurisdiction, it may be possible to conduct maintenance activities pursuant to the original permit. Note, however, this only covers work within the area covered by the original permit (i. e., the waterbody crossing itself).

The Louisiana CMD has established a system where an application can be filed for a permit online. The CMD Sonris online portal ([http://workflow.dnr.state.la.us/sundown/cart\\_prod/pkg\\_dnr\\_wf.initiate](http://workflow.dnr.state.la.us/sundown/cart_prod/pkg_dnr_wf.initiate)) allows applicants to complete the joint permit application, download the permit drawings and pay the application fee. Once CMD reviews the application for completeness, a Coastal Use Permit (CUP) number is assigned, and the application is then forwarded to the Corps and review agencies for comment. The applicant is notified via e-mail when the application is complete, acknowledgement of payment and the CUP number. The application can be tracked through the stages of permit review.

If requested to do so, the CMD will issue an Area Wide Permit (AWP) for maintenance projects. The AWP does not authorize any work itself but is a mechanism to establish the area in which work may be conducted and details how that work will be done if it is needed at a later date on the basis of the asset integrity testing. A formal application must be filed (as with new construction projects) and there is a 25-day Public Notice period. The AWP process could take between 60 and 90 days. The term of the AWP permit is for five years.

## “One of the best ways to avoid delays in the permit process is to request an interagency meeting for any major or time-critical work.”

Once individual repair sites are identified, detailed location drawings (with coordinates) must be submitted to the CMD for approval under the AWP. A map showing the ingress/egress for equipment and materials must be provided. The review agencies have a five-day comment period so the approval for Individual Sites could range from 10 to 15 days. This request does not go out on Public Notice. The Individual Sites permit has a term of two years.

“A major benefit of the AWP for an applicant is that it is not necessary to identify and contact all landowners and adjacent landowners for the entire line,” according to Rocky Hinds, Permits and Mitigation Program Manager for CMD. “Only those who own property that will subsequently be impacted by individual repair activities need be contacted and then only at the time of the repair work.”

The AWP applications are reviewed by other agencies for the presence of threatened/endangered species and historical or archaeological sites. Some distance restrictions may be placed on construction within 1,500 feet of active bald eagle nests or 1,000 feet of bird rookeries. Time restrictions prohibit work within the restricted zones for nesting bald eagles, bird rookeries, and in refuges and wildlife management areas during migratory waterfowl season and hunting season. A survey may be required when repair work is to be performed within the boundary of state oyster seed grounds.

**Project planning (both for conducting the testing and for executing associated repairs) should include consideration of the construction windows.** “Indeed, the pre-identification of these sensitive features so that a company can plan its testing program was a major impetus for the creation of the AWP concept,” said Hinds.

Some maintenance activities can be conducted pursuant to “general permits.” As a matter of policy, the agencies have determined that certain limited categories of maintenance activities are exempted from individual permitting. For example, the CMD has a general permit (GP-6) to expedite the repair of lines with an inside diameter of less than 12 inches and a length of less than 10,000 feet.

“Believe me, we’re going to do everything we can – evaluate the project to see if it meets our criteria for exemption from permitting, can be determined to ‘have no direct and significant impact on coastal waters’ or is eligible for approval under one of our general permits – to expedite the approval process. But you need to be aware that, if we must put an application on public notice, it will take a minimum of 47 days to get an individual coastal use permit,” according to Hinds.

Even in cases where a general permit is applicable, the project proponent should still file an application with the responsible agency to obtain their confirmation that the general permit covers the proposed work activity.

In all cases, compensatory mitigation will be required for any unavoidable impacts to vegetated wetlands.

“In the case of most pipeline installations or repairs, CMD will defer the determination of compensatory mitigation for one growing season to allow for natural regeneration,” according to Hinds, “but a company needs to be cognizant of that overhanging liability and ensure that they have set aside funds to cover the obligation. Certainly, avoiding the impacts up front is preferable; indeed obligatory to the extent it can be done. Submitting an application that proposes minimum impacts at the outset will save both time and money.”

Mitigation for impacts to marsh habitat is currently running between \$20,000 and \$25,000 per acre. Mitigation for impacts to forested wetlands is in the \$15,000 to \$20,000 per acre range.

### Special Use/Class B Permits

Coastal Louisiana contains national parks, federal wildlife refuges, state wildlife management areas and scenic streams. Companies that operate pipelines within these resource areas need to obtain Special Use Permits (SUPs) for access. SUPs are a requirement of the agency responsible for the resource. The CMD and the Corps will not issue their permit until the SUP is in hand. It will take the responsible agency at least two weeks to process a request to access Federal properties. A copy of the SUP must be carried in each vehicle (tired, tracked or boat) at all times when personnel are on these properties.

The conduct of a close interval survey or a cathodic protection survey requires a SUP to access parks, wildlife refuges or management areas. A letter must be sent to the proper agency requesting a SUP to conduct the activity. The letter must provide a brief description of the project, where it will be on the property, how it will be performed and the time. Requests for surveys of a day or less should include a window of several days to allow for unforeseen events (such as inclement weather). Obtaining the SUP can take as little as a day or up to 10 days once we have the information that is needed to file the application with the agency.

Scenic streams may be traveled by boat without any permit. However, doing work at a pipeline crossing of a scenic stream will require a Louisiana Wildlife and Fisheries Class B Use Permit. The application requires an Environmental Assessment be prepared that identifies the project, alternatives evaluated, a description of the resources in the area and permit drawings. A 45-day public notice is required so the permit process can take up to 75 days once the application is filed.

Loading and unloading equipment can probably be done without a permit but it requires making a written request to the agency along with a drawing that shows what will be done and where. Repair work on the pipeline also requires a written request with a map showing location and drawings indicating what work will be done. The approval can take a week or more.

SUPs will contain the name and telephone number of someone to contact prior to starting the survey on government property. **These contacts need to be made prior to entering the property.**

### Emergency Authorizations

The new Department of Transportation regulations require certain types of repair be conducted within five days of discovery. These repairs have to be performed under an Emergency Use Authorization (EUA) since five days is not sufficient to obtain a regular permit.

The CMD and Corps will issue an EUA if there is an event that poses an imminent threat to human life, property or the environment. Monetary loss is not listed as one of the criteria. Prior to issuing an EUA, the agencies will need a map showing the location (with coordinates), a description of the work to be performed and the danger associated with the incident. Authorization for a true emergency will be issued within hours of receipt of the required information. The applicant has a responsibility to file an "After the Fact" application, complete with as-built drawings, within 30 days after the authorization is issued.

Note that an EUA expires 30 days after it is issued. As the agencies will not have time to perform a complete review of the project's conformance with programmatic guidelines, the emergency approval comes with a caveat – upon thorough evaluation the agencies may require that the work be removed or modified or that additional steps be taken to minimize impacts to the resources they are mandated to protect.

In general, Shell does not want to seek emergency authorizations if it can be avoided since the agencies will not look favorably on emergency authorization requests based solely on economic or commercial factors. In addition, agencies will notice when a company makes numerous emergency requests. The result will be a loss of credibility which will, in turn, make it more difficult to process regular permits in a timely manner. There are, however, situations in which requesting an emergency authorization is not only appropriate but also desirable (i.e., to prevent a probable release).



"One of the best ways to avoid delays in the permit process," said Hinds, is to request an interagency meeting for any major or time-critical work. "By getting all of the interested parties in the same room at the same time, a lot of time-consuming letter writing and a lot of needless misunderstanding, can be avoided."

A caveat: Permitting is not limited to those agencies with regulatory authority that actually issue the required permits. Many other state and federal agencies have the right to review and comment on permit applications and these overlapping reviews will have a dramatic effect on the time it will take to approve the permit application (especially if the process is not handled concurrently). Although many state permits are based on a delegation from the federal government, it should be noted the federal permits are in effect nationwide and the applicant needs to ensure that they have obtained all required federal, state and local permits.

### In Summary

Permitting maintenance activities has become as complex as permitting new projects. The introduction of the AWP by CMD should be beneficial in the permit process because the Public Notice will have been taken care of under the Area Wide application. Working with the agencies and getting to know the permit analysts can ease the permit process and give the project proponent a better idea to forecast a realistic date to begin construction.

This is a difficult time for the state of Louisiana. Both the pipeline industry and the agencies face a myriad of challenges resulting from the recent storms that have impacted this state that has played such a critical part in the history of the pipeline industry. The agencies are facing an unprecedented number of new permit applications to cover repairs to existing facilities and for new pipelines that replace those facilities that have been damaged beyond repair by Hurricanes Ivan, Katrina and Rita. To the extent the industry can plan their projects with sufficient detail, and allow the agencies time to process these applications, we should be able to work in a collaborative manner to rebuild the transportation infrastructure while preserving the delicate ecological balance that is the bayou state. ■