MAINTAINING OUR PIPELINES' INTEGRITY THROUGH IN-LINE INSPECTIONS

Doing business the right way, every day is paramount at Kinder Morgan. We invest millions of dollars each year on integrity management and maintenance programs to protect people and the environment. One of the primary integrity assessment methods we use to help prevent incidents are in-line inspections (ILI).

WHAT ARE ILI TOOLS/"SMART PIGS"?

In-line inspections (ILI) involve the use of sophisticated machines called "smart pigs" or ILI tools.

- ILI tools are used as part of our pipeline integrity management program.
- The devices travel through a segment of pipeline to record information about the internal and external condition of the pipe.
- The equipment uses advanced sensor technology to pinpoint and measure pipeline anomalies, such as corrosion, cracks and other irregularities.

HOW DOES IT WORK?

1. ILI tools are inserted into the pipeline using a special configuration of pipes and valves that allow the device to be loaded into a launcher.
2. The launcher is closed and sealed, and the flow of product in the pipeline is directed to launch the tool into the mainline.
3. The tool travels through the pipe along with the product and collects data.
4. A similar setup is located downstream where the tool is directed out of the mainline into a receiver.
5. The recorded data is downloaded for analysis.
6. Results are used to identify locations where remediation activities may be necessary.

HOW IS THE DATA USED?

After the inspection is complete, the ILI vendor provides a detailed inspection report which includes detected anomaly types and locations. Remediation activities are then performed utilizing appropriate operating and maintenance procedures.

A wide variety of ILI tool types are available in the industry. This magnetic flux leakage (MFL) tool is designed to detect metal loss.