

Notifications Concerning Use of “Other Technology”:

In order to expedite any potential review, notifications concerning use of “other technology” should include the following information:

1. The operator’s demonstration that the “other technology” can provide an equivalent understanding of the condition of the line pipe, as required by 49 CFR 192.921(a)(4) and 192.937(c)(4). The demonstration should explain the following:
 - Where and how the technology will be used
 - What procedures will be followed
 - What criteria will apply to data analysis and evaluation, including verification excavations and acceptance and rejection of anomalies
2. Procedures for ensuring that qualified personnel will implement the technology, as required by 49 CFR 192.915 and subpart N of part 192.

Various operators have submitted notifications of their plans to use guided wave ultrasound as “other technology” for assessing the integrity of transmission line segments in casings. Guided wave ultrasound can be used to assess pipe for some distance on either side of a bell hole in which inspection equipment is located, making the technology suitable for assessing pipe within a casing. The technology is capable of detecting metal loss and of providing indications of dents, although sizing of dents is very difficult. OPS has experience in reviewing notifications on the use of this technology on hazardous liquid pipelines and, when satisfied with the information presented, has closed these notifications under the classification “no objections” noted. OPS understands that the technology’s performance in specific applications is critically dependent on the inspection equipment and procedures used and the training and qualification of those involved in its use.

If further review is necessary for notifications concerning use of guided wave ultrasound technology, as part of the equivalency demonstration under 49 CFR 192.921(a)(4) or 192.937(c)(4), OPS may ask operators to show use of the technology with inspection equipment set up in a typical condition of intended use. This information is especially important for applications that do not involve using the technology on both sides of a casing.

Guided wave ultrasound is capable of taking readings in both directions from its placement on a section of line pipe, as shown by the illustration below. To validate the technology’s application, operators should investigate all indications of potential threats to pipeline integrity in the opposite direction of the casing (supplemental region) and should excavate at least once in each supplemental region if no indications of concern are identified. Indications of welds are one of many potential readings operators should use to verify the accuracy of the device. Operators must demonstrate that all applications are effective for the type conditions, equipment, procedures, and performance measures for detecting the severity of the anomaly.

