

Longhorn Mitigation Plan
Commitment Implementation Status Report
Annual - 2008

Note: Bold text indicates updated information

| Mitigation Item No. | Description | Timing | Status of Commitment Implementation |
|---------------------|---|--|---|
| 38 | Longhorn shall submit periodic reports to DOT/OPS that will include information about the status of mitigation commitment implementation, the character of interim developments as relate to mitigation commitments, and the results of mitigation-related studies and analyses. The reports shall also summarize developments related to its Operational Reliability Assessment ("ORA"). The reports shall be made available to the public. | Quarterly during the first two years of system operation and annually thereafter for the operational life of the pipeline system. | This report covers the 2008 annual reporting period. This report addresses mitigation commitments that either begin with, or extend beyond startup and have not had a Completion Report submitted to PHMSA/OPS. System startup occurred January 27, 2005. |
| 10 | Longhorn shall, following the use of sizing and (where appropriate) geometry tools, perform an in-line inspection ("ILI") of the existing pipeline (Valve J-1 to Crane) with a transverse field magnetic flux inspection ("TFI") tool and remediate any problems identified. See the Longhorn Pipeline System Integrity Plan ("LPSIP") at Section 3.5.2 and the ORA at Section 4.0 | At such intervals as are established by the ORA, provided that an inspection shall be performed no more than 3 years after system startup in Tier II and III areas. | The timing of this inspection is to be determined by the ORA, but it shall be conducted not later than 3 years after system startup. The TFI Tool inspections have been completed for all segments of the pipeline between Valve J-1 and Crane. Analysis of ILI data, field investigations, and pipeline rehab activities are complete, and a report to OPS is being prepared. |
| 12 | Longhorn shall, following the use of sizing and (where appropriate) geometry tools, perform an in-line inspection of the existing pipeline (Valve J-1 to Crane) with an ultrasonic wall measurement tool (UT Tool) and remediate any problems identified. See the LPSIP at Section 3.5.2 and the ORA at Section 4.0. | At such intervals as are established by the ORA, provided that an inspection shall be performed no more than 5 years after system startup. | The timing of this inspection is to be determined by the ORA, but it shall be conducted not later than 5 years after system startup. The 2007 Annual ORA Report made no recommendations to change this interval. The UT Tool inspection is scheduled for completion in 2009. |
| 13 | Longhorn shall install an enhanced leak detection and control system which will include a transient model based leak detection system utilizing 9 meter stations (6 clamp on meters and 3 turbine meters). Additionally, a leak detection system will be installed over the Edwards Aquifer Recharge Zone and the Slaughter Creek watershed n the Edwards Aquifer Contributing Zone that will detect a leak of extremely minute volume in twelve (12) to one hundred twenty (120) minutes from contact, depending upon the product sensed by the system. That leak detection system will be a buried hydrocarbon sensing cable system designed to meet the leak detection performance specifications described in the preceding sentence. The pipeline system is designed to achieve emergency shutdown within 5 minutes of a probable leak indication. See Mitigation Item 13. | System installation prior to startup and system operational within 6 months of startup. | The enhanced leak detection systems were installed prior to system startup as specified in the LMP. Additional system enhancements and fine tuning of the model have maintained the leak detection sensitivities at under 1% of flow detected within one hour, and one half hour. Analyses of all operational data and activities are conducted, and the sensitivities are measured and evaluated every two weeks. The leak detection capabilities are periodically tested and demonstrated in conjunction with the Longhorn ILI activities. |
| 19 | Longhorn has performed studies evaluating each of the following matters along the pipeline, and shall implement the recommendations of such studies. See Mitigation Item 19. | | |
| 19b | Scour, erosion and flood potential. | Periodically after startup. (Scheduled inspections occur at various water crossings at 6 month and 5 year intervals. Inspections also occur after certain flood events). | The 6 month periodic inspections were completed in July and December 2008 . There were no 5 year interval inspections scheduled to occur during this reporting period. No event-based inspections occurred during this reporting period. |
| 19d | Ground movement, subsidence and aseismic faulting | Periodically after startup. (The study recommended surveys to be performed every 6 months). | January and June monitoring were completed in 2008 . The conclusions from the preliminary technical report state " Based on these results it appears that the subject faults are inactive at this time or are moving at rates of less than or equal to 0.001m per year ". |
| 19e | Landslide potential. | Periodically after startup. (The study recommended surveys to be performed every 5 years). | A photogrammetry survey was completed in June 2005. No recommendations resulted from the survey. The next survey is scheduled for 2010. |

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| 25 | Longhorn shall develop enhanced public education/damage prevention programs to, inter alia (a) ensure awareness among contractors and potentially affected public, (b) promote cooperation in protecting the pipeline and (c) to provide information to potentially affected communities with regard to detection of and responses to well water contamination. See the LPSIP Section 3.5.4 See Mitigation Appendix, Item 25. | Continuously after startup. | <p>Longhorn is executing its Public Education Program. Notable events in 2008 included: (1) Annual mail-out to 83,429 stakeholder addresses; (2) Emergency Responder / Excavator Training for all 25 counties through which the pipeline passes; (3) Delivered approximately 3,722 door hangers in Tier II and III areas from Harris to Bastrop counties; (4) Conducted face-to-face meetings with first responders from all 25 counties; (5) Provided damage prevention information to non-emergency public officials and emergency responders; (6) Conducted school program for 4th and 5th grade students in Houston and Austin; (7) Placed damage prevention advertisements in relevant publications with statewide distribution and co-sponsored airline in-flight radio advertisement about 811 national one-call number; (8) Participated in public events to distribute damage prevention information to the general public including the CAF Air show in Odessa, Texas as well as the PRCA Rodeo in El Paso, Texas, and the Austin Cave Festival in Austin, Texas;</p> <p>(9) Conducted a Kiosk Program in which damage prevention information is distributed to people renting or purchasing farm equipment; (10) Sent out a supplemental mailing to 5,816 stakeholders from Mile Post 0-24 in the Houston area after Hurricane Ike and participated in Houston-area wide radio campaign (consisted of 40 30 second radio spots) on 811 to raise awareness with stakeholders about 811 and the Call Before You Dig campaign; and (11) Sent targeted supplemental damage prevention mailing to 179 stakeholders along the pipeline right-of-way.</p> |
| 31 | Longhorn shall perform a surge pressure analysis prior to any increase in the pumping capacity above those rates for which analyses have been performed or any other change which has the capability to change the surge pressures in the system. Longhorn will be required to submit mitigation measures acceptable to DOT/OPS prior to any such change in the system, which mitigation measures will adequately address any MASP problems on the system identified by the surge pressure analysis. | Prior to any change in the system that has the capability to cause surge pressures to occur on the system | System changes that would prompt a surge analysis have been evaluated. No MASP problems were identified by the surge pressure analyses. |
| 32 | Longhorn shall perform pipe-to-soil potential surveys semi-annually over sensitive and hypersensitive areas (which is twice the frequency required by DOT regulations - 49 C.F.R. 195.416) and corrective measures will be implemented, as necessary, where indicated by the surveys. See LPSIP Section 3.5.1. | No more than six months after startup and semi-annually thereafter. | Semi-annual pipe-to-soil potential surveys for 2008 have been completed. |
| 36 | Longhorn shall prepare site-specific environmental studies for each new pump station planned for construction. These studies shall be responsive to National Environmental Policy Act requirements as supplements to the Environmental Assessment of the Proposed Longhorn Pipeline System. For each such pump station, Longhorn shall submit the site-specific environmental study to the U.S. Department of Transportation no less than 180 days prior to commencement of construction. | Prior to construction of any new pump station. | Clarifications to previously submitted Site Specific Environmental Study Reports (SSESRs) were prepared for four new pump station locations and submitted to DOT/OPS in 2008. The four new pump station locations are Warda, Eckert, Big Lake and Cottonwood. |
| Lower Colorado River Authority (LCRA) Settlement Agreement | | | |

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| | <p>Addition to Longhorn Mitigation Item 3: Longhorn will replace approximately six miles of existing pipeline in the Pedernales River watershed that is characterized as having a time of travel for a spill from Lake Travis of eight hours or less. Pipeline segments having this characteristic are approximately as follows: Segment 1 - 9968+64 to 10057+00, Segment 2 - 10107+00 to 10142+00, Segment 3 - 10179+00 to 10209+00, Segment 4 - 10275+00 to 10375+00, and Segment 5 - 10459+00 to 10509+00. Segment 5 crossing the Pedernales River will be completed prior to the date of pipeline startup. Horizontal directional drill construction methods will be used to install the section of pipe under the Pedernales River. Segments 1 through 4 will be replaced as determined by the LPSIP and ORA, but in any case no later than seven years from the startup date.</p> | <p>Prior to startup for Segment 5 and as determined by the ORA for Segments 1 through 4 but no later than 7 years from startup.</p> | <p>Timing of the pipe replacements is to be determined by the ORA, but the replacements shall occur not later than 7 years from system startup. The 2007 Annual ORA Report made no recommendations to change this interval.</p> |
| | <p>Item 6: Full scale drill during storm conditions when flows for the Pedernales River at the Johnson City gauge approach or exceed approximately 5,000 cfs.</p> | <p>Three drills within the first 5 years after system startup, with the first drill occurring after the first 6 months following system</p> | <p>LCRA initiated no drills in 2008. Two additional drills are anticipated to be completed prior to January 26, 2010.</p> |
| Operational Reliability Assessment | | | |
| | <p>The ORA will provide Longhorn with an annual technical assessment of the actual effectiveness of the overall LPSIP. The ORA will provide feedback on the adequacy, frequency, and additional element criteria of the evaluation plan, which includes use of internal inspection devices, hydrotests, and other mechanical integrity assessment and confirming processes and technologies. The ORA results will be factored back into the LPSIP and will be integrated into the ongoing program.</p> | <p>Annually, or per event as defined in LMP</p> | <p>OPS approved Kiefner and Associates, Inc., as the independent, third-party ORA contractor. Monthly analyses using the pressure-cycle-induced fatigue cracking model continued in 2008 even though the TFI in-line inspection established by Mitigation Item 10 was performed in 2008. The 2007 Annual ORA Report was submitted to OPS. The Summary Report of the 2007 ORA Developments has been posted to the Longhorn Pipeline website at www.longhornpipeline.com under the heading "Reports" and then "Annual." The 2008 Annual ORA report is scheduled for completion and submittal to DOT/OPS no later than April 15, 2009.</p> |
| Longhorn Pipeline System Integrity Plan | | | |
| | <p>The LPSIP consists of certain specific "Process Elements." The descriptions and program attributes of the Process Elements reflect action "over and above" those specified and required under various regulations and statutes, such as DOT's Title 49 C.F.R. Part 195.</p> <p>Implementation of the "Process Elements" will ensure that Longhorn will effectively identify, analyze, and responsibly manage the most important threats to and risk of the Longhorn Pipeline System.</p> | <p>Continuously - Operations Annually - Self Audit</p> | <p>The 2007 LPSIP Annual Self-Audit was provided to OPS and is available to the public on the Longhorn Pipeline website at www.longhornpipeline.com. The 2008 Self Audit is scheduled for completion and submittal to DOT/OPS no later than April 15, 2009.</p> |
| Relative Risk Assessment Model | | | |
| | <p>The Relative Risk Assessment Model (Model) is designed to automatically prioritize and sort pipeline segments in accordance with their scored relative risk in relation to all other segments. Changes in the surrounding population, the environment, or mechanical attributes of the pipeline are updated in the model as new information is available and the Model is rerun.</p> | <p>Annually, or per event as defined in LMP</p> | <p>The Relative Risk Assessment Model was run in March 2008 based on data from calendar year 2007. The Relative Risk Assessment Model results were then utilized in the Scenario Based Risk Mitigation Analysis Program of the LPSIP. As a result, a recommendation was made to perform a Close Interval Survey of pipe to soil potentials from Milepost 450 to 456. This survey was completed in 2008. The Close Interval Survey was in addition to the ongoing integrity management measures of the Longhorn Mitigation Plan and the LPSIP.</p> |