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2009 Annual System Integrity Plan Self-Audit Report For Magellan Midstream Partners, L.P. Longhorn Pipeline

July 23, 2010

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1.0 Definitions

CMS: Compliance Management System

Longhorn: the entire pipeline system and all parties including LPP and MPL

LPP: Longhorn Partners Pipeline (the asset owner until August 27, 2009 and its direct employees / contractors, excluding MPL)

LPSIP: Longhorn Pipeline System Integrity Plan

MPL: Magellan Pipeline Company, L.P. (the asset operator and owner as of August 27, 2009)

SIP: Magellan Midstream Partners, L.P. System Integrity Plan

Operator: Magellan Pipeline Company, L.P. (MPL)

PMI: PMI Services North America, Inc

SBRMA: Scenario Based Risk Mitigation Analysis

SIP: System Integrity Plan

2.0 Introduction

The Longhorn Pipeline System (Longhorn) was initiated in the mid-1990s, with the intent of converting an existing West Texas crude oil pipeline into refined products service, and reversing the flow to take refined products from the Houston Gulf Coast area to markets in West Texas and the Southwest US. The project encountered opposition from various groups, resulting in a lawsuit and eventual settlement as described in Table 1: History of the Longhorn System, below.

Table 1: History of the Longhorn System

1949 – 1995	Exxon constructed the 18"/20" pipeline, Crane to Baytown, to transport crude oil; operated and maintained / refurbished until pipeline was idled and purged with nitrogen.
Oct 21, 1997	Longhorn acquired the existing (idled) pipeline from Exxon.
April 1998	National Environmental Policy Act (NEPA) lawsuit filed in Federal Court in Austin.
1998/1999	• Cleaning and refurbishment of the existing pipeline; • Construction of new pump stations (Galena Park, Satsuma, Cedar Valley, Kimble County, Crane, and El Paso) • Construction of El Paso Terminal • Construction of pipeline extensions: 18" Crane to El Paso; 8" Crane to Odessa; 20" GATX to Tie-In; and 8" and 12" pipelines from El Paso Terminal to tie-ins with other systems.
March 1999	Settlement Agreement requires Environmental Assessment, which ultimately leads to the Longhorn Mitigation Plan.
November 2000	Finding of No Significant Impact issued and Longhorn Mitigation Plan published.
2001 – 2004	Pre-Startup Mitigation Commitment Activities Performed
January 27, 2005	Official startup date for the Longhorn pipeline system.
2006	High Resolution Magnetic Flux Leakage (HRMFL) in-line inspections completed for Galena Park to Crane.
August 2006	Flying J acquires Longhorn Partners Pipeline, L.P.
2008	High Resolution Magnetic Flux Leakage (HRMFL) in-line inspections completed for Crane to El Paso.
2008	Transverse Field MFL Inspection (TFI) in-line inspections completed on Galena Park to Crane.
December 22, 2008	Parent company Flying J Inc., Longhorn Partners Pipeline, L.P. and affiliated companies file for voluntary protection under Chapter 11 of the U.S. Bankruptcy Code, allowing for continued pipeline operation during financial reorganization.
August 27, 2009	Magellan Pipeline Company, L.P. purchased the Longhorn pipeline.

Longhorn agreed to implement a Longhorn Mitigation Plan (LMP) as part of the Environmental Assessment (EA) conducted. The LMP was supplemented twice, immediately after it was originally developed. The LMP includes 40 "Mitigation Commitments" that addressed various integrity issues on the Longhorn system both before and after startup. The LMP also committed Longhorn to implement the Longhorn Pipeline System Integrity Plan (LPSIP), which includes three main elements:

1. Management Commitments (14 total), addressing various integrity management programs for the pipeline system, including a commitment to conduct a self-audit of the LPSIP each year,
2. LPSIP Process Elements (12 total), addressing various risk management processes for the pipeline system, and
3. An Operational Reliability Assessment (ORA), providing an independent technical analysis of various integrity threats on the pipeline system.

This report is the result of the annual LPSIP self-audit for 2009, and addresses the first two items listed above. Magellan contracted with RCP Inc., a regulatory and engineering consulting firm, to perform the 2009 self-audit. There is a separate reporting process for the Mitigation Commitments, and they are not addressed in this report. The ORA has its own reporting process which is conducted separately from this report.

The overall structure of the LMP, Mitigation Commitments, LPSIP, Management Commitments, Process Elements, and Operational Reliability Assessment are depicted in Figure 1: LMP Organization. In this report, the 14 Management Commitments will be referred to sequentially as MCxx. Likewise, the 12 LPSIP Process Elements will be referred to sequentially as PExx. The Table of Contents for this document provides an easy reference, as the section numbers for the Management Commitments and Process Elements correspond with the appropriate MCxx or PExx number. For example, MC13 refers to the Management Commitment to perform a self-audit, and is discussed in section 13 of "Findings for the LMP Management Commitments". Likewise, PE7 refers to the Management of Change Process Element, and is discussed in section 7 of "Findings for the 12 LPSIP Process Elements", and so forth.

On August 27, 2009 the Longhorn Pipeline system was purchased by Magellan Pipeline Company, L.P. who now owns and operates the system. As part of the sale, MPL did not retain existing LPP management personnel who had significant historical perspective and understanding of the Longhorn pipeline system. The former legal counselor, who has significant historical perspective of the Longhorn pipeline system, including the LMP and SIP, remains available to on an as-needed basis.

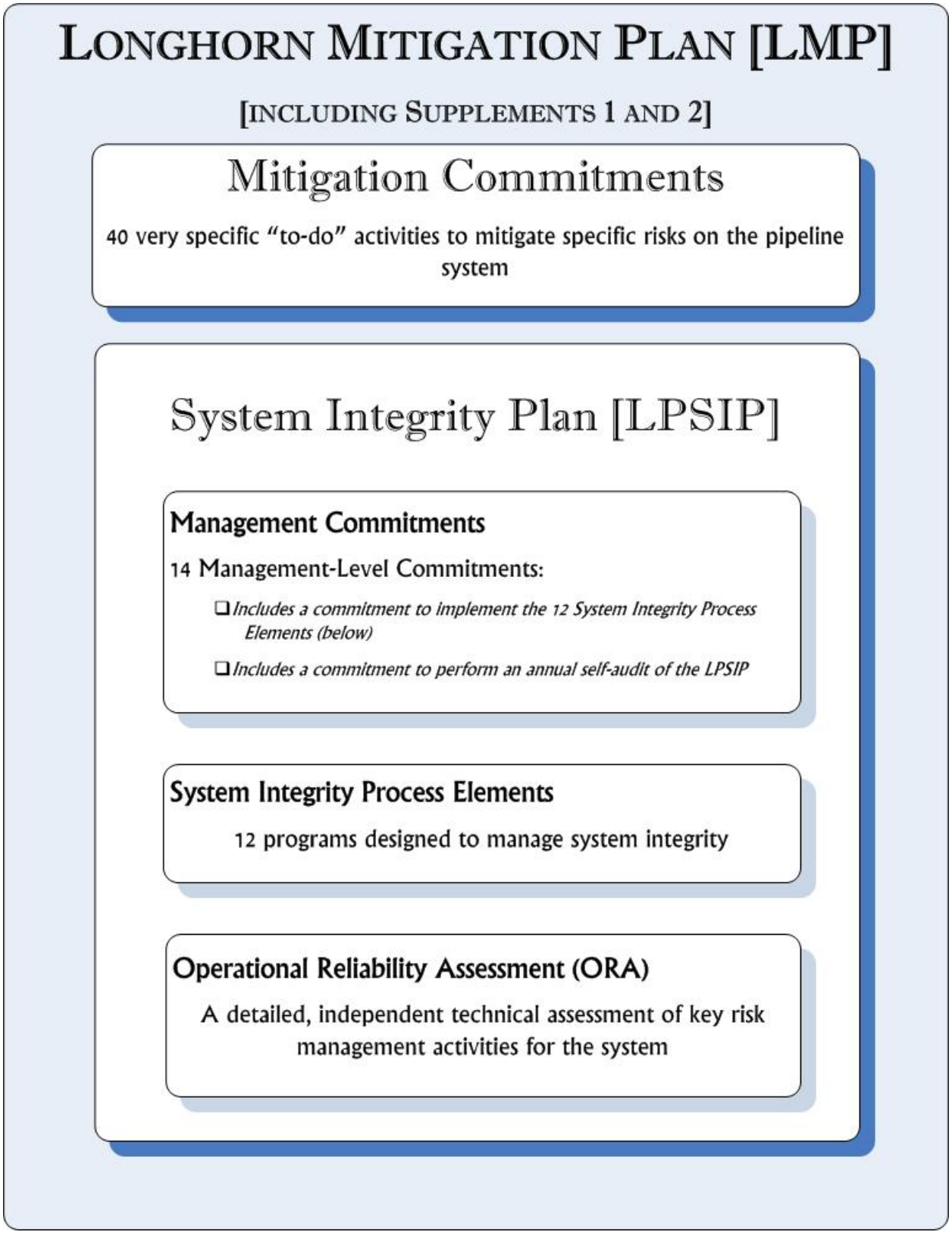

Figure 1: LMP Organization

3.0 Self-Audit Methodology

The self-audit team was composed of 2 representatives from RCP Inc., both experienced auditors with over 50 years of combined experience in the industry. The auditor's statements of qualifications are given in the appendix to this report. They reviewed the LMP, the LPSIP, and the SIP as well as various documents from Longhorn as listed in the appendix, including policies and procedures, work activity reports, agreements with third parties, performance tracking spreadsheets, and other relevant documents. They also interviewed 21 personnel from MPL in Austin, Houston, Tulsa, and El Paso, including personnel in field operations up through corporate executives, and inspected the facilities at the El Paso terminal. All the field activities for the audit were performed in March and April 2010. The auditors developed the opinions and findings in this report based on the interviews and documentation, using their best professional judgment and experience. Interim audit findings were reviewed with MPL to ensure that they were factually correct and considered all appropriate information – but the findings and conclusions in this report are the independent work of the audit team.

4.0 Significant System Developments in 2009

2009 activities were limited due to the LPP bankruptcy in late 2008 which carried through until the sale of the Longhorn pipeline system to MPL in August 2009. The system was idle throughout the majority of 2009 until the sale was finalized, with a minimal amount of construction activity for most of the year. The 42 mile pipe replacement was finalized by removing the old pipe. Two expansion tanks were brought online at the El Paso terminal, the manifold modifications were still underway, and the PMI tie-in was completed. The truck rack program was changed to an MPL system, and 2 truck rack lanes were shut down. In-line inspections using a UT tool were completed from Galena Park to Satsuma, and Satsuma to Warda, and some digs and remediation were performed based on prior ILI inspection results. There were no additional El Paso pump modifications completed in 2009, although they were still being evaluated. API 653 tank inspections were performed on 7 tanks at the El Paso terminal.

Due to low system volumes, Drag Reducing Agent (DRA) skids were de-commissioned at the Satsuma, Cedar Valley, Kimble, and Crane pump stations. The plans for four new pump stations at Warda, Eckert, Barnhart, and Cottonwood, to provide a capacity increase to 125 MBPD, were cancelled.

During 2009, Longhorn continued to implement system integrity activities as required by Federal Pipeline Safety regulations and the LMP.

There were numerous personnel changes in 2009, mostly associated with the system sale and management reorganization. The Longhorn management organization (the old LPP) was not retained, and operations of the Longhorn system were integrated into the existing MPL operating organization, with commensurate alignment of areas of responsibility including the assignment of a new Director of Operations and a new Manager of Operations. Most field operations personnel were retained with essentially similar roles and responsibilities. Support services provided by the Tulsa office were largely unchanged, although some of the field-level support personnel (two dedicated field engineers and a dedicated public awareness manager) were not retained. The responsibilities of the field engineers and the public awareness manager were absorbed by existing Field Operations and MPL support services personnel in the Tulsa office.

During the transition from LPP ownership to MPL ownership, a transition plan was developed and managed by MPL Director of Operations. This plan was intended to capture all ongoing projects and asset integrity activities. LPP management personnel provided transition plans to MPL and met with MPL counterparts to describe the status of each project and what activities were incomplete and required actions to be taken going forward.

5.0 Summary of Findings from the Self Audit

As mentioned above, the LMP requires that Longhorn conduct a self-audit of the LPSIP each year. The LMP specifically requires that the self-audit address 5 "core areas" of system integrity. Each of the 5 listed core areas is addressed below. Subsequent sections of this report address each of the 14 Management Commitments and the 12 Process Elements in the SIP.

5.1 A synopsis of the most important integrity issues being addressed on the Longhorn Pipeline System and the status of activities and programs used to manage these risks.

The activities and programs used to manage risk on the Longhorn system are addressed individually in the Management Commitments and Process Elements sections of this report. The activities and programs used to manage risk on the Longhorn system are mature, and the audit revealed that these programs are functioning and are effective. Areas for improvements in the programs are described in the Recommendations section of this report.

The sale of the system was the most significant issue in 2009. MPL took several steps to avoid any oversights during the transition, and reviewed MOCRs and project plans for all projects that were incomplete at the time of the sale.

An ultrasonic (UT) in-line inspection tool was run from Galena Park to Warda, for the first time, to check for laminations and other defects in the pipe wall as required by Mitigation Commitment #12. This required significant cleaning of the line prior to inspection.

API 653 tank inspections were conducted on 7 tanks at the El Paso terminal, with no significant findings. An additional 4 tanks were or will be inspected in 2010.

The mitigation actions from the HRMFL tool inspection conducted in 2008 were also completed.

MPL has established system-wide vibration standard for all Longhorn system mainline pumps in 2009.

PHA revalidations were completed for Galena Park, Satsuma, Cedar Valley, Crane and Cottonwood stations.

Tank pump vibration issues at the El Paso terminal were not addressed in 2009, due to the system being idle for most of the year. The 4 new tanks will have pumps with variable frequency drives. MPL is evaluating the use of variable frequency drives, in addition to or perhaps instead of, additional supports and regrouting of the pump skids, to address this problem on the remaining tank pumps.

MPL also performed safety culture assessments in 2009, addressing procedure adherence as well as other subjects, in Longhorn as well as the rest of the Magellan pipeline systems, as described

in MC9: Workforce Development. These assessments identified that SIP usability was potential opportunity for improvement. The SIP council is evaluating how to address this issue. It also determined that employees feel empowered to shut down jobs that they feel are unsafe, which is a positive reflection on the message that "safety trumps productivity". There has also been an increase in the number of safety issues elevated to management.

5.2 Important insights, results, and lessons learned from the previous year.

Gasket failures were a point of emphasis throughout the MPL systems. In response to this finding, MPL has established torque specifications, prohibited the use of "or equivalent" gaskets, and established a maximum shelf life for gaskets in inventory.

MPL's safety culture puts an emphasis on employee and front end supervisor accountability for safety awareness. With the realignment of responsibilities after the sale, the Southern District Safety representative's geographic area of responsibility is larger. She compensates for this by making routine calls to field operations management and personnel.

Pipeline scheduling and product quality issues are easier to manage under the unified MPL ownership / operatorship than they were when the prior owner was making shipping decisions.

During the transition to a different SCADA hub, the ability to monitor the flow of the Perdenales River was lost. The SCADA operator did not get an alarm that the river stage had reached >5000 cubic feet / second, and did not initiate follow up actions as required by the LMP. This omission was recognized after the fact, an incident investigation was conducted, and the SCADA system has been corrected.

5.3 Insights from new integrity management processes or technologies, or innovative applications of existing technologies.

Cleaning of the Longhorn system is an on-going requirement, in order to ensure good in-line inspections and to prevent internal corrosion. A non-invasive pig counter was successfully tested, for use in cleaning projects. The "coupon-style" cathodic protection test stations have been installed and being evaluated.

The results from the UT in-line inspection tool are being evaluated to determine what indications require repair. Actual field results are shared with the ORA contractor and ILI tool vendor to review the accuracy of the tool in order to provide continuous improvement of the inspection and analysis process.

5.4 Performance measurement results.

There were fewer Hazard Near Miss cards in 2009 than 2008; however, no more incidents, likely due to the line being idle for most of 2009.

The "scorecard" for 2009 is given in an appendix to this report. There were no DOT-reportable spills in 2009. One non-DOT-reportable release occurred inside facilities in 2009minor). There were no releases in sensitive or hyper-sensitive areas in 2009, and no releases along the pipeline outside of facilities. The number of incidents was down from 2008. There were six "near misses" in 2009.

The applicable government agencies also exercise oversight over the Longhorn system. The Pipeline and Hazardous Materials Safety Administration (PHMSA) conducted an audit in June, 2009, and has issued no findings pursuant to that audit.

5.5 New integrity management programs or activities that will be conducted or significant improvements to existing programs and activities.

As mentioned in the Recommendation section, MPL is continuing their efforts to address pump vibration at the El Paso terminal. They are also continuing the line cleaning process, to help ensure successful in-line inspections in the future.

MPL has established system-wide vibration levels and detection sensors for all mainline pump units. Vibration levels and sensors have not been established for pump units associated with tanks.

MPL intends to perform a "systems equipment review" (a checklist hazop style review) at Satsuma and Galena Park stations (El Paso terminal was done in 2008), looking at safety devices, manifolds, thermal safety valves, set points, cathodic protection, overfill protection devices, dead legs, pump vibration, relief tanks, etc. to identify potential integrity issues in 2010. MPL also intends to perform a dead leg review in El Paso utilizing risk analysis and prioritized once the manifold expansion project is completed.

6.0 Findings for the LMP Management Commitments

The 14 Management Commitments described in the LMP are addressed below.

6.1 MC1: Longhorn Pipeline System Integrity "Process Elements"

The first of the 14 Management Commitments addressed in this section of this report commits Longhorn to implement a System Integrity Plan (SIP) consisting of 12 "process elements" that are "over and above" the federal and state regulatory requirements. The 12 SIP elements are addressed in the next section of this report.

6.2 MC2: Data Gathering and Identification and Analysis of Pipeline System Threats

There is a significant program in place to accumulate and integrate a wide array of information related to the operation and integrity of the Longhorn system, as described in LMP section 3.2.2. MPL has dedicated a full time person to this task, who receives information from many different data sources that is compiled and entered into the Longhorn risk model on a monthly basis. This information is also forwarded to the ORA contractor, who performs their own evaluation of the data. MPL has also dedicated a full time Risk Engineer to the Longhorn system, which works with all SMEs related to the Longhorn system to evaluate risks and ensures compliance with SIP, DOT and the LMP.

MPL also continued to perform Incident Investigations during 2009, even though the system was inactive for most of that year. There were 16 incident investigations completed in 2009. These investigations are not limited to incidents that are reportable to government agencies, and include other types of operational incidents such as near misses. The results of these incident investigations are shared broadly throughout LPP and MPL. Likewise, Longhorn captures information concerning Incorrect Operations (IOs), and summarizes this information on a spreadsheet on a quarterly basis to identify trends and potential areas for improvement. IOs are drawn from Abnormal Operating Conditions (AOCs), incident investigations, and Hazard / Near Miss (HNM) cards (described in item 11 of the SIP process elements). MPL manages changes to the Longhorn system through SIP process Element 11 – Change Management. Management of Change Requests (MOCR) are listed on a report which is widely distributed throughout MPP personnel responsible for Longhorn operations. This report provides a quick reference as to whether the MOCR is either open or closed.

The LMP also commits Longhorn to conduct an annual Third Party Damage Prevention Program Assessment. The assessment for 2009 was conducted and reviewed as required.

6.3 MC3: Integration of System-Wide Activities

Using information from the data gathering processes mentioned above and the data tracking and scorecard processes mentioned in PE 12, Longhorn conducts system-wide reviews of activities to ensure that all relevant information about the operation and integrity of the system is considered and evaluated on a routine basis.

A Mitigation Plan Scorecarding and Performance Metrics document is prepared and reviewed quarterly. Incidents are reviewed on a quarterly basis by Operations Directors, VP of Operations, and VP of Technical Services.

Lastly, the Operational Reliability Assessment (ORA) provides a comprehensive, independent technical review of all types of threats to the Longhorn system on an annual basis.

6.4 MC4: Incorporation of Engineering Analysis

Longhorn consistently obtains the assistance of engineering experts (both inside the organization, and from third parties) to help identify, manage, and resolve potential integrity issues on the pipeline system. The results of each in-line inspection are reviewed by independent pipeline assessment experts who perform an independent analysis and identification of any additional areas for physical inspection of the pipe based on statistical analysis of the results (known as the probability of exceedance, or POE, review). The results of ILI tool runs are also sent to a third party to conduct seam or girth weld assessments, depending on the type of assessment tool used.

MPL did a pump case pressure protection analysis and conducted a low pressure manifold relief study, to ensure that this piping would not be overpressured.

6.5 MC5: Integration of New Technologies

Longhorn continues to incorporate new technologies for the operation of the system, and to evaluate the use of additional technologies as appropriate. An Ultrasonic ILI tool (UT) was run in 2009 for the first time on the Longhorn system. Special “coupon” style cathodic protection test stations were installed on the 42 mile pipe replacement and at a few other locations, in order to obtain IR- considered test readings. The Bullhorn continuous CP monitoring system is still being used.

6.6 MC6: Root Cause Analysis and Lessons Learned

This Management Commitment refers to the implementation of a formal incident investigation program for actual and near miss events, and for repairs that are made to correct deficiencies in system integrity. This program is described in PE6.

MPL conducts monthly SIP meetings in Austin, El Paso, and Crane / Odessa, where HNM cards, LPP procedures, and other accidents and lessons-learned are reviewed with operating personnel.

6.7 MC7: Industry-Wide Experience

As part of the sale, MPL did not retain existing LPP management personnel who had significant historical perspective and understanding of the Longhorn pipeline system. The former legal counselor, who has significant historical perspective of the Longhorn pipeline system, including the LMP and SIP, remains available to on an as-needed basis. Longhorn continues to benefit from the industry-wide sharing received by participation in industry and governmental committees. The Vice President of Technical Services sits on the API/AOPL Pipeline Performance Excellence Team (PET), which investigates liquid pipeline issues and develops programs and recommendations for improvements throughout the industry. He also sits on the API Operations Technical Committee (OTC), the primary US industry forum for technical issues for liquid pipelines, and is a member of the US Federal Government's Technical Hazardous Liquid Pipeline Safety Standards Committee (THLPSSC), which is the primary governmental forum for all types of liquid pipeline issues.

Representatives of also participate in various internal and external meetings and events. MPL's Director of Operations participated in a Pipeline Information Exchange (PIX) workshop in 2009, and MPL made a presentation at that event. MPL's Safety Manager participates in the ILTA and API safety manager's teams. MPL also has personnel who participate in the API CEHS committee, environmental committee, and pipeline leadership team. All MPL land representatives have meetings and share information concerning land and landowner issues throughout the Magellan system. The MPL Southern District Safety Leader participates in the Central Texas chapter of the National Safety Council, and she will get her Advance Safety Certificate in 2010. The Manager of Design Services and One Call is the chairman of the NE Oklahoma Damage Prevention Council.

6.8 MC8: Resource Allocation

Funds and personnel are made available as required to implement the requirements of the SIP. Allocation of resources is now done on an MPL-wide basis. Discretionary expenditures are reviewed and approved by the Maintenance Capital Expense Management Team (MCEMT), composed of the two Directors of Operations, the Director of Engineering, an Asset Integrity Manager, and the Director of HSE. While there are no dedicated funds for Longhorn discretionary expenditures, all personnel who were interviewed during the auditing process expressed their belief that the LPP bankruptcy filing and subsequent sale did not have an adverse impact on system integrity or the implementation of necessary risk mitigation activities. The Longhorn system still has dedicated resources, including a full time integrity engineer and a full time risk model and data / ORA coordinator, while other operations and management personnel are now shared with other MPP pipeline systems. The dedicated Longhorn public awareness position was eliminated and responsibilities have been transitioned to an existing MPL resource

that is responsible for all public awareness activities in addition to other responsibilities. Two dedicated Longhorn field engineering positions were eliminated, with their responsibilities transitioned to existing MPL shared technical services personnel. Some field and management personnel have different areas of responsibility than before MPL's purchase of Longhorn, with a corresponding change in scope of responsibilities (maybe a larger area with fewer tasks, or a smaller area with more tasks). The open supervisor position at El Paso terminal was filled with an experienced pipeline supervisor, which addressed one of the observations from last year's LPSIP report.

6.9 MC9: Workforce Development

Longhorn has a mixture of very experienced personnel with decades of pipeline experience along with some personnel who have relatively little pipeline experience (even though they may have a significant amount of non-pipeline experience). There were no new-hires on the Longhorn system in 2009, although there were several reassignments within MPL which has brought several existing MPL operations personnel from other pipeline systems to serve similar roles on the Longhorn system. However, the operating procedure training specified in Section 9.01 of the SIP does not appear to have been completed in some circumstances at the El Paso Terminal and Galena Park facility in 2009. SIP-ADM-9.01, Section 3.2, states that the supervisor shall verify training requirements, develop and implement site-specific procedures, maintain and annually review operating procedures, and ensure that each employee reviews and understands the relevant operating procedures prior to allowing them to perform the task. SIP-ADM-5.03, Section 3.1.1, states that the supervisor shall conduct SIP meetings (12 meetings held throughout the year) for field based employees and document the minutes on the SIP Meeting Minutes Form. The auditors did not receive documentation of individual training plans for site-specific procedures for employees newly assigned to the Longhorn system in 2009.

MPL initiated a team in late 2008 to evaluate training programs and needs. One of the outputs of that team was a new operations employee "on boarding" process which took effect in 2009 and should help with the assimilation of the operations employees. New field employees are now hired in groups and attend a week-long "boot camp" in Tulsa, conduct another week of orientation with their supervisor addressing specific topics in the field, attend another week of training in Tulsa, and then complete a training curriculum in the field.

MPL also performed safety culture assessments in 2009, addressing procedure adherence as well as other subjects, in Longhorn as well as the rest of the Magellan pipeline systems, as described in MC9: Workforce Development. These assessments identified that SIP usability was a potential opportunity for improvement. It also determined that employees feel empowered to shut down jobs that they feel are unsafe, which is a positive reflection on the message that "safety trumps productivity".

Longhorn personnel had "fall arrest" training in 2009. MPL has also conducted additional training for control room personnel in Tulsa on the use and interpretation of information provided by the leak detection system.

6.10 MC10: Communication to Longhorn and Operations Management

Prior to the sale of the Longhorn system, communication mechanisms were in place between LPP and MPL. There were weekly staff meetings, monthly budget reviews, and quarterly management meetings involving LPP and MPL personnel. The weekly meeting reports, monthly asset integrity reports, IO spreadsheet, operations scorecards, and mitigation scorecards were transmitted from MPL to LPP. During the transition period from LPP ownership to MPL ownership, MPL assigned someone to coordinate the hand-over of information and projects to existing MPL personnel. Several meetings were held between LPP and MPL; status reports were developed and communicated with MPL personnel. MPL maintained a master transition document that described each project, the status, who the new MPL owner would be and the eventual disposition of the project. Since the sale was completed, LPP management no longer exists as a separate entity and none of the LPP staff was retained by MPL.

6.11 MC11: Management of Change

This management commitment refers to the implementation of a Management of Change Program. The LMP requires that all documents and files affected by the change be identified and modified in a timely basis. MPL's management of change process is described in SIP Element 11 and is addressed in section PE7 of this report.

6.12 MC12: Performance Monitoring and Feedback

This management commitment is addressed in PE12.

6.13 MC13: Self Audit

The LPSIP self-audit has been prepared each year as required. This report is the result of the 2009 LPSIP self-audit. Recommendations from the 2008 self audit are being tracked to completion on the 2008 Self Audit Recommendation & Action Plan. There are some recommendations from the 2008 audit that are still open. In addition, there are some items that continue to be concerns in 2009 although they are listed as "Complete" on the 2008 Self Audit Recommendations & Action Plan report.

The following recommendations remained incomplete throughout 2009.

2008 Audit Recommendation	MPL Corrective Action / Status
Engineering Standards and SIP Documentation and Processes - The relative risk assessment model should be re-evaluated and updated as described in sections 3.2.2.4 and 3.2.14 of the LMP to incorporate more modern risk assessment protocols and to utilize current sources of information such as the TPD annual assessment report. The risk model is being maintained, and is updated with new data on a monthly basis. The tier-based segmentation of the pipeline has not been revised since the model was created. The factors that affect the tier segmentation change rather slowly, so annual updates should not be required, but an update of the segmentation based on current population densities should be considered.	9/30/09: LMP #39 requires that any changes or proposed to the LMP needs to be submitted to PHMSA, LCRA and other stakeholders for review and approval. This will need to be discussed with PHMSA prior to pursuing. This is a low priority and is being deferred to a later date.
Vigilance During System Divestiture / Transition - The tank pump skid vibration issues at the El Paso terminal still need to be resolved and may involve skid anchoring and grout modifications, recycle valve modifications (or elimination), and pipe support modifications. Only 2 of the 15 pump skids have been modified as of the date of this report, and the modified pump skids may require additional modification. There is also evidence of pipe movement in the rack at the El Paso Terminal that may need to be addressed.	6/8/09: Pipe movement has been addressed and is currently being monitored for further movement. 11/02/09: Pump skid vibration issues are being evaluated by the pump SME and asset integrity engineer and several solutions are being tested. Once a solution is identified, a project plan will be developed and implemented.

The following recommendations are listed as "Complete" on the 2008 Self Audit Recommendations & Action Plan report, but continue to be concerns for 2009. It appears that several MOCR's are listed as "closed" when no PHA or PSSR has been completed. The MPL Corrective Action/Status to these is listed below.

Documentation and Processes - The "Action Item" tracking process indicates whether the MOCs, PHAs, and PSSRs for any given project are open or closed. However, each MOC, PHA, or PSSR may contain multiple internal action items of their own, and these internal action items are not tracked individually in a centralized process. Some internal action items may take a long time to complete, and may not be fully complete at the time that the MOC, PHA, or PSSR that identified them is "closed" in the AI tracking process. The AI tracking process should be expanded to allow tracking of any internal MOC, PHA, and PSSR action items that may linger after the MOC, PHA, and PSSR itself is "closed".	9/30/09: Magellan is adhering to the requirements of the MOCR (SIP-ADM-11.01) procedure and PHA (11.01-ADM-001) procedure which does not allow sign off on either until all action items are properly addressed. For action items identified during a PSSR (SIP-ADM-9.05) process, Magellan has decided to continue to track open action items separately through the PSSR and not in the action item tracking. Project managers are required to provide progress reports on PSSR status, which includes any action items.

6.14 MC14: Longhorn's Continuing Commitment

Longhorn continued to implement the programs required by the LMP in 2009. All personnel interviewed by the auditors indicated that financial and personnel resources had not been adversely affected by Magellan's purchase of the Longhorn system in 2009 and confirmed that no integrity related items had been affected.

7.0 Findings for the 12 LPSIP Process Elements

The 12 process elements described in the LMP are addressed below.

7.1 PE1: Longhorn Corrosion Management Plan

The corrosion control programs for Longhorn are well designed and implemented, and the auditors noted no concerns. There were no changes to the corrosion control manpower dedicated to the Longhorn system after the sale. Close interval surveys were performed as needed in the higher-tier areas, including 100% of the tier III locations. 59 cathodic protection related repairs were made in 2009, including seven cathodic protection ground beds compared to 102 repairs made in 2008. Special "coupon" style cathodic protection test stations were installed on the 42 mile pipe replacement and at a few other locations, in order to obtain IR-considered test readings.

A corrosion issue potentially caused by AC-induced current was identified for a nine mile segment of pipe in a power line corridor prior to 2009, and initial mitigation actions were taken at that time. During 2008, a theoretical study of AC-induced corrosion was performed (which did not account for the mitigation activities already performed). The results of that study were received in December, 2008. MPL is now working with another expert to determine what, if any, additional mitigation actions may be required. This will be influenced in part by the results of the UT in-line inspection, which were still pending at the time of the audit. In the interim, a guideline has been established to target AC-induced voltage below 10 volts.

Several API 653 internal inspections were completed at the El Paso terminal during 2009. No significant corrosion issues were noted. No floor replacements were required following these inspections. Minor corrosion pitting that was identified was remediated with patch plates prior to placing the tanks back in service.

Internal corrosion is monitored through the use of corrosion coupons, which are inspected 3 times a year.

7.2 PE2: In Line Inspection and Rehabilitation Program

Longhorn conducted a UT in-line inspection from Galena Park to Warda during 2009 and remediation began in 2010. Longhorn could not complete the full in-line inspection run downstream of Warda due to low volumes on the pipeline. PHMSA was notified of this delay. The remainder of the tool run should be completed in 2010.

Longhorn completed several repairs (maintenance digs) in 2009 that were the result of the 2008 MFL and TFI tool runs. There were a total of 42 digs completed, 38 from the MFL tool between Crane to El Paso and 4 from the TFI run. The majority of the anomalies found from the TFI appear to be old defects that had not been identified by the 2006 MFL tool run. MPL follows

recent industry standards to ensure the quality of ILI runs, and uses conservative methods to re-calibrate ILI results when determining what ILI indications to dig. The ORA contractor performs a statistical analysis of the ILI data to identify any additional areas for physical inspection, beyond those that would normally be inspected, as an extra precaution. The ORA process provides a detailed, independent analysis of all ILI data. The schedule for recent ILIs has been driven by the mitigation commitments, and has not been altered by ORA technical analysis. This will change over time, as the mitigation commitment ILIs are accomplished.

7.3 PE3: Key Risk Areas Identification and Assessment

The risk model is being maintained, and is updated with new data on a monthly basis. The tier-based segmentation of the pipeline has not been revised since the model was created but the HCA designations are updated per 195. The factors that affect the tier segmentation change rather slowly, so annual updates should not be required, but an update of the segmentation based on current population densities should be considered. It should be noted that the Longhorn system is regulated under the PHMSA pipeline integrity management regulations in 49 CFR 195.452, which includes requirements for the identification and management of High Consequence Areas, including populated areas. The populated area information and resulting pipeline integrity management programs are periodically updated as required by this regulation.

7.4 PE4: Damage Prevention Program

The damage prevention program for Longhorn appears to have been effectively implemented in 2009. Longhorn has committed to install and maintain a high number of pipeline markers. The aerial patrol program is well organized and executed, and surveillance occurs more frequently than required. Flights are conducted in both directions (up the pipeline one day, and back in the other direction the next). That gives the aerial patrol observer the ability to spot potential issues from both perspectives on a regular basis. An operations person flies with the pilot annually to make sure the flight is taking the correct path.

MPL gathers ROW near miss and unauthorized encroachment data in the Mitigation Plan Scorecarding & Performance Metrics report. The patrol program identified 6 near-miss incidents, including 3 unauthorized encroachments on the ROW in 2009: However, there does appear to be a discrepancy in how certain third party near miss activities are counted as unauthorized encroachments. Upon review of incident investigation reports, it appears that all 6 incidents met the definition of unauthorized encroachment listed in the Mitigation Plan Scorecarding & Performance Metrics report.

- January 21, 2009: MP 157.48, landowner installed a fence on ROW (classified as near miss only, not as unauthorized encroachment)
- February 2, 2009: MP 310.2, landowner installed a fence on ROW (classified as near miss only, not as unauthorized encroachment)
- March 4, 2009: MP 114, landowner boring holes on ROW (classified as unauthorized encroachment)

- March 28, 2009: Odessa Lateral, power pole installed on ROW by contractor (classified as near miss only, not as unauthorized encroachment)
- May 21, 2009: MP 19.465, landowner installed drainage ditch across ROW (classified as unauthorized encroachment)
- July 9, 2009: MP 21.3, landowner installed drain line across ROW (classified as unauthorized encroachment)

Although unauthorized encroachments are not uncommon for any pipeline, these near misses and unauthorized encroachments reinforce the need for an active ROW patrol program, in addition to the public awareness programs.

There are multiple areas, some mentioned in the 2009 self-audit report that have or are expected to have encroachment activity on the Longhorn system in 2010 and future years. The locations mentioned in the 2008 report either have agreements in place, or the agreements are being negotiated. Anticipated new activity in 2010 includes the extension of Tucker road in Harris County, and the expansion of Highway 6280 in El Paso. All of these areas will require attention during the design and construction phases to ensure the safety of the Longhorn system.

There are locations of shallow pipe in agricultural areas, and no-till agreements are obtained when possible for those areas, which give a financial incentive to farmers to not use the ROW for farming activities. Landowners that have executed no-till agreements are contacted annually to reaffirm that land use has not changed. With or without no-till agreements in place, there does not appear to be a formal method to communicate these areas of concern to the ROW patrol pilots so that these areas are scrutinized more heavily during routine patrol activities. There were no new no-till agreements obtained in 2009. This was identified as a recommendation from the 2009 Third Party Damage Assessment and is being incorporated into the aerial patrol program and One Call process.

One near miss was reported in December 2008 that involved a newly identified shallow pipe location at Chico Lane in Big Lake, TX. This involved a road crossing that had eroded to less than 5-inches of cover. An incident investigation was completed and the shallow pipe was remediated in 2009 by adding a concrete cap over the line segment and adding base material to the road surface.

Execution of the public awareness program for Longhorn was implemented as required by the LMP and was being tracked and reported quarterly by a dedicated public awareness manager prior to the sale. These efforts included special outreach programs for schools, public event outreach, print advertising, and a kiosk program that distributes pipeline safety materials at stores frequented by excavators. Longhorn participated in numerous damage prevention initiatives, including special emphasis for “dig safely” in April. Door hangers were placed with resident homes located along the western Tier I II and III areas of the pipeline system Travis County to El Paso County). Additional targeted mailings were sent to people involved in near misses or unauthorized encroachments, those who have declined to sign no till agreements, and people identified as new inhabitants along the ROW.

Following the purchase of the pipeline, MPL eliminated the dedicated Longhorn public awareness manager position. These responsibilities were allocated between Field Operations and Magellan's existing shared resource that is responsible for public awareness efforts for all of MPL pipeline operations. This resource has additional responsibilities, including managing the one-call center as well as managing the resources responsible for updating engineering documentation such as P&ID's and other drawings. Prior to the sale, the former Longhorn public awareness manager met with the MPL Manager of Design Services to provide a detailed transition of Longhorn public awareness requirements and ongoing efforts. A detailed report was provided to the shared resource that outlined where public awareness documentation was stored and what efforts would need to be completed to remain in compliance with LMP and SIP requirements.

7.5 PE5: Encroachment Procedures

Operations personnel are keenly aware of the need to prevent unauthorized encroachments and to properly manage authorized encroachments. An encroachment agreement is executed for every authorized encroachment. MPL uses two different encroachment agreements: a "short form" that is used for routine activities (such as installing utility lines across the ROW), and a "long form" that is used for more complex situations such as land development. The land representative is informed of every encroachment agreement, and reviews them to ensure that they are appropriate. These are retained permanently in the TRACT land files. A total of 69 encroachments were recorded in 2009, 6 were reported as near misses, 3 of which were classified as unauthorized, Near misses and unauthorized encroachments are tracked in the Mitigation Plan Scorecarding & Performance Metrics report

7.6 PE6: Incident Investigation Program

The LPSIP requires that incident investigations be performed for accidents, incidents, repairs, and near misses ("close calls"). The II form includes checkboxes to identify the event as Minor, Serious, or Major. The vice-president level determines the level of investigation required for each II. There were 16 incident investigations in 2009, none of which were classified as Serious/Significant or Major. There was a significant drop in the number of incident investigations in 2009 (down from 27 in 2008), likely attributable to the idle conditions of the pipeline system. There were 7 Near Misses, all of which were attributed to third party encroachment issues. The other nine incident investigations were classified as Minor. Two releases were reported, however, only one met the criteria necessary to trigger an incident investigation. MPL conducts a quarterly review of all incident data with the VP of Operations; the Operations Directors; and the VP of Technical Services. The auditors did not investigate the level of detail or trending that is reported to management or the outputs that may come from these reviews.

To promote awareness of hazards and to ensure "near misses" are identified, MPL uses a hazard / near miss (HNM) card (note that these operational "near misses" are not the same as the ROW

"near misses" described in PE4). All operations employees are encouraged to complete these cards (a lot of HNM cards is better than just a few), and in 2009 there were 79 HNM cards for the Longhorn system. MPL has an action item (AI) tracking process that tracks IIs, HNM cards, and SIP meeting action items. The AI tracking process excludes action items that are performed immediately. The Safety Leader participates in the bi-weekly conference calls, and identifies any incidents that might require an Incident Investigation. She also gets copies of all spill reports, for the same reason.

7.7 PE7: Management of Change

MPL's management of change process is described in SIP Element 11. The LMP requires that all documents and files affected by the change be identified and modified in a timely basis. Upon review of the 2009 completed MOCR's, the majority did not include these documents as attachments or reference to a location where these documents were retained. The majority of MOCR's reviewed did not include completed Process Hazard Analysis documentation, Pre-Startup Safety Review documentation, or documentation of red-lined drawings or revised procedures. In many cases, the required signatures were not included even though the MOCR was listed as closed. MPL tracks whether MOCR's are open or closed and reviews this report on a quarterly basis. However, the method used to track progress of MOCR's does not include verification that these elements (PHA, PSSR, operating procedures, P&ID's, signatures, etc.) were completed prior to closing the MOCR. The Longhorn integrity engineer's sign-off is the only evidence of most PHA reviews. The MOCR process was changed in 2010, requiring a signed-off Facility Integrity Checklist to be attached to all closed MOCRs or a reference is made on the MOCR to the HAZOP report depending on the PHA methodology used. The tracking of associated documents has also been revised in 2010. MOCRs are not closed until this related documentation is received by the originator of the MOCR.

The LMP requires that all changes on the Longhorn system "be evaluated using an appropriate hazard analysis (HAZOP, what-if, etc.)". The MPL MOCR form includes a yes / no checkbox to indicate whether a Process Hazard Analysis is required, and MPL's procedures provide that the asset integrity engineer should determine the appropriate PHA methodology for change requests. MPL changed their SIP / PHA procedure in 2008 to specify that PHAs were required for all changes "on a Longhorn Pipeline System", and the PHA process was updated to provide two options: a what-if/checklist, or a full HAZOP. MPL is currently using the Facility Integrity Checklist as the primary method to perform PHA's. As noted, very few MOCR's reviewed included documentation that indicated a PHA was completed.

The SIP requires that Pre-Startup Safety Reviews (PSSR's) occur prior to bringing new equipment into operation or prior to bringing modified equipment back online. The MOCR form includes a signature line in the MOCR Closure Approvals section that confirms whether a PSSR was completed. The majority of MOCR's reviewed did not include a signature or an email confirmation that this was done. With a few exceptions, the completed PSSR form was not included with the MOCR's reviewed. For the PSSR's that were attached, it is not clear how

MPL tracks to closure the PSSR corrective action items listed (ex. CR-LH-09-35 Tank 22 PSSR Review Attachment A).

Documentation of MOCR's appeared to be inconsistent in many cases:

> Some completed MOCR forms were missing "Operating Procedure Modifications" in the Pre-Modification Checklist section of the form (ex. CR—LH-09-38, CR-LH-09-10). It appears that these MOCR's were using an older version of the form.
>
> Several completed MOCR forms were missing required signatures by the Operations Supervisor in the "Start-Up/MOCR Closure Approvals" section of the form (ex. CR-LH-09-41, CR-LH-09-42, CR-LH-09-36, CR-LH-09-38, and CR-LH-09-05). MPL relies heavily upon the MOCR originator to acquire emails from various stakeholders listed on the MOCR form for their approval. This leads to many closed MOCR's when in fact several people had been inadvertently left off email distribution list or had not issued their approval at the time of MOCR closure.
>
> Some completed MOCR's appear to omit the checklist item "Operating Procedure Modification" even though it would seem necessary to do so given the type of change being requested. For example, CR-LH-09-36 requests placing Tank 23 into temporary service via tank-to-tank transfer. Since this change would be a new sequence of steps for the operators to perform, it should have lead to developing or amending existing operating procedures. Further review of the procedure LH-EP-OP-215 confirmed that the revision log had not been updated to reflect this change.

MPL appears to have followed the MOC process for MOCR #CR-LH-09-36 relating to placing tanks 22 & 23 into service, but the change appears to be unusual in that the tanks did not have level gauges or temperature transmitters in service at the time that the tanks were placed into service. MPL's position is that this was satisfactory because, in their interpretation, these tanks were placed into limited storage service (not breakout tank service) only via tank-to-tank transfer.

LPP maintained a report of all PHA recommendations prior to the sale to MPL. It is unclear whether the open PHA recommendations from the LPP managed capital projects have been resolved by MPL as the projects were completed.

7.8 PE8: Depth of Cover Program

The depth of cover program is tracked as part of the Asset Integrity (AI) report. Regular depth of cover surveys are performed as required, results are evaluated, and remediation is performed as appropriate. One Near Miss incident investigation was performed in 2009 due to a shallow cover concern that was identified in November, 2008 near Big Lake, Texas.

In-line inspections to-date have not identified any correlation between shallow pipe and excavation damage, which indicates that this threat is being adequately managed.

7.9 PE9: Fatigue Analysis and Monitoring Program

The fatigue analysis and monitoring program is conducted as part of the ORA, which is functioning as planned. The results of this program are described in the ORA report.

7.10 PE10: Scenario Based Risk Mitigation Analysis

The scenario based risk mitigation analysis (SBRMA) is conducted annually as required, after the results of the Annual Third Party Damage Prevention Program Assessment (ATPDPPA) and the results of the relative risk model are available. The SBRMA for the 2008 operating year was performed as required, but did not identify any additional risk mitigation measures. The SBRMA for the 2009 operating year had not been conducted as of the time of this audit.

7.11 PE11: Incorrect Operations Mitigation

MPL has found that operator error has been a significant contributing factor to incidents and near misses on the Longhorn system. Longhorn has taken steps to address that issue, and uses an incorrect operations (IO) tracking spreadsheet which is updated monthly and reviewed quarterly. IOs include Abnormal Operating Conditions (AOCs), IIs, and Hazard / Near Miss (HNM) cards. The quarterly Incorrect Operations Mitigation Report has been discontinued. The previous "gold star" program was discontinued, and was replaced with the MPL Southern District program of giving one lottery ticket for each HNM card submitted. Action Items are reviewed monthly.

MPL does have an operations control center simulator specifically for LPP, which is used to train and to re-qualify board operators in the Tulsa control center. This helps to ensure that they can rapidly recognize and effectively respond to abnormal operating conditions on the Longhorn pipeline system.

7.12 PE12: System Integrity Plan Scorecarding and Performance Metrics Plan

This element commits Longhorn to establish and track general program performance measures, specific programs performance measures, and to conduct an annual system integrity plan audit. These measures have been established and are being tracked as required, and the annual system integrity plan audit has been conducted each year as required. Longhorn has also established several other performance measures and tracking systems, including the Mitigation Plan Scorecarding & Performance Metrics report and incorrect operations scorecard. The scorecard metrics are reviewed monthly. Longhorn no longer tracks all calls to their 800 number, as many of these calls were not related to system integrity (i.e. job inquiries, etc.), and now only tracks integrity-related calls. The Longhorn website has been incorporated into the MPL website, and

the ability to track hits to the Longhorn specific assets was lost during the transition. Work was underway to enable this tracking at the time of the audit.

See appendices 10.1 for a description of releases and other key metrics on the system in 2009.

The Longhorn workforce achieved a milestone of working 1,000 safe work days on October 22, 2009.

8.0 Recommendations

While the LPSIP is being implemented effectively, there are several opportunities for continued improvement in the opinion of the auditors. These have been grouped into the following categories (in no particular order of importance):

8.1 Engineering Standards and SIP Documentation and Processes

The "Action Item" tracking process indicates whether the MOCs, PHAs, and PSSRs for any given project are open or closed. There is no tracking process that ensures all of the required elements of an MOCR are completed prior to closure. The process should be improved to not only list whether the MOCR is open or closed, but should also include whether critical elements have been completed such as PHA, PSSR, signatures, and supporting documentation have been completed. Additionally, each MOC, PHA, or PSSR may contain multiple internal action items of their own, and these internal action items are not tracked individually in a centralized process. Some internal action items may take a long time to complete, and may not be fully complete at the time that the MOC, PHA, or PSSR that identified them is "closed" in the AI tracking process. The AI tracking process should be expanded to allow tracking of all internal MOC, PHA, and PSSR action items that may linger after the MOC, PHA, and PSSR itself is "closed". This includes all project-related MOCR, PHA and PSSR action items.

8.2 Incident Investigations

MPP also has a report that tracks Action Item status that result from incident investigations, MOCR's, HNM Cards, Lessons Learned Advisories, and other sources. Upon review of this report, it appears that some corrective actions were not tracked on this report. For example, one of the corrective actions from an incident involving a SCADA failure of the flow rates at the Perdenales River on October 22, 2009 was not tracked to completion using the Action Item tracking report.

MPP should consider formalized training for those individuals who are expected to prepare an incident investigation report. The level of detail provided in some of the incident investigations appear to be lacking and the corrective actions listed are sometimes vague and would be difficult to track whether they were ever completed. For example, one of the corrective actions listed an incident investigation from a failed hydro test on October 31, 2009 says "SIP-ADM-7.02, Analysis of Pipe Cutouts, should be followed". This may be appropriate, but the corrective action does not describe any specific actions that should be taken to ensure that this will be done by those that are responsible for conducting hydro tests in the future. Upon review of SIP-ADM-7.02, it is not apparent how following this procedure would have prevented this incident from occurring, since the failure was due to a manufacturing defect.

8.3 Workforce Development

The transition from LPP to MPL created significant opportunities to share MPL resources from other pipeline assets. However, MPL should ensure employees who now have operations and maintenance responsibilities for the Longhorn system are trained on the appropriate operating procedures for the Longhorn facilities they work on(ex. train non-dedicated MPL personnel who serve as back up for the Longhorn Galena Park facility). At the El Paso Terminal, several changes have occurred in 2009 and will continue to occur at this terminal into 2010. Operating procedures will need to change in addition to formalized training for personnel responsible for implementing those procedures in accordance with SIP-ADM-9.01 requirements.

8.4 Damage Prevention

MPL has several "No-Till" agreements in place as well as several areas in which agricultural activity occurs in an area with shallow pipe, but no agreement is in place. MPL should consider implementing a process to inform the aerial patrol pilots and COMs of these areas and place additional emphasis when patrolling these areas. This was also identified in the 2009 Third Party Damage annual report.

There are multiple areas, some mentioned in the 2009 self-audit report, that have or are expected to have encroachment activity on the Longhorn system in 2010 and future years. The locations mentioned in the 2008 report either have agreements in place, or the agreements are being negotiated. Anticipated new activity in 2010 includes the extension of Tucker road in Harris County, and the expansion of Highway 6280 in El Paso. All of these areas will require attention during the design and construction phases to ensure the safety of the Longhorn system.

8.5 Vigilance During System Transition

The Longhorn system was purchased by MPL in August, 2009. MPL was already the operator of the Longhorn system, so they were already well aware of the special commitments related to the Longhorn system. However, there is still a need to ensure that the integration of the Longhorn system into the MPL operating and management organization is conducted smoothly, since some of the Longhorn personnel were not retained after the sale. For example, the LPP Master Compliance List (including specific commitments from the EA, MC, etc.) has been compared to the MPLSIP, to identify any Longhorn commitments that have not been explicitly stated in the MPLSIP. MPL should ensure that all Longhorn commitments are incorporated into the MPLSIP as appropriate, to ensure that new personnel are aware of these special commitments.

The 2009 public awareness efforts were largely completed prior to the sale. MPL needs to ensure that they have developed action plans and assigned the necessary resources to fully implement the Longhorn public awareness efforts going into 2010.

The recent resignation of the Compliance Coordinator in Austin may disrupt the flow of monthly data used to update the risk model, Action Item report, individual training plans, emergency response liaison program, emergency response drills, and tracking line marker replacement numbers. MPL filled this position on May 3, 2010 and retained the position in Austin, TX.

Several facility modifications at the El Paso terminal are incomplete (new tank exterior painting, manifold modifications and painting). Care should be taken to ensure that integrity issues don't develop pending ultimate completion of these projects, and that no necessary activities are overlooked when the projects are resumed. For example, PHA recommendations associated with capital projects should be closed before closing the associated MOCR. The tank pump skid vibration issues at the El Paso terminal still need to be resolved and may involve skid anchoring and grout modifications, recycle valve modifications (or elimination), and pipe support modifications. Only 2 of the 15 pump skids have been modified as of the date of this report, and the modified pump skids may require additional modification. This may be addressed by the use of variable frequency drives, which will be installed for the 4 newest tanks at El Paso. The previously noted pipe movement in the rack at the El Paso Terminal was addressed by installing additional pads under the pipe at the supports, but should continue to be monitored to ensure the movement does not continue or get worse. Lastly, some in-service projects still have punch list items that need to be addressed.

9.0 Conclusions

The SIP was effectively implemented in 2008, and served its function of managing risks on the Longhorn system. Personnel at all levels of the organization are aware of and committed to comply with the requirements of the SIP. Comprehensive programs are in place to manage risks on the pipeline system and to implement the commitments in the SIP. These programs are mature, and are being improved on a continual basis. Several recommendations for additional improvement have been identified for further consideration by Longhorn.

10.0 Appendices

10.1 Summary of key metrics for 2009

Category	Measure	2009 Results
Incident Data	Releases in each Tier (DOT Reportable only)	Tier 1 = 0
		Tier 2 = 0
		Tier 3 = 0
	Releases in sensitive & hypersensitive areas (DOT Reportable only)	0
	Releases by cause (DOT Reportable only)	TPD = 0
		Corrosion = 0
		Design = 0
		Incorrect Operations = 0
	Releases by volume (BBL) (DOT Reportable only)	Tier 1 = 0
		Tier 2 = 0
		Tier 3 = 0
	Near Misses	Tier 1 = 4
		Tier 2 = 1
		Tier 3 = 0
Risk Awareness	Identification of new and/or previously unrecognized risks	0
	Number & type of projects completed that are not required by prescriptive code	0
Public Customer Service	Number of validated complaints on safety or environmental issues	9
	Number of landowner contacts related to pipeline safety and land use	57
Operator Resources and Innovation	Number of new technologies, alternative methodologies and innovative approaches to control risk	0
Damage Prevention Program	Number of third party damage incidents due to One-Call Process not being practiced (One-Call Violations)	0
Unauthorized Encroachments	Number of unauthorized encroachments	3
Facility Inspections	Number of facility inspections	9
Corrosion Management Plan – Smart	Dents with any of the following: metal loss, corrosion, exceeds 6% of the outside diameter, or located on the longitudinal seam or girth weld	0

Pig Results	Remaining strength of the pipe results in a safe operating pressure that is less than the current MOP at the location of the anomaly using a suitable pressure calculating criterion (e.g. B31 G, modified B31 G, RSTRENG or LAPA)	23
	Casing shorts with associated metal loss	0
	Girth weld anomalies	2
	Corrosion with 3” of either side and/or across girth welds	Not Available
	Preferential corrosion of or along seam welds	Not Available
	Gouges or grooves greater than 50% of nominal wall thickness	0
	Cracks located in the pipe body, girth weld, and longitudinal seam that are determined to be injurious to the integrity of the pipe	Not Available

Leading Measure	Definition	Standard	Score
Number of Unit Lockouts	Number of events that cause the system to shutdown or delay startup as indicated by a unit lockout.	Actual Number	74
Unit Lockout Duration	Total duration for unit lockouts from the time of lockout to return to remote control by Tulsa Control Center.	Actual Number	105.5
Number of Emission Events	Number of Emission events that exceed a permitted limit and require a report to TCEQ.	Zero (0)	0
Number of Releases	Number of Releases from company assets or projects that are managed by area employees in quantities exceeding 1 Gallon.	Zero (0)	8
Number of Recordable Releases	Number of DOT Reportable releases experienced on the Longhorn system.	Zero (0)	3
Number of Recordable Injuries/Illnesses for Employees	Number of OSHA Recordable Injuries experienced by area employees	Zero (0)	0
Number of Motor Vehicle Accidents	Number of Motor Vehicle Accidents experienced by area employees in Company Vehicles.	Zero (0)	2
Number of Line Hits	Number of contacts with pipeline by first, second or third parties. Contact with pipeline includes coating contact or damage.	Zero (0)	0
Number of Near Misses	Number of events that in slightly different circumstances could have resulted in damage to the pipeline by first, second or third parties.	Zero (0)	5
Number of Markers Repaired or Replaced		Actual Number	545
Number of Unauthorized Encroachments	Number of activities that resulted in a structure being placed on the ROW that was not authorized by Longhorn Pipeline.	Zero (0)	3
Number of Emergency Drills Conducted			13
Number of Facility Inspections Completed			7

10.2 Key documents reviewed for the 2008 SIP self-audit

2009 LPSIP Self Audit Backup Docs - Appendices

#	Doc. Name
	Magellan Organization Chart
	2009 Mitigation Plan Scorecarding & Performance Metrics
	2009 Mitigation Plan - Commitment Implementation Status Report
	Year End 2009 – Magellan Asset Integrity Report
	CMS Summary Report – November 2009
	Example MOCR Reports
	Open MOC List
	Closed MOC List
	Pre-Startup Safety Review Form (PSSR)
	Hazard Near Miss (HNM) - Closed List
	Hazard Near Miss (HNM) - Open/New List
	Closed Action Items (AI)
	Open Action Items (AI)
	Incorrect Operations Mitigation Report & Data
	Abnormal Operating Condition (AOC) Report
	Repair/Incident Investigation Decision Tree
	Incident Investigation Reports
	2009 LPSIP Release Table
	EHES Training List
	MPP Depth of Cover (DOC) Procedure
	December 16 - 31, 2009 Leak Detection Systems Report
	2008 Scenario Based Risk Mitigation Analysis (SBRMA)
	CMS Task Report
	2009 Third Party Damage Prevention Program (TPDPP) Annual Assessment
	Example Pre-Startup Safety Reviews (PSSR)
	Public Awareness Transition Brief
	Shallow Pipe in Cultivation Mitigation Plan
	Example Depth of Cover Form
	LCRA Unannounced Spill Drill, October 22, 2009
	Summary Report of 2008 ORA Developments
	2008 Self Audit Recommendations & Action Plan
	MPL Longhorn 101 Training Presentation
	MPL Longhorn Project Transition Plan
	MPL Letter to PHMSA, December 17, 2009
	DOT Maintenance / Repair Report
	MPL Longhorn Rectifier Maintenance Activity Report
	MPL Longhorn Test Point Exception Report
	MPL Project Discrepancy List (Handover from LPP to MPL)
	Facility Integrity Review Checklist
	Bi-Monthly Meeting Notes, December 15, 2009
	System Integrity Plan - 2009
	Website Monitoring Statistics
	Example API 653 Inspection Reports

10.3 Statements of Qualifications for the Auditors

W.R. (Bill) Byrd, P.E.
President

Executive Summary

As founder and principal of RCP, Mr. Byrd enjoys a solid reputation for working with the public, corporate executives, legal representatives, and regulatory agencies to resolve complex regulatory, integrity management, safety, and compliance management issues. He combines exceptional analytical and communication skills with a broad background in engineering, operations, management, economics, and regulatory affairs, yielding excellent professional judgment and capabilities that can be applied to intractable problems. He is a widely respected public speaker, and is routinely called upon to make presentations to industry associations and other groups at the national level. He is a licensed Professional Engineer in five states, and graduated with honors from Georgia Institute of Technology for both his M.S. and B.S. in Mechanical Engineering.

Accomplishments/Experience

- Serving as the consulting expert to the API / AOPL Pipeline Performance Excellence Team, a permanent team composed of pipeline executives dedicated to improving the safety of the liquid transmission pipeline industry.
- Serving on the INGAA Foundation with other pipeline company and contractor executives to identify, prioritize, and fund research projects for the gas transmission industry.
- Serving as a consulting expert during the first criminal prosecution under the Pipeline Safety Act.
- Serving as an expert witness during the first class action lawsuit brought against a pipeline company under the citizen suit provisions of the Pipeline Safety Act.
- Serving as an expert witness / consulting expert on several other pipeline accidents and lawsuits, including those of national significance.
- Chairing the Offshore Corrosion Surveillance Subcommittee for a major pipeline company.
- Leading the development and implementation of a corrosion control strategy for oil and gas operations on the North Slope of Alaska in response to congressional investigations.
- Leading the development of a multi-skill progression program for a major pipeline company with a unionized workforce.
- Developing a new approach for H2S contingency planning in large sour oil and gas production areas, and co-authored two papers based on that work at the first annual EPA/SPE Joint Exploration and Production Environmental Conference. This revised planning approach has since been adopted throughout the oil and gas industry for use in production operations.
- Developing solutions for produced water toxicity issues on the Outer Continental Shelf, NORM sampling and testing procedures for oil field wastes, and asbestos exposure issues.

Associations/Affiliations

- American Gas Association
- American Petroleum Institute
- American Society of Safety Engineers
- American Society of Mechanical Engineers
- Interstate Natural Gas Association of America Foundation
- Texas Gas Association
- Houston Pipeliners Association
- Gulf Coast Environmental Affairs Group

Chris Foley, CSP
Vice President, Consulting Services

Executive Summary
Mr. Foley has extensive engineering and senior management experience in a broad range of industrial sectors, including energy services, power generation, pulp and paper, and petrochemical. He has a strong background in operations & maintenance, project management, systems safety engineering, environmental compliance, and construction engineering. Board Certified Safety Professional and B.S., Industrial Engineering – Texas A&M University.

Accomplishments/Experience
In his 18 years of industrial experience, Mr. Foley has developed comprehensive regulatory compliance programs for pipelines, air, water, waste, emergency response, hazardous materials and processes, and occupational safety management for Fortune 500 companies. Specific accomplishments include:

- Directed due diligence efforts for several crude and HVL pipeline acquisitions. These efforts included comprehensive phase I environmental assessments, jurisdictional determination reviews, permit transfers, remediation project assessments, integrity management assessments, operator qualification transition, and regulatory program development, including O&M, Integrity Management, Operator Qualification, Oil Spill Response Plan, One call, Public Awareness, and Environmental, Health & Safety Plans.
- Conducted a comprehensive permit review of Longhorn Pipeline Partners, Houston Ship Channel to El Paso refined products pipeline. This included all federal, state, and local jurisdictions for the construction, start-up, and on-going operations of the refined products pipeline, various pump stations, and breakout terminals.
- Managed all aspects of EHS compliance for thirteen combined cycle power generation facilities in the Western Region of the U.S. This included acquisition and compliance monitoring for air and wastewater permits, performing comprehensive environmental due diligence reviews of recently acquired facilities, and served as lead point of contact for all agency representatives for a wide variety of regulatory issues.
- Developed EHS Management Tools utilizing web-based communication tools, for audit tracking.
- Coordinated Process Safety Management and Risk Management Plan compliance for all highly hazardous production processes within a large pulp & paper facility and lead several PSM/RMP compliance audit teams at various facilities throughout the country.
- Played a key role with the East Harris County Manufacturers Association, planning and hosting joint communication forums between local chemical industries and community members which presented each facility's chemical release modeling scenarios, accident prevention measures, emergency response capabilities, and community alert notification systems.
- Lead Project Engineer during various petrochemical production facility expansion and shutdown maintenance projects, and new LNG production facility start-up project.

Associations/Affiliations
- American Gas Association
- American Petroleum Institute
- Texas Oil & Gas Association
- Southern Gas Association
- Texas Gas Association
- ANSI Gas Piping Technical Committee