

Milpitas District Internal Review of Gas Maintenance Records  
Date: 5/20/11

Background

The following summary identifies PG&E's internal findings and the corrective and preventative actions taken in response to PG&E's review of Milpitas District's 2008, 2009, 2010 and 2011 gas maintenance activities.

Topic	Findings	Corrective Actions Taken To Close Findings	Actions Completed to Prevent Recurrence	Completion Date
Emergency Valves	1) During the 9/24/2008 quarterly records review, PG&E personnel identified four valves at [Redacted] for which the required June 2008 maintenance was not documented on the relevant valve card.	1) Milpitas District reviewed employee time cards and PG&E's Pipeline Maintenance Database ("PLM") and verified that the required maintenance work had been completed in June 2008, within the mandated frequency, and updated the relevant valve cards to reflect the maintenance.	1) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.	1) Corrective: 9/24/2008 Preventative: On-going Confirmatory assessment: 11/1/2011
	2) During the 3/18/2009 quarterly records review, PG&E personnel identified five valve [Redacted] for which the required October 2008 and April 2009 bi-annual maintenance was not recorded on the relevant valve card.	2) Milpitas District reviewed employee time cards and PLM and verified that the required work had been completed in October 2008 and April 2009, within the mandated frequency, and updated the relevant valve cards to reflect the maintenance. The employee documented his April 23, 2009 work out of sequence on the valve card.	2) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.	2) Corrective: 3/18/2009 Preventative: On-going Confirmatory assessment: 11/1/2011
	3) During the 3/18/2009 quarterly records review, PG&E personnel identified several valve cards that lacked a supervisor's signature ([Redacted]).	3) All identified valve cards were reviewed for completeness and signed by the Supervisor.	3) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.	3) Corrective: 3/18/2009 Preventative: On-going Confirmatory assessment: 11/1/2011

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	<p>4) During the 6/21/2010 quarterly records review, PG&amp;E personnel identified two valves at [Redacted] for which the required May 2010 bi-annual maintenance work was not recorded on the relevant valve card.</p>	<p>4) Milpitas District reviewed employee time cards and PLM and verified that the required work had been completed in May 2010, within the mandated frequency, and updated the relevant valve cards to reflect the maintenance. In addition, these services were performed a second time, and valve cards updated, on June 22, 2010.</p>	<p>4) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&amp;C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.</p>	<p>4) Corrective: 6/22/2010 Preventative: On-going Confirmatory assessment: 11/1/2011</p>
	<p>5) During the 6/21/2010 quarterly records review, PG&amp;E personnel identified two valves at [Redacted] for which the required 2010 annual service work was not recorded on the relevant valve card.</p>	<p>5) Milpitas District reviewed employee time cards and PLM and verified that the required work had been completed in May 2010, within the mandated frequency, and updated the relevant valve cards to reflect the maintenance.</p>	<p>5) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&amp;C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.</p>	<p>5) Corrective: 7/11/2010 Preventative: On-going Confirmatory assessment: 11/1/2011</p>
	<p>6) During the 6/21/2010 quarterly records review, PG&amp;E personnel identified valves at [Redacted] for which required maintenance work was not recorded on the relevant valve card.</p>	<p>6) Milpitas District reviewed employee time cards and PLM and verified that the required work had been completed in April 2010, within the mandated frequency, and updated the relevant valve cards to reflect the maintenance. In addition, these services were performed a second time, and valve cards updated, on August 18, 2010.</p>	<p>6) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&amp;C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.</p>	<p>6) Corrective: 8/18/2010 Preventative: On-going Confirmatory assessment: 11/1/2011</p>

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	7) During the 3/14/11 quarterly records review for Irvington Station, PG&E personnel noted that the semi-annual maintenance for valves 5, 17, 20, 30, 31, 34, 50, 66, and 71 was completed outside the compliance period. PG&E personnel also identified one valve (valve 33) for which the required bi-annual maintenance was not recorded on the relevant valve card.	7) Semi-annual maintenance for [Redacted] was due in August 2010 and completed on 11/15/10. The completion date exceeded the PG&E required frequency, but not the federally mandated frequency. There is no corrective action to perform.  Semi-annual maintenance for [Redacted] as due in September 2010 and completed on 11/23/10. The completion date exceeded the PG&E required frequency but not the federally mandated frequency. There is no corrective action to perform.  Milpitas District reviewed employee time cards and verified with PLM that the required work on valve 33 had been completed within the mandated frequency and updated the relevant the valve card to reflect the maintenance. In addition, this services were performed a second time, and valve card updated, on December 23, 2010.	7) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.	7) Corrective: 12/23/2010 Preventative: On-going Confirmatory assessment: 11/1/2011
<b>Station Maintenance</b>	8) During the 6/21/2010 quarterly records review, PG&E personnel determined that Milpitas District failed to document required calibrations for [Redacted]  9) During the 6/21/10 quarterly records review, PG&E personnel determined that Milpitas District failed to document the April 2010 review of [Redacted]	8) Milpitas District reviewed employee time cards and PLM and verified that the required work had been completed in April 2010, within the mandated frequency, and updated the relevant records to reflect the maintenance. In addition, these calibrations were performed a second time, and records updated, on August 10, 2010.  9) Milpitas District reviewed employee time cards and PLM and verified that the required review had been completed in April 2010, within the mandated frequency, and updated the relevant records to reflect the review. In addition, this review was performed a second time, and records updated, on October 13, 2010.	8) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.  9) Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.	8) Corrective: 8/10/2010 Preventative: On-going Confirmatory assessment: 11/1/2011  9) Corrective: 10/13/2010 Preventative: On-going Confirmatory assessment: 11/1/2011
<b>Equipment Calibrations</b>	11) [Redacted] monthly calibration check was missed in January, 2011. [Redacted] monthly calibration check was missed in September, 2010. [Redacted] monthly calibration check was missed in November, 2008.  Multiple blanks on monthly calibration forms for all years.	10) Subsequent monthly calibration checks for the missed CGIs found the units to be within tolerance. The completion dates of the monthly check exceeded the PG&E required frequency.  PLM was reviewed and confirmed that monthly CGI calibrations had been done but not documented. (except the 3 above) Blanks were noted.	10) Each GT M&C district has been provided a binder with current forms in 2010. This binder is up-dated by the Operating Specialists when new forms are issued. The Milpitas equipment calibrations binder was recently reviewed and re-organized. PLM for Milpitas was updated to reflect Combustible Gas Indicators as CPUC A Regulatory jobs. The PLM system administrator has been asked to check and correct all other Districts. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.	10) Corrective: 5/19/2011 Preventative: On-going Confirmatory assessment: 11/1/2011

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Observation	<p>10) During the 12/18/08 quarterly records review, PG&amp;E personnel determined that [Redacted] [Redacted] were documented as hard to operate or inoperable since March, 1999. These valves were able to be operated within the 15 month interval.</p> <p>12) During the 11/13/2010 quarterly records review, PG&amp;E personnel determined that there were blanks left on several of the station maintenance forms for [Redacted] [Redacted] All work was performed and documented properly.</p>	<p>1) Milpitas District flushed and greased the valves several times and on January 6, 2010, [Redacted] cleaned and greased [Redacted] making permanent repairs to the operation of the valves.</p> <p>12) [Redacted] reviewed the station maintenance forms, and determined that the blanks were non-applicable and that all work was performed and documented properly.</p>	<p>11) Engineering is in the process of updating and developing new torque limit charts for Plug and Ball valves.</p> <p>12) Milpitas CPUC records binders were recently reviewed and re-organized. Station maintenance forms specific to each Milpitas station were created with all non-applicable areas "grayed" out. Tailboards were conducted on 12/6/2010 and again 12/8/2010 on documentation and records rules. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.</p>	<p>11) Corrective: 1/6/2010 Preventative: On-going</p> <p>12) Corrective: 5/18/2011 Preventative: On-going Confirmatory assessment: 11/1/2011</p>
Previously Disclosed	<p>PG&amp;E previously disclosed subsequent to the November 15, 2010 audit:</p> <p>CPUC_045-01-CONF - Milpitas Terminal [Redacted] annual maintenance not documented on station maintenance form.</p> <p>CPUC_046-01-CONF - [Redacted] semi-annual maintenance not documented on valve maintenance record for May of 2010. Annual maintenance [Redacted] [Redacted] were not documented on valve maintenance record in 2010.</p>	<p>Gas Maintenance Supervisors, adopted a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. This process matches PLM report 60, the daily timecards and the CPUC records.</p> <p>Color network printers were purchased for Milpitas and Hollister. PLM prints all CPUC "A" Regulatory work in red on the timecards. This alerts employees of work priority of their work. It also aids in the supervisor review.</p> <p>Records procedures and organization were reviewed in several Districts. Willows District was determined to have a "best practice". Milpitas/Hollister District reorganized their records after this "best practice".</p> <p>A new compliance measure, for crew members, was added in 2011 to California Goaled to measure the thoroughness and accuracy of CPUC documentation.</p> <p>In January of 2011 a new Journeyman Gas Controls Technician was added to the Milpitas District. In the second quarter of 2011, a second new Journeyman Gas Controls Technician was authorized for Milpitas District. 8 candidates are in the testing phase of the hiring process.</p> <p>The maintenance for Valve 2 was performed December, 10, 2010.</p>	<p>Instructions were provided to Gas Maintenance Supervisors, in the form of a Work Management Process, on the requirements for reviewing all regulatory maintenance documents, on January 19, 2011. Milpitas CPUC records were recently re-organized to provide a marker system enabling a Technician or Mechanic to highlight for the Supervisor when records need supervisor review. The Supervisor's review is typically conducted each week. GT M&amp;C crew members participate in a performance recognition program for the areas of safety and compliance, California Goaled. A new compliance measure was added in 2011 to measure the thoroughness and accuracy of CPUC documentation. This measure will account for up to twenty-five percent of their total performance score in 2011. On-going, Operations Specialists will assess the effectiveness of this preventative action. A confirmatory assessment will be conducted by 11/1/2011 to verify the effectiveness of these corrective actions.</p>	<p>Corrective: On-going Preventative: On-going Confirmatory assessment: 11/1/2011</p>