

National Petrochemical & Refiners Association

# Reliability and Maintenance Conference 2008

May 20-23, 2008  
San Antonio, Texas, USA

Printed from e-media with permission by:

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571  
[www.proceedings.com](http://www.proceedings.com)

ISBN: 978-1-60560-359-9

Some format issues inherent in the e-media version may also appear in this print version.

# **DISCLAIMER**

The papers in this book have been reproduced for the author or authors as a courtesy by the National Petrochemical & Refiners Association.

Publication of this paper does not signify that the contents necessarily reflect the opinions of the NPRA, its officers, directors, members, or staff.

Requests for authorization to quote or use the contents should be addressed directly to the author(s).

National Petrochemical & Refiners Association

Reliability and Maintenance Conference  
2008

**TABLE OF CONTENTS**

<b>RMC-08-07 Maintenance Work Sampling .....</b>	1
<i>A. Poling</i>	
<b>RMC-08-09 Three Years On From Texas City.....</b>	10
<i>M. Broadribb</i>	
<b>RMC-08-12 10 Fundamental Strategies and Best Practices of Supply Chain Organizations .....</b>	25
<i>R. Engel</i>	
<b>RMC-08-15 Prevent Corrosion Under Insulation - A Strategy for Piping Systems - .....</b>	32
<i>B. Fitzgerald</i>	
<b>RMC-08-18 Reliability and Availability: Lifecycle Lessons from Functional Safety .....</b>	41
<i>C. O'Brien, B. Goble, I.V. Beurden</i>	
<b>RMC-08-19 New Best Practice to Deliver Predictably Competitive Turnaround Results .....</b>	50
<i>R.P. Vichich</i>	
<b>RMC-08-22 Transformers, Insulating Oil Testing &amp; Analysis .....</b>	57
<i>M.Q. Tu</i>	
<b>RMC-08-23 Medium Voltage Cable Testing Techniques .....</b>	71
<i>D. Jubert</i>	
<b>RMC-08-25 Fieldbus Project Implementation.....</b>	94
<i>P. Manak, F. Ford</i>	
<b>RMC-08-26 Monitoring and Maintaining PLC's .....</b>	100
<i>A. Runte, J. Aiena</i>	
<b>RMC-08-29 Materials Verification .....</b>	112
<i>M. Vining</i>	
<b>RMC-08-33 Turnaround Peer Assist Process at ConocoPhillips .....</b>	117
<i>S. Busick</i>	
<b>RMC-08-35 Strategies for Infrastructure Reliability.....</b>	124
<i>T. Kline, B. Hall, G. Fischer</i>	
<b>RMC-08-36 Failure Modes and Effect Analysis Utilization.....</b>	131
<i>P. Rabuse</i>	
<b>RMC-08-37 Analyzer Specialists – Their Origin and their Replacement .....</b>	161
<i>A. Williams, K. Landreth, P. Kroll, W. Hanks</i>	
<b>Author Index</b>	