

RMC2013 – Building the Next Generation												
Wednesday, May 22						Thursday, May 23						Friday, May 24
Turnaround	Reliability	Maintenance	Mechanical Integrity	Analzers Electrical Equipment	The Next Generation	Turnaround	Reliability	Maintenance	Mechanical Integrity	Analzers Electrical Equipment		8:30 -9:45
<b>Keynote Address</b> Alan Thicke Actor, Writer, Producer, Composer						<b>8:30 - 9:45</b> <b>What is Best-in-Class in Contractor Management?</b>  Global industry trends indicate a growth in the use of contractors, which increases the risk involved in completing the work at hand. This presentation will review ten essential attributes to establishing a contractor management strategy to effectively mitigate risk while increasing communication to contractors to ensure their understanding and compliance.	<b>Reliability Discussion Session</b> 1. 7 Common Traits of Winning Maintenance Reliability Programs  2. Standards Based Maintenance Reliability	<b>Onsite TSA for CUI: Fundamentals, Misconceptions and Trends</b>  This presentation will discuss the fundamentals of thermal spray aluminum (TSA) for mitigating corrosion under insulation (CUI) and how requirements for using TSA on-site are influencing application choices, leading to some misconceptions and driving usage trends and economics.	<b>Basic Infrared Inspection</b>  This presentation discussion will include infrared inspection program startup, safety concerns, reliability benefits and common faults found during infrared inspections.	<b>Reliability and Efficiency Improvements Realized through an Electrification Project within a Refinery</b>  In this workshop we will present a case study of a project that was executed to improve reliability, operating efficiencies, and reduce the energy usage of a pipe still within a large refinery. The workshop will include background on an industry recognized indices, the use of proven variable speed drive technologies, and the execution process that was followed to a successful project completion. The reduction in maintenance costs, improved HSSE, and reliability improvements will also be discussed.	<b>8:30 -9:45</b>  <b>Turnaround Discussion Session</b>  <b>How to Write an Effective Bolted Flange Joint Assembly Document</b>  <b>Craft Skills Development – Owner Support</b>	
<b>Turnaround Size Manageability: What's the Tipping Point?</b>  Using the industry's largest turnaround database, this presentation will look at the impact of size and complexity on turnaround cost and schedule outcomes, labor productivity and safety, and answer the questions: Is there a tipping point (e. g, man-hours, capital scope, equipment, etc.) where turnarounds become unmanageable? Is there a penalty paid in terms of cost, time, and safety for the larger events?	<b>Oil Mist Lubrication Drives Reliability of Over 100,000 Pump Sets</b>  Plant-wide oil mist systems have been in use in hundreds of reliability-focused petrochemical plants since the-mid 1960's. The latest edition of the API-610 Standard for centrifugal pumps describes advantageous application parameters. In the United States, Canada, South America, the Middle East and Pacific Rim countries, oil mist lubrication has matured to the point where plant-wide systems are now being specified by major design contractors and owners. An estimated 100,000 pump sets are thought to be presently lubricated with oil mist. Cost justification and data on unsurpassed experience will be presented in this workshop.	<b>Repair Strategy for Civil Structures Utilizing New Risked Based Inspection Methodology</b>  A team of engineers from BP's Whiting refinery and DNV collaborated to develop a risk assessment and inspection process to identify and evaluate aging refinery structures. To better focus structural repair efforts among a population of over 12,000 structures, this new inspection program utilizes detailed rule based inspection checklists yielding consistent and efficient inspection reports. The value of this new methodology is the creation of an inspection program that uses quantifiable risk analysis to give clarity to a repair strategy for a large population of refinery structures.	<b>Case Studies of Large Losses Associated With Fixed Equipment Integrity</b>  This will be a workshop of 4 owner-user MI experts presenting at least 8 actual case studies (not previously presented) of large losses due to MI problems with fixed equipment that led to hazardous releases, fires, explosions, LPO, etc. The presenters will explain what happened, why it happened (often multiple reasons), the physical cause of the failure (the damage mechanism that resulted in the release), the corrective actions implemented to avoid such incidents and how to make sure it does not happen again (systems to sustain the solutions).	<b>Unplanned Plant Electrical Outages: Testing and Preventative Options</b>  This workshop will discuss key methods for insuring the electrical system reliability in industrial plants. Silicone rejuvenation of cables will be detailed.	<b>Knowledge Transfer – Mitigating The Effects of An Aging (Retiring) Workforce</b>  This workshop will discuss ways to help transfer knowledge from experienced workers into the workplace environment, primarily through the use of Visual Cues, so that newer workers have the information they need to be efficient and to work safely.	<b>10:00 - 11:15</b> <b>Hot Rods and Hand Tools The Skill Trades Deficit: 6 Strategies To Fill The Void</b>  The current and incoming young oil and gas workforce was shaped by Nintendo and the internet. For the first time in the history of the United States we are seeing a long term shortage of skilled trades. This presentation will outline the challenges that this shortage presents to oil and gas and offer the following six elements of the solution:  <ul style="list-style-type: none"> <li>• Clear documented business processes to insure a smooth transition, continuous improvement and employee involvement;</li> <li>•Training as both a knowledge and a morale booster;</li> <li>•Condition sensing technology in maintenance and how to bring the "cool" back to the skill trades;</li> <li>•Capturing and facilitating the use of history in your CMMS or EAM;</li> <li>•Mentoring by the retiring generation;</li> <li>•Proactive Reliability.</li> </ul>	<b>Reliability Discussion Session Continued</b>  <b>Torque vs. Tensioning</b>  This presentation will help define the variables to consider and how they might affect your decision to torque or tension a bolted joint.	<b>Optimizing Tank Inspection Plans Utilizing Risk-Based Inspection: A Case Study</b>  Over the past few years, API Std 653 – the definitive standard for the inspection of storage tanks – has undergone several revisions. These revisions have included the addition of Risk-Based Inspection (RBI) as an acceptable practice. As these different revisions have been published, new and changing guidelines have been established around how RBI should be used and what flexibility it offers to the tank owners. This presentation will explain these requirements, demonstrate a proven methodology for analysis (including the use of similar service), and explain the benefits, challenges, and risks associated with utilizing RBI. Specifically, the presentation will address the business improvements seen in one case study, explain the regulatory impact and potential exposure associated with the utilization of RBI, and provide the key points to be covered to ensure a valid RBI analysis is performed.	<b>Going Beyond Asset Monitoring For Improved Reliability: Remote Asset Monitoring and Alerts</b>  It's no surprise that a good predictive maintenance strategy improves overall reliability and helps to meet production availability targets. Remote, automated monitoring extends the benefits even further. This presentation will explore wireless technology, essential asset monitoring solutions, and remote asset and system health monitoring and show examples of how they improved plant reliability.	<b>10:00- 11:15</b>  <b>Turnaround Discussion Session Continued</b>		
<b>Refining Turnaround Performance Improvement</b>  This workshop will share the approach BP utilized to create a step change performance improvement in their refining turnaround performance.	<b>Neglecting The Simplest Tool In Your Reliability Efforts?</b>  People are always seeking better tools to drive equipment reliability. Yet in many cases, they have overlooked one of the simplest and most effective; the detailed work instruction. While organizations have preventive maintenance procedures and some level of corrective repair job plans, few use them effectively to drive reliability. This presentation will provide attendees with a tool kit that they can take back and immediately analyze the processes surrounding	<b>Maintenance Discussion Session</b> 1. Rotating Equipment Reliability  2. Fixed Equipment Reliability  3. Becoming a "Reliability Linchpin" For Your Company	<b>Applying Pulse Reflectometry to Non-Traversing Tube Inspection</b>  This workshop will focus on the technical background and applications of pulse reflectometry (PR), a new methodology using sound for non-traversing inspection of heat exchangers and boiler tubes. Advantages for improving the quality and efficiency of inspections will be discussed and supported by related case studies.	<b>Benefits of Wireless Hart Transmission for Instrument Maintenance</b>  In this workshop we show the steps to implement Wireless Hart Transmission to develop predictive maintenance for Instruments and the benefits that we achieved, such as: on line supervision of critical instruments, remote access, optimization of maintenance costs, etc. The project includes the following equipments: control valves, vibration monitoring, steam losses	<b>Craft Workforce Development: It's Not Just Craft Training</b>  Even with an abundant labor pool, employers are still finding it difficult to hire qualified candidates, the scope of which worsens when looked at from a global perspective. This workshop will present current statistical information along with solutions to recruiting, training and retaining skilled craft professionals.	<b>1:15 – 2:30</b> <b>Getting The Most of Out of Your Contracted Maintenance Workforce</b>  In this presentation, the speaker explores the various relationships that exist between host companies and contractors, challenging the audience's view of what relationship they believe they have and how to change it. It also discusses the importance of establishing Service Level Agreements (SLAs); provides critical success factors and	<b>Leveraging Risk and Cost Analytics for Better Reliability and Holistic Enterprise-wide Asset Strategies</b>  Leveraging risk and cost analytics across the enterprise helps to manage risk and cost associated with physical asset strategy plans. Evaluation and optimization of strategy plans based on risk mitigation is supported by history revision of all changes made to strategy plans. A scalable process requires that you organize and aggregate into system and unit	<b>Reliability and Maintenance Excellence – What It Takes to Compete in a Global Marketplace?</b>  Reliability and Maintenance Excellence are rapidly becoming requirements to compete in a global marketplace. This workshop highlights those requirements gleaned from Solomon's International Study of Plant Reliability and Maintenance Effectiveness (RAM Study).	<b>OSBL Line Inspection Tracking</b>  OSBL (outside battery limits) lines are the arteries of any facility. We'll explore efforts to prioritize, categorize, and present inspection findings on OSBL lines and examine the challenges involved, such as the detail required for planning repairs of lines, issues with remediating piping with soil-air interface, maintaining cathodic protection systems, and critical equipment not covered by inspection findings.	<b>Nuclear Gauge Reliability</b>  Outside influences can affect the output but are often overlooked. These outside influences are normally interpreted as gauge reliability issues.		

	their work instructions to drive sustained improvement.			sensors and coriolis flow meters for custody transfer.			highlights the pitfalls to be avoided when establishing SLAs, before laying out a plan for establishing an effective contractor management system.	strategies, implement strategy plans for execution into the one work management system. This way knowledge capture and knowledge management that can be shared across the enterprise.				
<p><b>The Perfect Balance Between Man and Technology: The Latest Technology to Protect Confined Space Workers</b></p> <p>This presentation will explore the emerging technology of a Centralized Confined Space Monitoring System and the alternative methods used to reduce hazards within permit spaces. This technology is designed to increase the safety of workers within permit required confined spaces by reducing the deficiencies within current programs, as well as human error.</p>	<p><b>Operation Excellence and Its Role in Plant Reliability</b></p> <p>This presentation covers a discussion on operations excellence and the impact on plant reliability.</p>	<p><b>Maintenance Discussion Session Continued</b></p>	<p><b>Improved Failure Investigation Using Advanced Engineering Technologies,</b></p> <p>This workshop will discuss examples of using advanced engineering techniques such as finite element modeling (FEA), computational fluid dynamics (CFD), and material science to provide a more comprehensive approach to failure investigation. The lesson learned from these analyses help provide insight into better design and operational practices.</p>	<p><b>Collecting Instrument Reliability Data To Improve Performance</b></p> <p>Developing systems that monitor KPI's are important to ensure equipment is operating as intended and to provide the appropriate level of risk mitigation. Instrument Reliability Data provides prior use history and serves as the basis for the KPI's. KPI's enable owner-operators and consultants to understand there is a problem and investigate why the performance is trending in the wrong direction. This presentation will review current efforts by the Mary K. O'Connell Center for Process Safety to develop Tier 3 and Tier 4 KPI's support API RP-754 Process Safety Performance Indicators for the refining and petrochemical industries.</p>	<p><b>Finding the Connection: Education Meets Industry</b></p> <p>The solution to the ever-widening skills gap lies in the crucial connection between industry and education. In this workshop you will hear directly from a young craft professional talking about his experience and find out how your company can recruit effectively and make connections with education.</p>	<p><b>2:45 – 4:00</b></p>	<p><b>Effective Work Planning: Its Impact on Successful Outage Execution</b></p> <p>Scheduled outages in the refining, petroleum and petrochemical industries are the most expensive of all maintenance projects not only because of the loss of production, but also due to the expense of the maintenance performed. Effective task planning coupled with precision work execution has a direct correlation to extending the time between outages and maximizing the amount of work scheduled during an outage. This workshop will engage participants in a focused evaluation of their outage task planning processes and the effect on scheduling in order to accommodate an outage window.</p>	<p><b>Compressor Overhaul QC Improvements Critical To Right First Time Startups</b></p> <p>This presentation will discuss the journey taken by BP's Whiting refinery to improve compressor overhaul quality of repair. Since 2011, a renewed focus has been placed on "right the first time" repairs. To support our focus, personnel spent time improving procedures, practices and refinery norms. These efforts have proven to have a positive impact on overall compressor availability and eliminated costly repeat repairs.</p>	<p><b>Improving "Wrench Time" Thru Adaptive Planning &amp; Scheduling</b></p> <p>More and more manufacturing organizations are seeking to gain higher productivity from their maintenance workforce as a key strategy to stay cost competitive. As labor, material costs and backlogs rise, the challenge becomes just how to more effectively utilize the existing workforce.</p> <p>At PBF Refining in Paulsboro, New Jersey, the new science of "Complex Adaptive Systems" is being applied to the Work Management strategy as a "bottom- up", feedback based approach to planning and scheduling excellence. This approach concentrates on building robust relationships at the field level and incorporates both a user friendly "work launch" for operator notification entry and a "work close-out" to consistently capture valuable information from the mechanic.</p>	<p><b>Why Gasket Surface Area, Surface Condition &amp; Gasket Stress are important for "Leak Free" Operation</b></p>	<p><b>Improving Safety &amp; Communication with Industrial Wireless at a Leading Chemical Facility</b></p> <p>Many facilities have realized the benefits of industrial wireless applications to address safety, security, optimization and compliance. In this presentation we will learn from the real-life experiences of BASF Freeport's approach to industrial wireless with various wireless applications including their strategic approach, planning, implementation, successes and lessons learned along the way.</p>	