

Ensuring Reliability through Preparedness Planning: Best Practices for Delayed Coker Units

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REFCOMM
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Do you have a plan in place?



Value

- What would the impact be if your coker went down?

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Value

- Urgency versus Emergency

Value

◦ Urgency versus Emergency



Taking the Emergency Factor Out

- Do I have someone to call?



Understanding Your Needs

- Plant requirements
 - GPM
 - Pressure
 - Cycle times
- Site Specific SOP
 - Detailed
 - All Encompassing



Understanding Your Needs

CORRECT EQUIPMENT



Understanding Your Needs

STANDARD OPERATING PROCEDURE

	STANDARD OPERATING PROCEDURE Title: HVHP COKE CUTTING SOP FOR _____	Page 1 of 13
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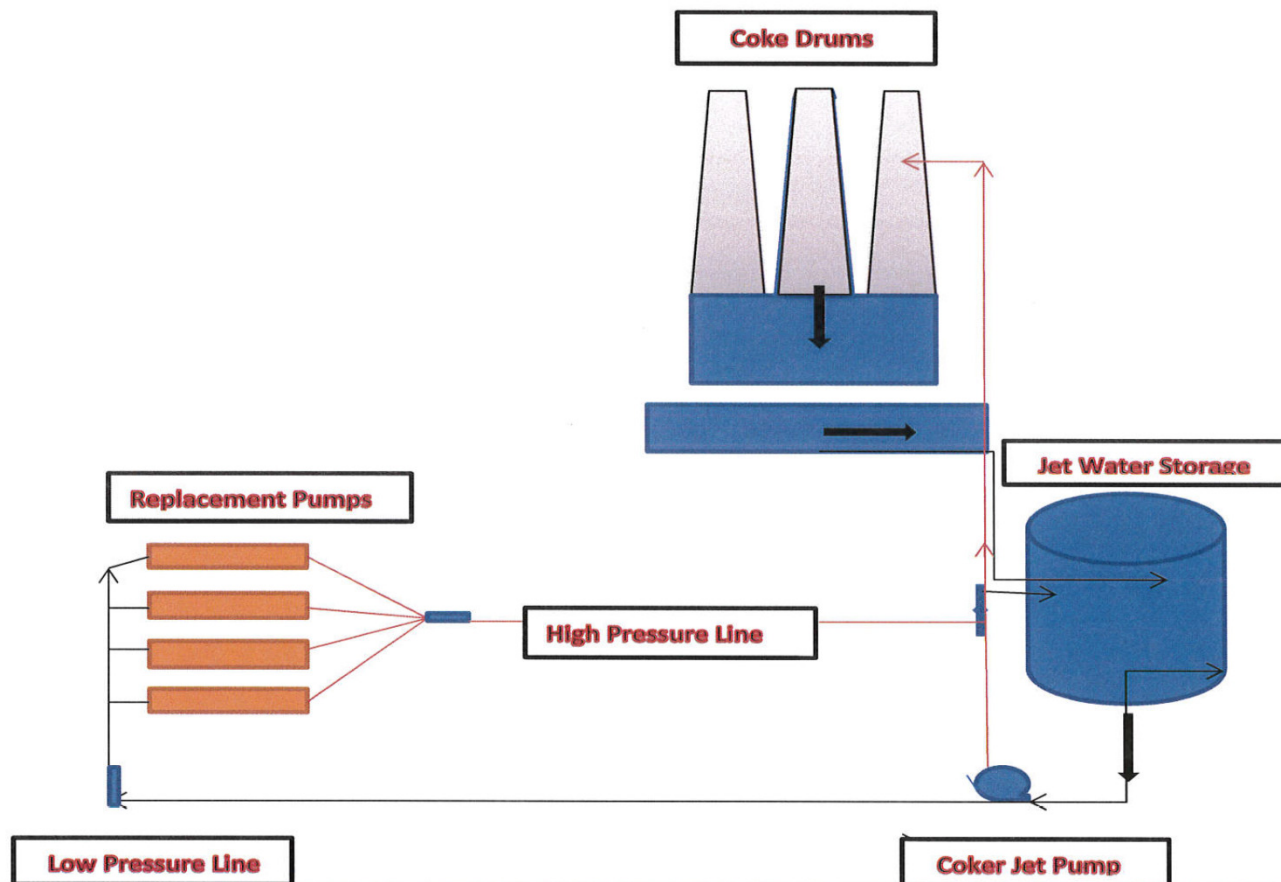
	HYDROBLAST AND SAFE OPERATING PROCEDURE FOR COKE CUTTING PROJECT	3/12/15
<p>SOP: HIGH VOLUME HIGH PRESSURE COKE CUTTING</p> <p>Document Number: CC- 1-18-13</p> <p>Job Description: Provide Backup High Volume High Pressure Pumping During The Coker Jetting Operations At _____</p>	<p><u>Hazard Recognition</u></p> <ul style="list-style-type: none"> • <u>Reactive</u> - Water to steam conversion creating burn hazard • <u>Hot Surfaces</u> - Until cool down is complete • <u>Elevated Work</u> - Working from scaffolding • <u>100% tie off required???</u> • <u>High Pressure Water</u> –6,000 psi. @ 400gpm or more • <u>Lifting - Pulling</u> - Possible strain • <u>Tripping/Slipping</u> - General, wet surfaces, hose routing, uneven surfaces • <u>Pinch Points</u> - Between high pressure tooling and hoses and structures • <u>NVESISE</u> - High noise level during jetting process. Double hearing protection required during jetting process. • <u>Struck By</u> - Potential for pipe or fitting failure • <u>Line of Sight</u> – Due to pump placement radio communication will be observed during operation. • <u>Congested work area</u> – Due to turnaround activities involving other contractors and plant personnel • <u>Overhead lifting</u> – Due to contractors in area 	

Site Specific SOP

- Customized/ Pre-Approved
 - Operational Plan
 - List of required equipment and personnel
 - Set up procedure
 - Operating procedure
 - Redundancy (Backup)
 - Safety Plan
 - Contact List

Site Specific SOP

BASIC DELAYED COKER JET PUMP REPLACEMENT SETUP



Key Points

- Do we have a contract in place?
- Do they own the equipment?
- Are they approved to work on my site?
- Do they meet safety/training requirements?
- Do they work in refineries?

Case Study

- SCOPE
 - *2014 Jet Pump Failure at Corpus Christi Refinery*
- CHALLENGE
 - *Without notice, refinery began experiencing jet pump issues*
- SOLUTION
 - *Dispatched equipment and personnel based on Site Specific SOP and Plan*
- RESULT
 - *Supported coke cutting operations 24 hours per day for 12 Days*

Questions?

Thank you!