

---

**From:** NSU, CIC TL  
**Sent:** Saturday, October 22, 2005 6:43 AM  
**To:** Leach, Brett W  
**Cc:** Sprague, Kip P; Hedges, Bill  
**Subject:** Emailing: Control Options 10 22 05.xls

**Attachments:** Control Options 10 22 05.ZIP



Control Options 10  
22 05.ZIP (...)

rett,

Attached, please find a list of potential budget control options - broken out by chemicals and manpower. If you are interested in exploring more detail about any of the options please let me know.

Bill/Kip - if you have any edits or additions, lets discuss so I can update the list...

Thanks,

Gary

Option	Rank	Category	Monthly Savings	2 Month Savings
3 Phase CI: Eliminate Xylene		Chemical	\$ 75,000	\$ 150,000
3 Phase CI: Shut in top 5 CI users		Chemical	\$ 75,000	\$ 150,000
3 Phase CI: Potential Optimization (5%)		Chemical	\$ 40,500	\$ 81,000
PW CI: Slow deployment/reduce injection rates		Chemical	\$ 400,000	\$ 800,000
STP: Reduce Biocide frequency to every two weeks		Chemical	\$ 36,000	\$ 72,000
Production Chemicals		Chemical	\$ -	\$ -
Corrosion Monitoring		Manpower	\$ -	\$ -
Chemical Deployment (C Pad and Chem. Ops.)		Manpower	\$ -	\$ -
Piggling: Contract support crew		Manpower	\$ 16,700	\$ 33,400
Pump Crew: Eliminate TD jobs		Manpower	\$ -	\$ -
Inspection: Comprehensive Inspection Program		Manpower	\$ 66,667	\$ 133,333
Inspection: Corrosion Rate Monitoring		Manpower	\$ 66,667	\$ 133,333
Inspection: Erosion Rate Monitoring		Manpower	\$ 16,667	\$ 33,333
Inspection: Corrosion Under Insulation Detection		Manpower	\$ 66,667	\$ 133,333
Inspection: Frequent Inspections		Manpower	\$ 16,667	\$ 33,333
Inspection: Special Request/ADHOC		Manpower	\$ 16,667	\$ 33,333
Rope Access Technology		Manpower	\$ 16,667	\$ 33,333
Veco		Manpower/Materials	\$ 195,000	\$ 390,000

<b>Purpose</b>	<b>Risk</b>
Potential for plugging continuous injection system	High
Production exceeds cost by >10x	Low
Plan not fully developed and locations not identified, 2-4 weeks to implement	Low
Lot of effort spent on getting the system up and running this year based on owner approvals. Technically, probably the least short-term risk of the options presented	Medium
MIC locations established resulting in long term effects	High
Without these chemicals, facilities would shutdown.	High
Regulatory commitments and significant attention over the last few years. There was an effort to unify the coupon schedule, but that is on hold.	High
Reduction in chemical volumes in 1 and 2 contain a labor component	High
Eliminate support crew - 2 personnel. Program has only been meeting ~75% of target YTD.	Medium
Program has been focused on freeze protects, with only 5 TDs performed in the past 3 months.	Low
Eliminate program to YE - 4 positions. 9750 items	Medium/High
Eliminate program to YE - 4 positions. 1840 items	Low
Eliminate program to YE - 1 position. 768 items	High
Eliminate program to YE - 4 positions. 6000 items	High
Eliminate program to YE - 1 position. 384 items	High
Eliminate program to YE - 1 position. 536 items	Medium
Eliminate RAT to YE - 1 position	Medium
Eliminate CUI Mitigation program to YE - 9 positions	Medium

**Risk Mitigation**

Batch treatment program  
None

Follow technical review protocol. Increase rates if data suggests necessary.

Increase rates January 1, 2006. Corrosion mechanism is relatively slow. Initial cleaning to remove deposits may reduce corrosion rates substantially.

Increase rates January 1, 2006.

Shutdown facilities

Inspection

Third party contractors

BP Operators still pig with help of BP Ops and ad-hoc contractor help

Restart program January 1, 2006

Reschedule FS1, LPC, STP, SIP and remaining FL/WL programs

Rely on monitoring only

Reduce maximum allowable mixture velocities/ Minimize or cancel well-work and well strat-ups)

Shut-in Y LDF

Repair or shut-in equipment (PMP - High wastage areas i.e. G&I)

No response or action as a result of observations/discoveries

Built scaffold for perceived or at risk locations

No response or action as a result of observations/discoveries

**Reputation/Perception Risks**

ADEC/Workforce - only if problem occurs  
Governor/ADEC/Partners/Workforce

Workforce

ADEC/Partners/Workforce

ADEC/Partners/Workforce

Governor/ADEC/Partners/Workforce

ADEC/Workforce

ADEC/Partners/Workforce

Workforce

Workforce

ADEC/Workforce

ADEC

Workforce

ADEC

ADEC/Workforce

Workforce

Workforce

ADEC/Partners/Workforce