

**STRATEGIC PETROLEUM RESERVE
ENTERPRISE CHANGE PROPOSAL**



ECP Header

ECP #:	EC-2016-000024	Title:	Sugarland MVCU Changes		
In Process Status:	Open	Overall Status:	APPROVED	Work Status:	Design Engineer Review
Initiator:	Marion Brown	Created Date:	Jun 13, 2016	Approver:	Bryan Roussel
Class of Change:	Class I	Change Type:	Engineering Change	Priority:	Routine
Basis for Change:	To Improve	Change Ranking:	3A - ES&H/SECUR - SHORTCOMING		
Key Impl Factors:	<24m	Risk:			
PAN Numbers:	SJ-M/O-4660;				
Sites:	SJ-St. James;				

(in USD)

Description

Title:	Sugarland MVCU Changes
Problem/Existing Configuration:	The existing MVCU will be out of compliance if the regulatory compliance improvements are not implemented and Operationally Reviewed before August 15, 2016. The reliability improvements will increase system reliability.
Proposed Solution:	This ECP covers regulatory compliance updates and reliability improvements for Sugarland's Marine Vapor Combustion Unit (MVCU).SPLC proposes the following changes to the Sugarland MVCU (subject to minor changes based on reviews received during Management Of Change process):Regulatory compliance improvements:PLC Logic updates:(j) non-inert: Reduce O2 shutdowns (ASHH-101 and AAHH-101) from 16.5% to 16.3% O2(j) non-inert: Reduce O2 alarms (ASH-101 and AAH-101) from 15.5% to 15.3% O2(k) inert: Reduce O2 concentration from 7% to 5%(k) inert: Reduce O2 shutdowns (ASHH-101 and AAHH-101) from 9% to 6.7% O2(k) inert: Reduce O2 alarms (ASH-101 and AAH-101) from 8% to 5.7% O2 (f) inert: add PLC logic to achieve 0.2 psi at PIT-101 before opening PCV-101Dock Operating Manual (DOM) and/or Local Operating Procedure (LOPs) updates/additions:Original MVCU installation HAZOPOriginal MVCU installation drawing packageWNEC initial certification letter/packageStantec recertification letter 12/11/2015John Zink AddendumHose cut sheetsAll changes described in this MOCReliability improvements:Add to operating procedure to clean filter element FLT_101 at next opportunity when pressure differential exceeds 10" water column (WC)Add pressure transmitter PDIT_102 (see SD-115289 Redline)Relocate existing pressure transmitter PDIT_101 to PDIT_103 (see SD-115289 Redline)Adjust PLC logic accordinglyAdd PDIT_102 and PDIT_103 to local HMITune the control loop for gas enrichment valve AV-101 for quicker reaction time
Driving Requirements & Justification:	An August 2013 update to 33 CFR 154, pertaining to MVCUs, requires the regulatory compliance improvements prior to an August 15, 2016 deadline for an Operational Review. The reliability improvements are to reduce spurious shutdowns.
Risk:	

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SAP Task Package List

Task Package #	Description	PAN #	SPR Task #	Resp. Engg.	Project Lead	Created By	Created On	Changed By	Changed On

Affected Configuration Items

Ref. Doc. #	FLN #	ELN #	FLN Status	Site	Service	Equipment Area	Equipment Function

TBL Documents

Ref. Doc. #	SAP Task Package #	SRP Draw/Spec #	Category	Status	Created By	Created On	Changed By	Changed On

Reference Documents

Ref. Doc. #	Description	Task Package #	Status	Created By	Created On	Changed By	Changed On
MCD-900036658	PCCB Minutes for August 9, 2016		AT - Active	Lillian Wils	Aug 9, 2016	Lillian Wils	Aug 9, 2016

STRATEGIC PETROLEUM RESERVE
CONFIGURATION CHANGE AFFECTED REPORT



"TO BE COMPLETED BY TECHNICAL REVIEW PROCESS, ENGINEERING AND CONFIGURATION MANAGEMENT ORGANIZATION DEFINED PROCESS"

ECP #: REV. Change Classification Class I Class II FT

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