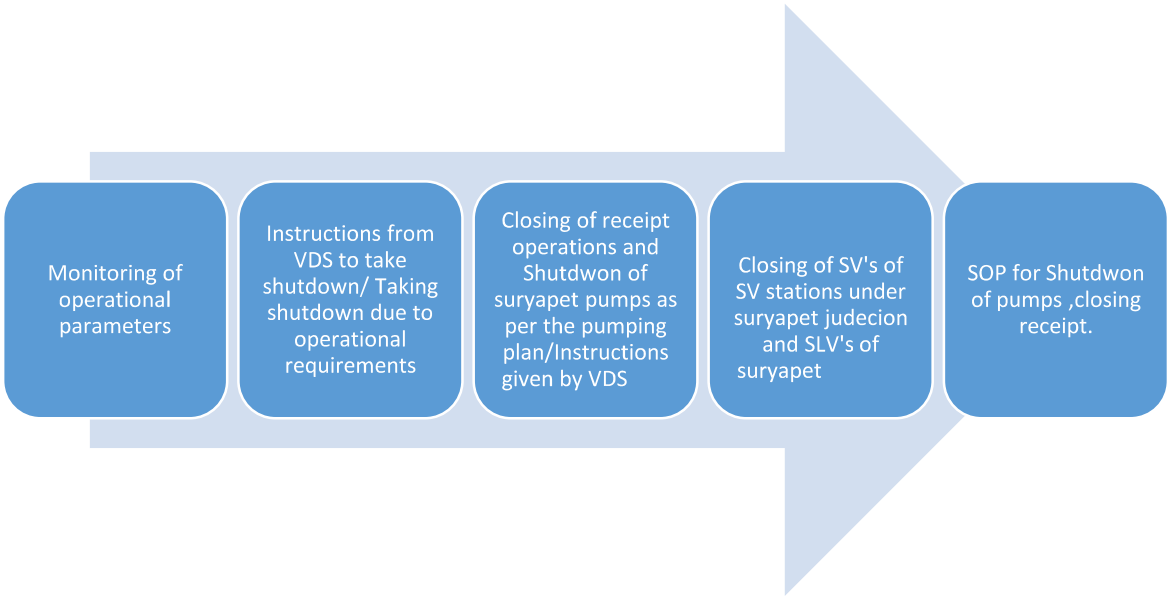
	HINDUSTAN PETROLEUM CORPORATION LIMITED **VISAKHA- VIJAYAWADA- SECUNDERABAD PIPELINE**	**ISSUE NO: 2** **REVISION NO.:00** **EFFECTIVE DATE: 01/01/2018** **SHEET: 1 OF 5**
INTEGRATED MANAGEMENT INSTRUCTION		**DOCUMENT NO.: IMP/OSP/03**
TITLE	**SHUTDOWN OF SURYAPET STATION**	

Process: To provide guidelines for taking Shutdown of Suryapet pumps.
Existing IMS Document no: QMP/OSP/03

Clause	Elements
4.4.1 a	**Inputs to perform the process** Pumping plan from VDS, Monitoring of operational parameters, man power, SOP for Stopping of pumps, SOP for stopping of h/c, Reports from SV Station guards, status reports from field. **Output of the process:** Suryapet Booster Station Shutdown.
4.4.1 b	**Process activities: Activity involved to perform the process** 
4.4.1 c	**Criteria & methods:** **1 When only Heart Cut is 'ON' & VSPL shutdown to be taken:** 1.1 Suryapet Pipeline shift engineer informs, Visakh, Vijayawada/ Rajahmundry & Secunderabad about closing the Heart Cut operation. 1.2 Pipeline shift engineer first closes FCV-1601 and other stations will simultaneously adjust the station pressures accordingly.

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1.3 After that Suryapet shift engineer closes MOV-1620 and will confirm back to Visakh, Vijayawada /Rajahmundry & Secunderabad.

1.4 Vijayawada /Rajahmundry shift engineer then informs Secunderabad shift engineer to close PCV-1701 and MOV-1703. Once pressure is 15 kg/cm^2 at Secunderabad, Vijayawada stops the pump. In case Rajahmundry pumps are running instead of Vijayawada pumps,Vijayawada will close their outlet SLV once pressure at Secunderabad is 15 kg/cm^2.

1.5 For a long shutdown Suryapet shift engineer closes MOV-1603, MOV 1613 and station limit valves, MOV-1601 and MOV-1615. Secunderabad shift engineer closes MOV-1701 apart from tank manifold.

2 VSPL Shutdown when booster pump and Heart Cut are ON :

2.1 Suryapet Pipe Line Shift engineer informs Vizag, Vijayawada /Rajahmundry & Secunderabad about closing the Heart Cut.

2.2 Suryapet Pipe Line Shift engineer first closes FCV-1601 and other stations simultaneously adjust the station pressures accordingly.

2.3 After the line pressure stabilizes, Suryapet will stop the pump and other stations will adjust the station pressures accordingly.

2.4 Vijayawada/ Rajahmundry will inform Secunderabad to close PCV –1701 and MOV-1703. Vijayawada pumps are stopped once pressure at Secunderabad is 15 kg/cm^2. In case Rajahmundry pumps are running instead of Vijayawada pumps, Vijayawada will close their outlet SLV once pressure at Secunderabad is 15 kg/cm^2.

2.5 In case of only Vizag and Suryapet pumps running,Suryapet pumps will run till pressure at Secunderabad is 15 kg/cm^2.After that Suryapet pumps are tripped and outlet SLV is closed.Once pressure at Suryapet reaches 20 kg/cm^2, Vijayawada will close their outlet SLV.

For a long shutdown, Secunderabad will close MOV-1701 apart from manifold and tank inlet and Suryapet will close MOV-1601 .

3 Shutdown of Suryapet Station during station by pass and no Heart cut.

During dedicated receipt at Secunderabad and station by pass condition at Suryapet , the product is either routed thru Suryapet station by-passing the pump or bypassing the Suryapet Station. In these cases, Suryapet is required to isolate the station after receipt is completed at Secunderabad by closing SLVs after obtaining confirmation from Vijayawada and Secunderabad.

4 When Vijayawada and Suryapet Booster Station are ON and VSPL shutdown to be taken:

4.1 Stop one pump at VBS if two are running.Stop SBS pump.

4.2 Close PCV and SLV i.e. MOV-1701 at SRS.

4.3 Stop VBS second pump once pressure reaches 15 kg/cm^2 at SRS.

4.4 Close outlet SLVs at VBS immediately

4.5 Close outlet and inlet SLVs at SBS.

4.6 Incase of emergency or Vizag pump tripping, pump is stopped at Suryapet immediately and the relevent valves at Suryapet and Secunderabad will be closed subsequently.

5 When Heart cut is ON with station by pass and VSPL shut down is to be taken:

5.1 Stop Suryapet Heart cut.

5.2 Close PCV and SLV i.e. MOV-1701 at SRS.

5.3 Stop VBS pump once pressure reaches 15 kg/cm^2 at SRS.

5.4 Close outlet SLVs at VBS and Suryapet will close its SLVs if long shut down is there.

6 When Heart cut and Pumps are ON and VVSPL shut down is to be taken :

6.1 Stop Suryapet Heart cut.

6.2 Stop one pump at VBS if two are running.Stop SBS pump.

6.3 Close PCV and SLV i.e. MOV-1701 at SRS.

6.4 Stop VBS second pump once pressure reaches 15 kg/cm^2 at SRS.

6.5 Close out going SLVs at VBS.

6.6 Close out going and in coming SLVs at SBS.

6.7 Stop RBS Heart cut and pumps if on.

	6.8 Close PCV and in coming SLV at VBS after stopping one pump at VDS. 6.9 Stop second VDS pump once pressure reaches 20 kg/cm^2 at VBS. **Performance indicators:** Safe and smooth shutdown of Station without any surge in upstream and downstream locations.
4.4.1 d	**Resource:** Manpower
4.4.1 e	**Roles and Responsibilities:** Shift In Charge
4.4.1 f	**Risks:** 1. Improper coordination 2. Improper monitoring of operational parameters 3. Accident & Incident due to not use of proper PPE **Opportunities:** 1. Proper utilization of equipment 2. Innovation in operations 3. Close monitoring of operational parameters 4. Strict follow of all SOPs 5. Proper handling of equipment during maintenance
4.4.1 g	Review of the performance on the parameters identified in 4.4.1 c if required
4.4.1 h	Action planning for the negative deviation of the performance parameters identified in 4.4.1 c if required
4.4.2 a	**Documents to be maintained:** 1. Shift Log Book (IMF/OPN/01) 2. Operations Log Book (IMF/OSP/01) 3. Maintenance Log Book (IMF/OPN/02) 4. PLC by-pass register (IMF/OPN/07) 5. Critical behavior check list for PPE observation (IMF/OPN/12) 6.
4.4.2 b	**Documents to be retained:** 1. Shift Log Book (IMF/OPN/01) 2. Operations Log Book (IMF/OSP/01) 3. Maintenance Log Book (IMF/OPN/02) 4. PLC by-pass register (IMF/OPN/07)

	5. Critical behavior check list for PPE observation (IMF/OPN/12)

Risk	Risk rating	Action Plan
Improper Co-ordination	H	• Shift in charge to ensure proper co-ordination with upstream and downstream stations for smooth shutdown of station.
Improper monitoring of operational parameters	H	• Shift in-charge to ensure all safety measures before start of the job
Accident & Incident due to not use of proper PPE	H	• Safety training to be given to all Contractor & Contract workmen

How to find the RISK/ opportunity for individual process

a) Analysis of individual interested party

Interested party involved in process	Expectation of the parties	Risk/ opportunity	Seriousness of Risk (RATE H-High, M=Medium, L-Low)	Is Risk has taken care in earlier version?	If yes, reference?	If not include here or Improvement required	Action Plan
Shift- In-charge	Safe Operations	Improper monitoring of operational parameters	H	YES	Vigilant Shift in charge	NA	NA
Contract workmen	Safe Operations	Accident & Incident due to not use of proper PPE	H	YES	inspection by Officer In-charge	NA	NA

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