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APPROVED BY: J.S.
DATE: 03-06-90
REVIEWED BY: O.B.
DATE: 04-06-91

6906-011.SOP
MC REACTOR PRE-START UP CHECK LIST

OPERATOR'S NAME: _____ DATE _____

CHECK	ACTION STEPS (Capital letters) and Comments (Small letters)
_____	1. JOB SAFETY INSTRUCTIONS REVIEWED.
_____	2. INSURE THAT YOU ARE WEARING PROPER SAFETY EQUIPMENT.
	A. HAVE PRODUCT STILL AND RECYCLE STILL UP AND IN SPEC WHEN POSSIBLE.
	B. MAKE UP A FRESH BATCH OF ORTHO-TOLUIDINE AND TEST WITH CHLORINE.
	C. HCL TO THE HCL SYSTEM CLOSED AT THE MC REACTOR PCV.
	D. STROKE P-358.
	E. CHLORINE PCV AND FCV BLOCK VALVES CLOSED, INCLUDING THE PASS.
	F. STROKE F-322. IT WILL NOT OPEN UNLESS THE DELTA P IS SATISFIED.
	G. STROKE P-320.
	H. MC REACTOR SCRUBBER PCV IS IN SERVICE AND OPERATING.
	I. - STROKE P-360.
	- BOTH AIBN TANKS CHARGED AND READY FOR SERVICE
	J. MC REACTOR PRESSURE AT 50 PSIG.
	K. PURGE THE MC REACTOR WITH N2 FROM BOTTOM TO TOP TO CLEAR OUT O2.
	L. CHLORINE ANTI-BACKUP VALVE IN CLOSED POSTITION.
	M. CHECK THE MC REACTOR LIQUID BED AND VENT FOR FREE CHLORINE.
	N. IF FREE CHLORINE IS PRESENT: MIX THE MC REACTOR WITH N2 UP FROM THE BOTTOM OF THE REACTOR LEAVE PRESSURE ON THE CHLORINE LINE FROM THE ANTI-BACKUP VALVE TO THE FCV. NOTE: HAVE LOW ENOUGH MC REACTOR PRESSURE TO PREVENT BACKUP INTO THE N2 SYSTEM DURING THE MIXING OPERATION.
	O. TURN THE SHAFT OF THE MC REACTOR START UP PUMP 10 TIMES BY HAND TO FREE UP ANY CRUST ON THE SEAL. THEN PUT THE MC REACTOR START UP PUMP CIRCULATING THROUGH THE REACTOR START UP HEATER; BOTTOM ORGANICS VALVE BETWEEN HEATER AND REACTOR CLOSED.
	P. REMOVE THE N2 HOSE FROM THE BOTTOM OF THE MC REACTOR.
	Q. PRESSURE UP THE MC REACTOR TO 90 PSIG AT THE MC REACTOR VENT CONDENSFP. OR USE THE NEW HCL LINE TO PPESSURE UP THE

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N2 VALVE IF IT IS NOT NEEDED.

- R. START UP THE HIGH PRESSURE ABSORBER LOOP.
- S. HAVE MC REACTOR LIQUID LEVEL IN THE SIGHT GLASS.
CHECK THE SIGHTGLASS VERSUS THE LEVEL TRANSMITTER. THEY WILL NOT AGREE EXACTLY DUE TO CONCENTRATION IN THE REACTOR NOT BEING RIGHT. BUT YOU SHOULD SHOW A LEVEL. HAVE INDICATION ON FLOAT CHAMBER.
- T. CHECK THAT THE MC REACTOR LEVEL TRANSMITTERS AGREE WITHIN 1 FOOT OF THE SIGHT GLASS.
- U. DCE STILL RECYCLE FLOW TO THE MC REACTOR. START FEEDING THE STILL OUT OF THE REACTOR.
- V. CTW FLOW THROUGH THE MC REACTOR CONDENSER AND EAST REACTOR COOLER. BOTH WATER CLOSED ON THE WEST COOLER.
- W. BOTH DRAIN VALVES OFF THE MC REACTOR CONDENSER OPEN AT THE OUTLET OF THE CONDENSER AND AT THE REACTOR.
- X. ORGANICS VALVE ON THE EAST REACTOR COOLER OPEN. T-328 SET FOR 240 F. (AUTOMATIC VALVE SHOULD BE CLOSED.)
- Y. BLEED CONDENSATE FROM THE REACTOR HEATER SHELL. START STEAM TO THE HEATER.
- AA. DCE MAKE UP FEED READY.
- BB. STEAM TRACING ON THE CHLORINE FLOW AND PRESSURE IMPULSE LINES.
- CC. SAMPLE THE MC REACTOR FOR WATER AND IRON.

THE FOLLOWING STEPS MAY BE OMITTED IF THE LP SYSTEM IS ALREADY IN SERVICE.

- DD. AIBN FLOW SHOULD BE ESTABLISHED 1 HOUR BEFORE PUTTING CHLORINE IN THE MC REACTOR.
- A. CALCIUM CHLORIDE BRINE ON THE HP HCL VENT CONDENSER.
- B. HP HCL SYSTEM LINED UP CORRECTLY AND UNBLOCKED THROUGH HP VENT CONDENSER AND HCL HEATER TO THE HCL HEADER.
- C. HP HCL CONDENSATE LINED UP TO THE LP SYSTEM.
- D. HP ACCUMULATOR LCV CLOSED UNTIL LEVEL BUILDS UP.

SPILL/RELEASE POTENTIAL

- IF A N2 HOSE IS PUT ON THE BOTTOM OF THE MC REACTOR, IT MUST BE REMOVED BEFORE THE REACTOR IS PRESSURED UP TO 70-90 PSIG. USE N2 AT THE CONDENSER OR THE SMALL HCL LINE TO PRESSURIZE THE REACTOR BACK FROM THE CONDENSER. EXCESS PRESSURE AT THE BOTTOM OF THE REACTOR WILL PUSH LIQUID BACK INTO THE NITROGEN SYSTEM.

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