

WRITTEN BY: MJF
DATE: 12/12/91

5603-024.SOP
VCM-II Cl₂ LINE SNIFFING/REGASSING

NOTE: THIS CHECKLIST MUST BE FILLED OUT COMPLETELY AND TURNED INTO SUPERVISION EACH TIME THE LINE IS CLEARED.

OPERATOR'S NAME: _____ DATE: _____

CHECK	ACTION STEPS (Capital letters) and Comments (Small letters)
-------	---

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1165

_____ 1. JOB SAFETY INSTRUCTIONS REVIEWED.

_____ 2. INSURE THAT YOU ARE WEARING PROPER SAFETY EQUIPMENT.

CLEARING THE LIQUID CHLORINE LINE BETWEEN LIQUEFACTION AND VCM-II REQUIRES APPROXIMATELY 6 HOURS. CLOSE COMMUNICATION AND COOPERATION BETWEEN THE TWO UNITS IS ESSENTIAL TO THE SUCCESS OF THE OPERATION. DEVIATIONS FROM THIS SOP MUST BE APPROVED BY SUPERVISION. NOTE: THIS SOP WILL BE IN EFFECT UNTIL THE NEW CHLORINE HEADER AND SNIFF SYSTEM GOES INTO OPERATION IN EARLY 1992.

_____ 3. UPON SHUTDOWN OF THE VCM-II LP-EDC REACTOR DO THE FOLLOWING:

VCM-II

- _____ A. BLOCK THE Cl₂ SURGE DRUM PCV DOWNSTREAM BLOCK VALVE & BYPASS.
- _____ B. BLOCK AND TAG THE VAPORIZER STEAM PCV BLOCK VALVES AND BYPASS. DEPRESSURIZE THE CONTROL VALVE STATION.
- _____ C. BLOCK AND TAG THE DOWNSTREAM BLOCK VALVE AND BYPASS ON THE Cl₂ FCV.
- _____ D. VERIFY THAT THE Cl₂ ANTI BACK-UP VALVE IS CLOSED.

LIQUEFACTION

- _____ A. SHUTDOWN THE PUMP SUPPLYING VCM-II. BLOCK THE DISCHARGE VALVE. AND OPEN THE RECIRCULATION VALVE. The tank pressure should be about 50 PSIG. NOTIFY VCM-II WHEN THIS IS DONE SO THEY CAN BEGIN THE NITROGEN PURGE.

_____ 4. VCM-II PUT A NITROGEN PURGE AT THE Cl₂ PCV UPSTREAM BLEED AND BLOW THE LIQUID IN THE LINE TO LIQUEFACTION UNTIL BREAKTHROUGH OCCURS. Make sure there is adequate nitrogen pressure at the drop to blow to Liquefaction.

_____ 5. LIQUEFACTION WATCH THE EQUALIZATION FLOW FOR BREAKTHROUGH. NOTIFY VCM-II WHEN BREAKTHROUGH OCCURS.

_____ 6. VCM-II AFTER BREAKTHROUGH HAS OCCURRED. OPEN THE Cl₂ PCV BYPASS AND SWITCH THE NITROGEN PURGE TO THE BLEED UPSTREAM OF THE Cl₂ FCV. BLOW BACK TO LIQUEFACTION FOR 1 HOUR. Verify for yourself that 3C and D are done to prevent any organics from entering the line during the sniff.

_____ 7. VCM-II AFTER 1 HOUR OF PURGING REMOVE THE NITROGEN PURGE. CONTACT LIQUEFACTION TO PUT THE LIQUID LINE ON SNIFF AND LOWER THE PRESSURE TO A MINIMUM OF -10" HG VACUUM. This will take 2-3 hours.

SL 003745

8. BOTH AREAS AFTER 2 - 3 HOURS. SURVEY THE LINE AT LOW POINTS FOR ICE AND SWEATING. STEAM HOSES MAY BE NEEDED AT THESE POINTS DURING COLD WEATHER.

9. LIQUEFACTION IF NO ICE AND SWEATING IS PRESENT AT EITHER END. BLOCK THE SNIFF IN.

10. BOTH AREAS WATCH THE LINE PRESSURE FOR 15 MINUTES ON ALL PRESSURE GAUGES AND INDICATIONS. ALL INDICATIONS MUST BE <0 PSIG. ANY DISCREPANCIES AMONG THE INDICATIONS MUST BE RESOLVED BEFORE PROCEEDING.

IF THERE IS NO INCREASE IN PRESSURE AFTER 15 MINUTES. GO TO STEP 11. IF THERE IS ANY INCREASE IN PRESSURE. GO BACK TO STEP 7.

11A. IF THE ENTIRE LINE IS TO BE CLEARED. VCM-II IS TO BREAK THE VACUUM WITH NITROGEN AND BLOCK THE VALVE AT THE EAST BATTERY LIMITS.

11B. IF JUST THE VCM-II SECTION NEEDS TO BE CLEARED. VCM-II MUST BLOCK THE VALVE AT THE EAST BATTERY LIMITS AND LIQUEFACTION WILL MAINTAIN THE SNIFF ON THE UPSTREAM SECTION IF POSSIBLE. VCM-II WILL BREAK THE SNIFF IN THE UNIT WITH NITROGEN.

PUTTING THE LINE BACK IN SERVICE

1. BOTH AREAS LEAK CHECK THE LINE WITH NITROGEN WHEN POSSIBLE AT ALL POINTS WHERE WORK WAS DONE.

2. LIQUEFACTION PUT THE LIQUID LINE ON SNIFF AND LOWER THE PRESSURE TO -10" HG VACUUM.

3. VCM-II BREAK THE VACUUM BY PUTTING NITROGEN INTO THE LINE AT THE BLEED UPSTREAM OF THE Cl_2 FCV. BRING THE PRESSURE ON THE LINE UP TO 0 PSIG. This is done to fill the expansion bottles with nitrogen.

4. VCM-II CLOSE THE Cl_2 PCV UPSTREAM BLOCK VALVE AND BYPASS.

5. LIQUEFACTION START FILLING THE LINE WITH Cl_2 GAS BY OPENING THE RECIRCULATION LINE. The line pressure will come up to 50 PSIG.

6. LIQUEFACTION START THE PUMP AND OPEN THE DISCHARGE VALVE TO PUT LIQUID Cl_2 INTO THE LINE. THROTTLE THE RECIRCULATION TO MAINTAIN A 120 - 130# LINE PRESSURE.

SL 003746

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145