



PTW CHECKLIST - NO. 59		Title: Making and Breaking Flanges and Bleeding Down Vessels Containing Hazardous Fluids to Drains or Atmosphere	
Owner: Capability Coordinator			
Approver: Capability Coordinator		Max Validity Period: 5 yrs	
Permit No.:		Date:	
Latest Rev	Date	Details	Authorised By
8.0	Jan 2016	Full revision	S Elliott
8.1	May 2016	Inclusion of NORM testing requirements	S Elliott
8.2	Oct 2016	Item 20 amendment	S Elliott
8.3	12 Dec 16	Addition of pages 3 and 4	S Elliott

Other Checklists That May Be Relevant: [25](#)

HRA Checklists: [9](#), [16](#)

PRIOR TO COMMENCING TASK:

Tick when done

- | | Y | N | NA |
|--|--------------------------|--------------------------|--------------------------|
| 1. The requirements of the above referenced HRA(s) have been read and understood | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Work party familiar with Work Instruction WI-EP72.03-433 (Procedure for Bolt Torquing and Tensioning) and have referred to the appropriate section relevant to workscope. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Ensure all isolation spades, spec blinds/blank flanges, stud bolts, plugs and caps are of the same class/rating as the pipe work they are being fitted to. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. If flanges are to be broken, a competent operations representative shall be in attendance during initial breaking into process equipment, pipework or Valves.

Name: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. All stud bolts, nuts and lubricating compounds are of the correct size and composition. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. The correct torque method and values are known for tensioning flanges. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Individual(s) breaking a flange are to satisfy themselves that the equipment is proven to be isolated and depressurised. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Is this system one that may contain Mercury contamination? (Refer to Mercury Register)
If the answer is yes, refer to Standard Operating Procedure (SOP) STA-01.43 and PTW Checklist 25 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Is the system one that may contain Pyrophoric Iron? If the answer is Yes, refer to Standard Operating Procedure (SOP) STA-01.09 . | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Flanges requiring Cathodic Protection Flange Insulation Kits (FIK's) are identified and the specific torque settings are known . | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. When breaking flanges on underground lines that use sacrificial anodes or Impressed Current systems such as blowdown and cross country lines, the flanges are bridged before breaking. Reference MSP 2.04.02 for MPS requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. For both isolation and reinstatement phases, new gaskets are to be fitted in all cases. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Confirm that there is sufficient mechanical support for all flange breaks. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- | Y | N | NA |
|---|---|----|
| | | |
- 14 Prior to the use of lifting lugs on manway flange closures, hatches or motors, visual checks have been carried out by a competent person to ensure the lug dimensions are as designed, not reduced by a Facilities Inspector or Mechanical Engineer.

When draining vessels or pipework to open drains or atmosphere:

- | | | | |
|----|--|--------------------------|--------------------------|
| 15 | Half drum in good condition and large enough to contain expected fluids. | <input type="checkbox"/> | <input type="checkbox"/> |
| 16 | Confirm the gas / air cap in the vessel will receive adequate make up when Draining commences. | <input type="checkbox"/> | <input type="checkbox"/> |
| 17 | If waste is to be removed from site, discuss disposal route with PI. Reference Waste Management Procedure (PRD-ACT03-005). | <input type="checkbox"/> | <input type="checkbox"/> |
| 18 | Connect earth lead to plant earth. Record results of continuity test on Permit (<10Ω) | <input type="checkbox"/> | <input type="checkbox"/> |
| 19 | Perform a test on production solids / deposits for NORM and enter results into the Site Register. | <input type="checkbox"/> | <input type="checkbox"/> |

ON COMPLETION OF TASK:

- | Y | N | NA |
|---|---|----|
| | | |
- 20 QA results are recorded on the flange assembly control sheet.
- 21 Check that any Victaulic or similar couplings or expansion joints are adequately supported and anchored in both the vertical and horizontal planes to eliminate the potential to fail under pressure?
- 22 A "line walk" has been conducted to ensure all equipment is reinstated as per formal procedure.



