



<b>PTW CHECKLIST - NO. 16</b>		<b>Title: Blasting &amp; Painting Including Use of Portable Diesel &amp; IC Engines, Use of Non Certified or Non IS Electrical Equipment &amp; Steel Wire Brushes &amp; Needle Guns where applicable</b>	
Owner: Capability Coordinator		Max Validity Period: 5 yrs	
Approver: Capability Coordinator		Date:	
Permit No.:		Date:	
<b>Latest Rev</b>	<b>Date</b>	<b>Details</b>	<b>Authorised By</b>
10.0	Jan 2016	Full revision	S Elliott

Other Checklists That May Be Relevant: [50](#)

HRA Checklists: [13, 15](#)

**Work under this permit will include the following operations (tick as applicable):**

- Sandblasting, Waterblasting, Needle Gunning, Steel Wire Brushes, Spray Painting – Section ONE of this checklist to be completed for all Permits**
- Operation of Portable Diesel & IC Engine – Section TWO of this checklist to be completed**
- Use of Non Certified or Non IS Electrical Equipment in Hazardous Area – Section THREE of this checklist to be completed**

**NOTE – Sections 2 and 3 of this checklist are in addition to the checks required in Section 1 that applies to all parts of this permit activity.**

**SECTION ONE:**  
**PRIOR TO PERMIT ISSUE:**

Tick when done

		<b>Y</b>	<b>N</b>	<b>NA</b>
1	All potentially affected instrumentation, safety trip devices, detectors, valves, pumps, motors and air intakes are to be protected from impact, paint spray, water, stray grit and debris.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Consider need to isolate or inhibit fire and gas detection and the implications of doing so.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The work team is aware of and understands the contents of the MSDS sheets for the material being used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Arrangements have been made to contain and regularly remove abrasives from the worksite (or suitably protected from the wind) to prevent it being blown into other process equipment including drains.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	If paint is known to contain hazardous material ie: lead; precautions are in place for containing and disposal of the toxic material (as per MSDS sheet) and Health Risk Assessment (HRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Prior to removal or work on any wrap material consult the <a href="#">Asbestos Register</a> . If the presence of asbestos is suspected, all work shall cease and a management plan confirmed with the HSE Dept.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tick when done

<b>Y</b>	<b>N</b>	<b>NA</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 7 If the line/vessel is **hydrocarbon** duty and is not able to be isolated/de-pressured then consider the following four bullet points and complete the table below:
- On line blasting of hydrocarbon piping should be avoided whenever there are other practical options.
  - These requirements are for all forms of invasive blasting - HP water, grit, garnet, walnut shell, ice etc. This is also applicable for needle gunning and wire buffing.
  - These requirements are for all levels of blasting ("light" for further inspection and "severe" for painting)
  - For estimated wall loss > 2.5 mm, STL mechanical engineering approval is required. For onshore sites this approval can be recorded below. For offshore sites this approval SHALL be via an approved STL Deviation.

<input type="checkbox"/>	<input type="checkbox"/>
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**NOTE: For the purposes of this item "hydrocarbon duty" means gas (incl. fuel gas) and condensate pipework but does not include diesel, glycol, vent and produced water lines.**

Scope defined using marked up P & ID's \_\_\_\_\_

WO: \_\_\_\_\_

<b>Location Number (to be marked on drawing)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Pipe Diameter (if applicable)					
Nominal Wall Thickness (A)					
Estimated Maximum External Wall Loss (B)*					
Remaining Wall Thickness: Estimated (= A - B) or Measured (e.g. 7.1, M)					
Safe to blast? (Y/N)					

*Should more than 5 locations be identified for the one permit, an additional table may be added but will require the same signatures as below.*

\*\*Assessor: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

\* For estimated maximum wall loss > 2.5 mm, Mechanical Engineering approval is required. For onshore facilities this approval can be recorded below. Offshore facilities require a deviation.

Engineer: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

*\*\* The Site Painting Supervisor is deemed a competent person to make the assessment of external wall loss. If they are not comfortable in making the assessment or have any doubts about whether the condition satisfies the requirement as stated just above - then a STL Facilities Inspector, Coatings Inspector or Mechanical Engineer should be asked to make the assessment.*

**PRIOR TO COMMENCING TASK:**

Tick when done

<b>Y</b>	<b>N</b>	<b>NA</b>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 8 Hoses are in good condition and within current certification period.
- 9 Where a Ludecke coupling is connected directly into a pneumatic tool, it is done via an in-line straight swivel (360°). Where a hose is connected directly into a pneumatic tool, it is done via a crimped dyna-swivel or similar universal joint.
- 10 All equipment has been checked thoroughly, all components in good order and the 'dead mans' handle is functioning.
- 11 External metal parts of the cleaning, blasting and spraying equipment are bonded Together and unit electrically bonded to earth. Continuity test results have been recorded on permit (<10Ω).
- 12 Barriers and signs have been erected to prohibit passage of other personnel within the work area?
- 13 Shields and screens have been erected to protect passing personnel from stray grit and debris where necessary.

<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>
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<input type="checkbox"/>
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<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>
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- |          |          |           |
|----------|----------|-----------|
| <b>Y</b> | <b>N</b> | <b>NA</b> |
|----------|----------|-----------|
- 14 If using air pressure to assist cleanup of sand and grit, a deadman device shall be fitted or observer placed at isolation valve.
- 15 List any additional eye protection and/or respiratory protection as agreed.
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**NOTE: The MPA waterblaster/header shall NOT be used for hydrotesting process equipment, nor be connected to the process in any way.**

**SECTION TWO:**

The use of Non Zone Rated Engines in Zone 2 Area will be allowed with the following controls in place; Initial and continuous gas testing, equipment is manned at all times while in operation. This deviation to the table is for short term use of equipment. Eg. Chemical deliveries, Hiab tractors.

**PRIOR TO COMMENCING TASK:**

- |               |                |
|---------------|----------------|
| <b>Zone 2</b> | <b>Non Haz</b> |
|---------------|----------------|
- 16 Indicate the area/zone the equipment is to be located in.

**NOTE:** This should be as far from the process as practical,

- |                |          |           |
|----------------|----------|-----------|
| Tick when done |          |           |
| <b>Y</b>       | <b>N</b> | <b>NA</b> |
- 17 Name the dedicated watchman who is standing by while the engine is running (if in Zone 2 area only).  
Name: \_\_\_\_\_
- 18 A portable dry powder extinguisher is present at the engine site.
- 19 Equipment has a current WOF/Certificate of Fitness as required.

**SECTION THREE:**

**PREPARATION:**

- |                |          |           |
|----------------|----------|-----------|
| Tick when done |          |           |
| <b>Y</b>       | <b>N</b> | <b>NA</b> |
- 33 All electrical equipment checked and found to be in good condition with a current test tag.
- 34 An ELCB or RCD must be used.
- 34 Cables run through a hazardous area are fitted with an orange, hazardous area extension lead tag. Note these tags must be fitted by a registered electrician.