



# WI-A-4.5.1-02 Use of Battery-Operated Hand Tools in a Hazardous Area 2

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To review changes, refer to the 'Version summary' at the end of this document.

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#### 1. Purpose

Whenever bp conducts construction, maintenance, demolition, remediation and other similar work that are typical of our industry, there is the potential for harm to people and the environment and for damage to equipment. This document provides a system of work that allows tasks to be completed safely and without unplanned loss of containment with the potential to cause environmental damage or to damage a plant or equipment.

This document supports Control of Works WI-A-4.5.1-01 for the Task Risk Assessment Table (TRAT) and provides instructions for the use of Battery-Operated Hand Tools in a hazardous area 2, occurring on bp New Zealand sites.

#### 2. Scope

This work instruction has been created specifically for New Zealand retail construction and maintenance tasks and is not authorized to be used by other areas within bp.

The requirement specified in this procedure applies equally to bp employees, contractors and visitors engaged in New Zealand retail construction and maintenance tasks.

## 3. Work Instructions for use of battery powered hand tools in a hazardous area 2

|                 | All personnel (bp or contractor) who use battery operated hand tools in a hazardous area 2         |
|-----------------|--|
|                 | on bp New Zealand retail sites.  |
|                 | The battery operated hand tools within the scope of this work instruction shall only be            |
| Applies to:     | equipment that can be readily de-energised (e.g. by turning off the battery operated               |
|                 | equipment) in the event a flammable atmosphere is detected or an incident occurs on site           |
|                 | that releases product (e.g. a customer or contractor spills fuel).                                 |
|                 | Do not use this work instruction for work within Confined Spaces.                                  |
|                 | To safely use battery operated hand tools within a hazardous area 2 at bp New Zealand retail       |
|                 | sites.   |
| Objective       | NOTE: This procedure covers the safe use of battery powered hand tools within a hazardous          |
| Objective:      | area 2 with respect to site and process hazards, i.e. the potential for flammable atmospheres.     |
|                 | The task hazards associated with their use is not within the scope of this work instruction. These |
|                 | shall be covered by the contractor JSA or SWMS associated with the task.                           |
| Risk            | Level 2 Task Risk Assessment-Use of Battery-Operated Hand Tools in a Hazardous Area 2.             |
| assessment:     | Level 2 Task Hisk Assessifient-Ose of Battery-Operated Hand Tools in a Hazardous Area 2.           |
|                 | To be used only by bp accredited contractors or sub-contractors engaged through a                  |
|                 | contractor who is bp accredited to manage sub-contractors.   |
|                 | Persons performing the task shall be trained and competent in this procedure with training         |
|                 | records kept by their employer and available for audit on request.                                 |
| Due vervieitee  | Any person conducting gas testing in accordance with this work instruction shall have              |
| Pre-requisites: | successfully completed NZQA 25510-Operate an atmospheric testing device to determine a             |
|                 | suitable atmosphere exists to work.  |
|                 | The contractor using the hand tool shall comply with all relevant requirements of bp               |
|                 | procedures and legislation as applicable to the equipment and the task, e.g. inspection of         |
|                 | equipment prior to use, risk assessment, etc.  |

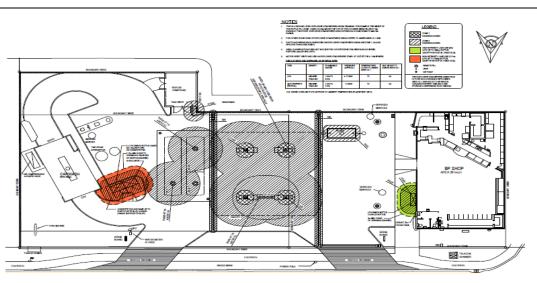


Complete Work
Clearance
Checklist (WCC)
on arrival to site

Report to site. WCC to be completed and signed by both contractor and site representative to authorise the work.

Insert correct details referencing to this work instruction WI-A-4.5.1-02 for the use of battery operated hand tools in a hazardous area 2 and the risk assessment for your task (your contractor SWMS or JSA which includes all relevant hazards and controls for the work to be undertaken (i.e. public vehicles, 3rd parties, barricading, signage, SIMOPS, etc)

Confirm
proposed
2. location and any
impacted
hazardous areas



Refer to bp site service station hazards map. This map shows all specific hazardous

|    |   | area locations. Note those areas that are impacted by the work or are immediately         |
|----|---|---|
|    |   | adjacent. If no hazardous areas are impacted, this work instruction is not required. The  |
|    |   | task may be completed under a WCC and contractor risk assessment (SWMS/JSA) for           |
|    |   | the task.   |
|    |   | All fuel dispensers and pumps within 4m (or 1m beyond the maximum hose length) of         |
|    | Isolation of fuel<br>sources and gas<br>testing of area | the location of the planned use of the battery operated hand tool shall be locked out     |
|    |   | (LOTO) & de-energised at the switchboard, an out of order sign placed on the              |
|    |   | dispensers, and physically barricaded to prevent customer use and access during the       |
|    |   | work.   |
|    |   | LPG exchange cylinder cabinets within 1.5m to be locked shut and bp site informed         |
|    |   | that they cannot be accessed during the work.   |
|    |   | Complete the bp Gas Test Certificate to confirm appropriate areas have been de-           |
| 3. |   | energised prior to use of the battery-operated hand tool.                                 |
|    |   | Physically test each bowser to confirm the de-energisation is effective.                  |
|    |   | No breaking containment to occur within the work area during use of the battery-          |
|    |   | operated hand tool. As a minimum, this area to be the hazardous areas impacted by         |
|    |   | the use of the battery-operated hand tool. Breaking containment is the opening of fuel    |
|    |   | lines by removal of fittings, draining fuel lines, or other fuel system work that has the |
|    |   | potentially to release fuel or vapour to the atmosphere rather than the normal            |
|    |   | operation of "keeping it in the pipe".  |
| 4. | Prepare gas   | Confirm that the gas detector has a current calibration. Conduct bump testing of the      |
| 4. | detector for use  | gas detector (also known as challenging) to confirm accuracy prior to use.                |
|    | Gas testing of  | Complete the bp Gas Test Certificate to confirm appropriate areas have been identified    |
|    |   | and to document this has been completed prior to use of the battery-operated hand         |
|    |   | tools, including prior to recommencing work after breaks and after tanker deliveries.     |
| 5. |   | Gas testing is to be completed by a person trained in NZQA 25510-Operate an               |
| J. | work area   | atmospheric testing device to determine a suitable atmosphere exists to work.             |
|    |   | All readings shall be 0% LEL and stable prior to commencement of work. Your bp            |
|    |   | representative shall be contacted if this is not achieved as further investigation may be |
|    |   | required prior to confirming the site is safe for work.                                   |
|    | Cover drains, dip<br>& fill points                      | Use a fire blanket or wet hessian to cover any of the following that affect the work area |
|    |   | and keep moist.   |
|    |   | All dip and fill points (including both remote fill boxes and dip/fill points) within 4m  |
| 6. |   | Ø Drains/pits within 0.5m   |
|    |   | Separator unit/pit within 0.5m  |
|    |   | Complete the bp gas test to confirm appropriate areas have been covered, and to           |
|    |   | document this has been completed prior to use of the battery-operated hand tool.          |
| L  |   |   |

| 8. | End of work    | representative and sign out the work is complete on the WCC  If the following day the work is to continue, the complete work instruction shall again be followed commencing at step 1.   |  |
|----|----------------|--|--|
|    |                | Pack up all equipment. Remove debris and make area safe. Report to the site  |  |
|    |                | <ul> <li>The use of mobile plant. See WI-A-4.5.1-04 for the requirements of entry of mobile plant into a hazardous area 2.</li> <li>Ground disturbance.</li> <li>Hot Work that includes burning, welding, grinding, air arcing, soldering, open flame, stress relieving, preheating or any similar activity that creates an uncontrolled ignition source. This type of work requires a Hot Work Permit.</li> <li>Use of battery-operated equipment in a confined space.</li> <li>Authority from bp is required in the form of a Hot Work Permit if in a hazardous area 1.</li> </ul> |  |
|    | tools          | This work instruction does <u>NOT</u> authorise the following:   |  |
| 7. | operated hand  | drops zones are also to be in place.   |  |
|    | Use of battery | kickboards provided on the scaffold / EWP or stored with a secure toolbox. Exclusion /   |  |
|    |                | When not in use, battery operated equipment shall be protected from falling, using   |  |
|    |                | No batteries are to be changed out within the hazardous area.  |  |
|    |                | hazards and shall be referenced on the WCC.  |  |
|    |                | A contractor risk assessment (SWMS or JSA), as a minimum, is required for the task   |  |
|    |                | checks, and competency in the use of the equipment.  |  |
|    |                | the battery-operated hand tool shall be complied with for the task including pre-start   |  |
|    |                | potential for flammable atmospheres. All bp and legislative requirements for the use of  |  |
|    |                | This bp work instruction is only for the safe use of battery-operated hand tools in a hazardous area 2 on a bp retail site with respect to site and process hazards, i.e. the  |  |

#### 4. Associated Documents

WI-A-4.5.1-01 bp Task Risk Assessment Table (TRAT)

WI-A-4.5.1-03 Drilling into or breaking concrete with hand held tools to a depth of 100mm not in a

hazardous area

WI-A-4.5-01-04 Entry of mobile plant into a hazardous area 2

PRO-4.5-0001-1-03 Ground Disturbance

PRO-4.5-0001-1-07 Hot Work

PRO-4.5-0001-1-01 Permit to Work

PRO-4.5-0001-1-02 Energy Isolation

PRO-4.5-0001-1-04 Confined Space Entry

PRO-4.5-0001-1-05 Working at Height

#### 5. Version summery

**Table 1: Document Version Summary** 

| Version | Prepared by  | Description of Change                         | Date       | MoC |
|---------|--------------|---|------------|-----|
| 1       | Glenn Dopson | Initial Document                              | 30/08/2016 |     |
| 2       | lan Heath    | Revision - no changes made                    | 07/01/2020 |     |
| 3       | lan Heath    | Training and Competency requirement and minor | 31/01/2021 |     |
|         |              | reference changes.                            |            |     |

**End of Document**