WORKSAFE

Mahi Haumaru Aotearoa



August 2020

Notifying a rupture disc activation when classified as a SCE

This bulletin presents WorkSafe's position on notification following failure, operation or activation of a rupture disc classified as a safety critical element (SCE) at a Major Hazard Facility or Petroleum Installation.

WorkSafe's position

If a rupture disc activates, and has been classified as an SCE by the operator, WorkSafe must be notified of the activation under the MHF Regulations r33(c) and/or PEE Regulations r70(f).

Introduction

There has been some uncertainty regarding reporting of rupture disc (or 'bursting disc') activation.

By design, a rupture disc is a safety device with a onetime-use membrane that ruptures at a predetermined differential pressure, either positive or vacuum. This can be referred to as failure, operation, rupture or burst, or activation of the device.

When the device ruptures, it requires replacement. The replacement rupture disc serves the same one-off safety function once the process is returned to service.

This technical bulletin advises when a rupture disc activation is notifiable to WorkSafe under the:

- Health and Safety at Work (Major Hazard Facility)
 Regulations 2016: MHF Regulations
- Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016: PEE Regulations

The regulations

A rupture disc could be classified as an SCE at a Major Hazard Facility or Petroleum Installation.

The definition of a safety critical element is covered within MHF Regulations r4 and the PEE Regulations r3(1).

Additional guidance for MHF operators on identifying safety critical elements is available in the:

- WorkSafe good practice guidelines on <u>Safety</u> Assessment (Section 5.4)
- technical bulletin (September 2017) on <u>Defining</u> safety critical elements and demonstrating their independent verification at a major hazard facility
- technical bulletin (July 2020) on MHF notifiable incidents

The notification requirements for safety critical element (SCE) failures are covered within the MHF Regulations r33(c) and the PEE Regulations r70(f).

Notification requirements

Operators (including drilling contractors) must comply with requirements in:

- MHF Regulations r34 and Parts 1 and 2 of Schedule 4, or
- PEE Regulations r71 and Parts 1 and 2 of Schedule 9.

The root cause analysis required in each Part 2 should be proportionate to the severity/complexity of the rupture disc activation.

If you are not sure whether notification is required, the best course of action is to contact WorkSafe.