

## Safety barriers, demarcation and lines

<b>Scope</b>	RWE Generation NL
<b>Department</b>	Safety GES
<b>Validity until</b>	01-05-2027

### Document information

Version	Version date	Drafter	Check	Authorisation
2.2	01-05-2024	S. Potter	M. Meesters	Manager Safety GES Ronald Kamst
<b>Check what applies</b>				
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#### Changes from previous versions

- Periodic review, no substantive changes necessary. Names of organization or department adjusted where necessary

#### Purpose of instruction

The purpose of this instruction is to clarify when, how and which cordons and markings should be installed to reduce and control dangerous situations and risks of hazardous work for workers and third parties. It also establishes a uniform use of colours for markings and lining.

#### Related documents

Process/ Doc.	Title	Code
Output	Managing Health and Safety risks	P053
Input	Operate and monitor	P033
Input	Work permits	I001
Input	Maintaining installations	P080
Form	<a href="#">Form Prohibited Entry (information label at barriers)</a>	F112-002

## Objectives

In addition to the aim of clarifying when, how and which cordons and markings should be put in place to prevent dangerous situations, it is also important to achieve uniformity in cordons, markings and lining across all RWE Generation NL sites through this instruction, thereby avoiding confusion among employees.

## Scope

These instructions apply to all activities and situations within the locations of RWE Generation NL.

## Measures and instructions

A cordon-off must **never be** passed or ignored by persons not authorised to do so. If it is necessary to be inside a cordoned-off area, permission must always be sought from the responsible executive or responsible department that placed the cordoned-off area. See also RWE Life Saving Rule 7.

When a barrier is set off, an information label (see Fig. 2) should indicate the date, the reason for the barrier and the contact details (**telephone number**) of the person responsible for the barrier. This label should be clearly and securely attached to the cordon, or directly nearby making it clear that the label belongs to that cordon. The person or department responsible who installed the barrier is also responsible for removing the barrier after completion and approval of the work.

A barrier can be placed by Operations or Maintenance to cordon off a high-risk situation or area, or by a contractor (permit acceptor) to cordon off a workplace.

The permit acceptor always coordinates the work within his work area. In case of conflicting activities, which may occur during the issuing of the permit or during the execution of the **LMRA**, it is determined, in consultation with the permit acceptor, which activities can be carried out within the demarcated work area.

### If one installs a barrier, the owner/manager is responsible for:

- The proper method of cordoning off, with attention to leaving necessary passages clear, for example, for emergency services;
- Applying the sign/tag forbidden passage immediately;
- Maintaining the barrier in good condition;
- When necessary, timely adjustment of barrier;
- Removing the barrier at the end of the work;
- Arranging surveillance so that no unwanted persons enter the cordon(s).

### Each label should state:

- Name and phone number of the owner and responsible department of the deposition;
- The reason for the barrier, nature of the work;
- Date and time, when the barrier was placed.



Figure 1 Prohibited access (LSR 7)



Figure 2 Information label prohibited access

## Safety barriers

### Type A barrier - temporary barrier

A barrier by means of a fence or chain, the purpose of which is to cordon off a (working) area temporarily (< 5 days) from unauthorised persons and make clear the dangers to trespassers.

#### Red/white chain

Red/white drop-off chain is used at drop-offs in connection with a hazard and/or a prohibition situation. For example:

- Demarcation of a work area in which lifting activities take place;
- Demarcation of a work area where work is carried out at height and there is a risk of falling objects;
- In an area where leaks are present;
- Where an incident took place.

A daily check should take place to ensure that the barrier and barrier area is still in order.

#### Yellow/black chain

Yellow/black cordon fencing is used as a warning in situations and activities that may cause danger to the surroundings, where the danger is not always visible. The hazard, hazardous substance or risk should be clearly marked on the cordon. For example at:

- Risky activities such as high-pressure cleaning;
- Detonative cleaning (using pressure waves/ controlled explosions);
- X-ray work;
- Presence of asbestos or other hazardous substances;
- Live, non-insulated electrical parts or components.

A daily check should take place to ensure that the deposition and barrier area are still in order.

### Type B barrier - hard barrier (colour, according to type A):

- Fencing, for example, between walkways and the road;
- Fences, interconnected, that cannot fall over;
- Barrier of scaffolding equipment;

#### Application barrier type B:

- When a barrier has to be maintained for a longer period (> 5 days) due to a high-risk situation;
- The risk is such that there is a high risk of injury within a barrier and passage should therefore really be blocked with a fixed barrier;
- For fall hazards, e.g. when digging trenches and wells, for which a chain etc. does not provide adequate protection.

## Preparation phase

In the work preparation phase, the need for cordoning off should already be considered. The alternative routes and/or the provision of alternative escape routes or the accessibility by emergency services in emergencies should be examined immediately. These alternative routes and/or escape routes must be announced to the work permit preparer or work permit issuer in good time by the person setting up the cordoning off.

## Completion phase

After completion of all work, all barriers will be removed. This of course includes removing and clearing away any remnants of temporary barriers.

## Deviations

If there is a deviation from the above, an alternative control measure must be taken, discussed beforehand and recorded in a Task Risk Analysis (TRA).

## Markings and lines

This alerts employees and passers-by, in connection with their personal safety, to a particular hazard, access restriction or obligation (e.g. wearing PPE).

### Colour coding, line demarcation

#### **Yellow Black Marking (RAL 1018 Yellow/ RAL 9005 Black)**

The combination of yellow and contrasting black marking is used to mark dangerous places such as floor or wall obstacles, protruding corners and/or edges etc. that can cause injuries when struck.



#### **Yellow lines: (RAL 1003)**

ATEX areas/zones. Yellow lines next to the "ATEX zone" signs.



#### **Blue lines: (RAL 5005)**

Wear compulsory Personal Protective Equipment (PPE). Blue lines next to the signs with pictograms.



#### **Signal green lines/markings: (RAL 6032)**

Indication of escape route lines at locations where no escape route (transparent lighting) can be installed.



#### **Red lines: (RAL 3001)**

Demarcation at fire fighting equipment, in front of which there should be no obstacles, combined with pictograms.



#### **Dark green lines: (RAL 6010)**

Route marking for guided tours. Decide per location if lineation is necessary/desirable.



#### **Orange lines: (RAL 2005)**

Marking for areas in which the use of life-saving equipment (e.g. swimming jacket or life jacket) is mandatory and as a warning for an area in which there is a danger of drowning.



## References

- Occupational Health and Safety Decree article 3.16 - preventing the risk of falling.
- Occupational Health and Safety Decree article 8.4 - general requirements for safety and health signs.
- Health and Safety at Work Policy Rule 8.27 - signposting of obstacles and danger points.
- NEN 3011 - Safety signs in the working environment and in public spaces.

## Terminology & Abbreviations

Abbreviation/term	Meaning
TRA	Task Risk Analysis (TRA).
RAL	Is a coding system for paint colors and other coatings.
PPE	Personal protective equipment
LSR	Life Saving Rule
LMRA	Last Minute Risk Analysis (Stop before start)