



## Yara Management System

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Procedure

Valid for organisation:

Sluiskil

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Persoonlijke veiligheid en arbeidsomstandigheden

## AGREEMENTS REGARDING CHROMIUM 6/LEAD

### Notes:

- New procedure.

### 1. INTRODUCTION

Chromium 6 and lead are hazardous substances. Exposure to them can eventually lead to serious health damage in the form of cancer or reproductive ailments. This is therefore referred to as a CMR substance: Carcinogen, Mutagen, Reproduction-toxic. Additional obligations are therefore imposed when working with CMR substances at Yara Sluiskil.

### 2. PROCEDURE

When working with metals or coatings containing chromium/lead, employees could be exposed to chromium 6/lead. This can occur both by inhalation and via the skin. Due to the highly toxic and carcinogenic properties of chromium 6/lead, it is very important to take measures to ensure that employees do not experience any negative health effects from this work.

Chromium 6 and lead may be encountered in stainless steels and painted surfaces or objects.

#### 2.1. Make an inventory

If stainless steels or painted surfaces or objects have to be processed, consider the possibility that these could contain a chromium-bearing layer. Chromium 6/lead are released during the processing of these. 'Processing' can encompass sanding, grinding, welding, cutting, shotblasting, etc.

#### 2.2 Take control measures

First check whether a safe working method has already been established for the procedure you must carry out (see management tables, paragraph 2.3) and then look to see whether the associated control measures are applicable in the situation. If there is a safe and correctly reasoned working method, you no longer need to assess the exposure yourself. In that case, make sure that exactly the same procedures are followed, and that the indicated criteria are met with regard to the environment and control measures.

In the absence of a safe working method, make sure that the exposure is evaluated and, on the basis of this, take the necessary control measures in accordance with the health and safety strategy. This works via the STOP principle, as follows:

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- a. Substitution:  
If chromium 6/lead is present in a surface, substitution of the chromium 6/lead is not an option. On the other hand, you can check whether it is possible to avoid the intended procedure. That can also be viewed as a form of substitution. Check whether:
- There is a different way to process the metal surface or object. For example, painting over instead of shotblasting, or replacement instead of repair.
  - The paint layer can be wholly or partially removed in such a way as to eliminate or reduce dust production. For example, by pre-treatment in a bath or in a sealed system.
- b. Technical measures:  
Check whether:
- It is possible to encase/enclose the work.
  - Equipment fitted with extraction devices can be used.
  - Effective extraction at source is possible: For effective operation, the distance between the object to be worked and the extraction must, for example, be no bigger than the diameter of the extraction aperture.
  - Well-designed space ventilation of adequate capacity is installed. Ensure that exposure is as far as possible below the limiting value. To that end, take all measures that are technically feasible, i.e. that the technical control measure is operationally available and is applicable in the given situation.
- c. Organisational measures:  
Limit the number of employees who are exposed; for example, via task rotation, or by restricting access in places where exposure cannot be prevented.
- d. Personal Protective Equipment:  
Personal Protective Equipment (PPE). If necessary, make additional PPE available:
- Respiratory protection devices, well-fitting and with the correct (assigned) protection factor.
  - Protective gloves and clothing.

### 2.3 Control measures for processing of Chromium 6 and/or Lead

The appended tables contain the prescribed control measures for the processing of chromium 6/lead-containing materials at YARA Sluiskil B.V. Depending on the nature of the processing and its duration, measures for prevention at source, PPE, and environmental measures are prescribed.

Language	Version	Management Table
Dutch	Version 5 July 2019	 Chroom-6 en Lood (NL).pdf
English	Version 5 July 2019	 Chroom-6 en Lood (ENG).pdf
French	Version 5 July 2019	 Chroom-6 en Lood (FR).pdf

## 2.4 Flow chart for processing involving chromium 6/lead

