REORGANISING OF A PAINTERS’ WORKSHOP TO PROMOTE WORKER HEALTH AND SAFETY

1. Case metadata

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2. Organisations involved

Peintures Hubert SCHMITT et Fils Sarl

3. Description of the case

3.1. Introduction

In compliance with the legislation (05/11/01 Decree), the risk assessment of the small company (employing six workers) specialized in house painting for private individuals should be updated every year. In 2007, the Labour Inspection was invited to visit the factory, and to carry out a critical assessment, in order to inform the company of the sort of modifications that should be made to the working methods in order to ensure the health and safety of the staff. The labour inspector came with a health and safety engineer, and they were able to give some advices. Prior to this visit, the company already planned to redesign the workshop. The inspector's visit served to back up the plan.

3.2. Aims

When updating the industrial and chemical risk assessment files, the company felt that it was necessary to review the organisation of the workshop, and also all the potentially dangerous tasks performed by the workers.
3.3. What was done, and how?

Industrial and chemical risk assessment files were updated in 2007, using software programs developed by the OPPBTP (Professional organisation for prevention in the construction industry).

Industrial risk assessment

To assess the risks, the software program MAEVA, from the OPPBTP, was used. It has a complete database and can be used for all professions in the construction industry. The program intended for Painters, Glaziers and Floor fitters was chosen.

The assessment principles given by the program were clear, and each task performed was listed in order of priority:

1: Priority situation, immediate improvements required.
2: Slightly worrying situation, modifications required in the medium term.
3: Low risk task.

For 2008, six of the tasks that were performed in the company were classified as priority 2 by the program, and the rest as priority 3 (none in priority 1).

Chemical risk assessment

The chemical risk assessment for the products that were used was done with the software LARA, from OPPBTP as well. For 2008, 53 products were registered using the suppliers’ Safety Data Sheets as a reference. For each product, once the risk assessment was done, a detailed product information sheet was printed, and placed in a file in the workshop, together with a work notice, placed in a "mobile" file, i.e. either in the workshop, or in vehicles on the customers' premises, so that workers can use them at any time.

Following these industrial and chemical risk assessments, the company decided to improve the work environment and adopted measures to prevent workers from main risks.

The measures implemented were the following:

Installation of the new equipment in the workshop

The main investment was to acquire a washing station with a decantation tank made by Storch (see Figure 1). The rollers could then be cleaned by a machine, and thereby allowed avoiding any contact between paints and workers. Impurities were then separated and collected, and the washing water clarified. The washing area was redesigned, a fume cupboard placed over the washing tank, which allowed to avoid potentially harmful emanations for workers.
In the basement of the building the company stored pots of acrylic paint and glues, which were thus protected from sharp temperature changes. It was used to store equipment that was not often used, to avoid contact with workers. The basement was designed with retention tanks to prevent any risk of spills or leaks (see figure 2). In the room reserved for storing glycerine paints and products, in which the threshold had been raised to prevent run-offs, retention tanks were also placed under the shelves. These shelves contained pots and bottles. In this room, a fume cupboard was placed above the paint preparation area to protect any person working there, and also a lamp complying with ATEX regulations.

Figure 1. New washing station

Figure 2. New room for waste
A room for waste storage was created designed to comply with all the regulations: fire door, retention grid on the floor, permanent ventilation, ATEX lamp, storage of used paint pots in a special container and paints and solvents in a special drum. This new room had a double positive effect: helping to protect the environment while also protecting the workers (see figure 3).

**Figure 3. Proper storage of products**

![Proper storage of products](source: Peintures Hubert Schmitt et Fils SARL)

A 3350-litre rainwater collecting tank was bought. Wastewater from the warehouse could be collected and sent to a clearing drum, and water from the car park sent to a hydrocarbon clearing drum. In addition, one area had been specially set aside in the room for stripping the substrata, like shutters for example. A floor grid collected the residues, which were then sent on to the clearing drum, and workers did not have to handle them at all. A new changing room was also built for the staff.

For all the alteration work listed above, the company received the support of experts from the CRAM (Regional State Health Insurance Office), the Water Agency, the OPPBTP, and also from company doctors and Health and Safety advisors.

The latest acquisition, at the beginning of September 2008, was a mobile sanitary trailer, which was used as a changing room on work sites, again with the aim of improving the health of the workers.

**Substitution of chemicals**

Since the analysis of the chemical risk in 2007, the four products considered critical by the LARA program have no longer been used. The company has replaced them by less critical paint strippers, and cleaning is now done with perchloroethylene instead of trichloroethylene.

**Safety outside the workshop**

Following the risk assessment in 2007, a portable air suction ventilator was bought which can be taken on work sites and used when preparing paint on the client’s premises to avoid inhaling vapours.
New, safer scaffolding (following the risk assessment done in 2003) were acquired, which can be transported to the work sites using two trailer containers. Handling is now easier and transport is safer. Similarly, and again according to the 2003 risk assessment file, the company invested in an elevator, which complies with all the conformity requirements and replaced an older model. In addition, protective clothing and equipment were worn to reduce any risks linked to the work performed.

**Staff training**

Various training courses were offered to the company's staff in 2007:
- Training in electricity risks HO-BO (for non-electricians): 5 workers
- SST training (First Aid and Emergency at Work): 3 workers
- CACES nacelle: 2 workers
- Trailer permit: 3 workers
- Training in using scaffolding: 5 workers
- Prevention when working on painting sites: 5 workers
- General risks in painting work: 5 workers

**Other measures**

Also, in order to respect workers, the company reduced in 2002 the working time from 42.5 hours to 35 hours, whilst maintaining wages already above the average for the sector.

The company also awarded bonuses to create loyalty within staff.

In addition, an employee savings plan was set up in 2006. Under this arrangement, each worker can pay in a sum of money, which is then topped up by three times that sum by the employer.

**3.4. What was achieved?**

The results of these actions are difficult to measure from an economic point of view, as they are not directly linked to profitability, but they all have an impact on the health and safety of workers, and one cannot of course put a price on that.

However it is noteworthy that in the last few years, this small company has never suffered from occupational accidents or diseases. This is due to this awareness policy, which the company continually endeavours to develop. This policy has won us several prizes and trophies.

It is above all important to remember that this is a small-scale business in a small structure with six workers at present. Means are therefore limited compared to those of a large industrial company, but this does not alter the fact that procedures are transposable in any sector and for a company of any size.

The equipment for protecting the environment was financed for 40% by the Rhin-Meuse Water Agency, that contributing to the health and safety of the workers for about 25% by the CRAM Alsace-Moselle, and 10% by the Alsace regional authorities.

The pre-requisite for applying for a grant from the CRAM is the annual updating of the risk assessment report.
3.5. **Success factors**

Key success factors for this case study are:

- Strong involvement of the manager,
- Help from the software MAEVA and LARA of OPPBTP to update the risk assessment,
- Provision of training for workers,
- Tackling risk at source,
- Receiving support, guidance and funding from different organisations and institutes.

3.6. **Further information**

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3.7. **Transferability**

The procedures applied in this case study are transposable in any sector and for a company of any size. It is not necessarily a question of investing large amounts of money, but simply of writing up the risk assessment file and especially of combining it with a plan of action, regularly updated, so that the work done is profitable.

4. **References, resources:**

Information provided by the company in the framework of the Good Practice Award Competition 2008/2009.