

## **BETTER HEALTH PREVENTION – BETTER WORK PERFORMANCES**

### **1. Organisations involved**

**S.C. POPECI UTILAJ GREU S.A. CRAIOVA (POPECI GROUP - CRAIOVA)**

### **2. Description of the case**

#### **2.1. Introduction**

S.C. Popeci Utilaj Greu S.A. is located in the South-Western part of Romania, in Craiova, on the town's Eastern industrial platform.

S.C. POPECI UTILAJ GREU is a large company working in the field of machine building and heavy equipment manufacture. It provides products for a broad range of industrial sectors e.g. the metallurgical and mechanical industry including car manufacture, the mining and power industry, the wood industry and electronics industry.

At present, it has over 700 employees distributed both in the design department and the manufacturing sections of the company.

Given the wide range of the industrial sectors to which the company's products are targeted, it makes a large variety of machines and equipment. The operations to be carried out by the workers are very complex. Consequently, the work related risks to be considered in terms of the workers' health and safety are very diverse.

Moreover, S.C. Popeci Utilaj Greu S.A. develops its activity within a high risk industrial sector also implying releases of heavy metals (such as Pb, Cd, Cr) with serious consequences for the workers' health in the absence of an appropriate workplace risk management.

This case study refers to the company's leadership commitment in ensuring safer and healthier workplaces and to the senior management's direct initiative for setting up a permanent health care service within the company.

#### **2.2. Aims**

In 2009, a case of occupational disease was reported within the mechanical / welding section of the company. A worker suffered from bronchial asthma because of the inhalation of heavy metals when welding. As a direct reaction to this incident, the company's top leaders decided to implement an initiative aimed at eliminating any risk of occupational diseases of the workers through different measures. As a first step, the management committed itself to implement a new health and safety policy that was based on different actions. The main aims of the policy were to involve workers in decision-making processes, to raise awareness within the entire company on health and safety risks and to improve communication on risk prevention based on the recommendations of an OSH advisor.

### **2.3. What was done, and how?**

The new health and safety policy was based on 5 pillars:

1. management commitment
2. employee involvement
3. organisational measures
4. health surveillance of employees
5. health promotion measures for employees

#### **1. Management commitment**

Leadership action was the first step for setting up the new health and safety policy. To enhance the prevention of future health and safety risks, the management decided to employ a full time OSH advisor, in addition to the already existing personnel responsible for OSH within the company.

The OSH advisor has post-graduate OSH and environmental training, including competence as an auditor of OSH and environmental system assessments. His role is meant to enhance the company's leadership capabilities to provide well-targeted prevention measures and to implement an efficient risk management all over the company. Concomitantly, the OSH advisor, as part of the company's permanent staff, represents the missing link between the workers and their OSH related problems, on one hand, and the company's senior management, on the other hand.

- The OSH advisor's responsibilities include a solid knowledge of the specific technical aspects related to the company's machines, equipment and technologies, and the workplaces related risks.
- He is also employed to facilitate communication within the company on any issue that could be possibly related to safety aspects. This is meant to promote workers' open consultation on the problems they face at the workplaces and to take over their claims/improvement suggestions. As part of the company's leadership initiative, the OSH advisor regularly participates in senior management meetings and in the decision making process regarding the adoption of OSH policy and the implementation of efficient preventive measures within the company. He is invited to comment on the impact any management decision would have on the health and safety culture within the company.
- Two main principles regarding OSH are stated within the new policy of the company: Prevention is based on continuous improvement and the overall OSH goal is to have zero accidents and incidents.
- A close and regular collaboration exists between the OSH advisor and the personnel responsible for OSH in the company mainly in relation to workplace risk assessments, the analysis of the results obtained, the elaboration of an adequate OSH prevention plan, and the integration of the OSH related actions with the environmental measures.
- One of the first outputs of the improved information of the management on health and safety issues was the setting up of regular and frequent safety tours, done by a member of the senior management accompanied by the OSH advisor. In addition to that, unannounced safety visits took place.

#### **2. Employee involvement**

The company's policy is the expression of the senior management commitment in implementing a high quality OSH management system. Employees are valued and their well-being is a key focus

# CASE STUDIES

within the policy. According to the continuous improvement statement within the company, each employee, from the workers to the senior management, contributes to the achievement of the company's objectives at the workplace.

- A prevention oriented rewarding system is meant to support this approach and to prevent the occurrence of work accidents. One important instrument consists of detailed recordkeeping of work incidents/accidents and occupational diseases in order to enhance prevention. Workers are encouraged to report on any safety issue and to raise any possible doubt with the OSH advisor.
- This prevention-oriented policy constitutes the basis of reaching the “zero accidents” goal as it ensures that even minor incidents are discussed and solutions are found.
- Another part of the policy is the high quality safety training foreseen for every employee before starting a new task. These training sessions are further repeated on a regular basis.
- A life-long learning approach is also provided in the policy, meant to encourage employees to keep up to date with the new developments within the company and to be flexible on changing tasks.

### 3. Organisational measures

A very first step taken after implementing the new policy was a comprehensive workplace risk assessment within all sections. A focus was put on the mechanical /welding section, since an employee from this section contracted a case of occupational disease, bronchial asthma. The records of the measurements previously made on the occurrence of harmful releases at welding could not reveal when the limit value of heavy metals fumes were exceeded.

Therefore, repeated measurements have been carried out within the welding section. They highlighted the presence of random emissions of heavy metal fumes that could not be previously detected upon regular workplace risks assessment.

The company leadership decided accordingly to have consistent investments, to improve the exhaust installation in the mechanical / welding section. This included the purchase of high performance measurement devices capable of detecting any random releases of heavy metals within the workplace atmosphere.

Concomitantly, repeated measurements of the workplace atmosphere have been carried out in the grounding, sanding and painting sections to identify any potential dangerous releases in these sections. Despite the satisfactory measurement results obtained, the company management allocated the necessary funds to modernise the ventilation system of these sections, too.

### 4. Health surveillance

Based on serious investigations made within specialised medical care units, the cause of the worker's illness (as above) was found to be the inhalation of heavy metals over a long period. Thus, it was decided to have on-site a health surveillance unit and to contract an occupational physician instead of relying on external services. A permanent medical care unit was set up within the company alongside with the employment of specialised medical personnel - an occupational physician and a nurse in addition to the existing general medicine physician. Upon the senior management's decision, necessary funds were allocated for the purchase of modern medical investigation and health care equipment.

The employees' health condition was surveyed through the medical care unit and regular reports were submitted to the senior management in order to monitor the benefits of the investments made. Further the occupational physician was regularly invited to the senior management's meetings to report on the health condition of the employees.

## 5. Workplace health promotion

As an additional part of the health and safety policy, upon the personnel responsible for OSH and trade-unions representatives' proposal, the company's management encouraged and supported sports activities for the employees e.g. various contests or simply leisure modalities as an ongoing initiative destined to improve the personnel's life quality. The possibilities of sport activities were set up and managers took part in some of these to set a good example and to show employees that everyone's participation was welcomed and encouraged.

Since the company's activities requires highly qualified personnel capable of operating modern equipment and facilitating installations, the company's senior management team also decided to have an additional incentive for its employees by providing free dental care for all staff. Another reason was of course to diminish sick leave by providing a high level of dental and general health care at.

### **2.4. What was achieved?**

The company's senior management aimed at eliminating risks at work and reducing sick leave absences and medical care costs. Over the long-term, a healthier workforce, a safer working environment and better organisational measures result in better outcomes, improved financial parameters and a consolidated position on the market for the company.

Concomitantly, within the mechanical / welding section, heavy metal releases were detected and acted on, which was probably the most important improvement.

Other outcomes are:

- Less absenteeism of the employees e.g. a decrease by 30% of the sick leave days and reduced medical care costs showed by the records of workers' absences for medical reasons.
- Improved medical parameters of the employees noticed at the periodical medical checking.
- "Zero work accidents" goal achieved in 2009 and 2010 according to the company recordkeeping of work accidents.
- A survey based on tailored questionnaires distributed to the company employees highlighted an increased satisfaction level as a result of the permanent health care provided within the company. The OSH Committee gave the same 'feedback' – employees' experienced high satisfaction levels because of having a permanent surveillance of their health condition by competent medical staff familiar with the working environment risks.
- Increased communication and transparency at all organisational levels.
- A closer collaboration between the company's senior management and the personnel responsible for OSH , including the medical assistance personnel of the company.
- An overall benefit for the company in terms of e.g. the work productivity, financial parameters attained, high OSH standards and workforce stability.

### **2.5. Success factors**

Several factors contributed to the success of the setting up of new policy and the accompanying measures. First of all the senior management commitment on making consistent investments regarding a more efficient prevention was of crucial importance.

The investments in new technologies and equipment were done to reduce and eliminate the workplace related risks. One of these, the local exhaust ventilation installation in the welding section along with measurement devices with improved detection parameters, was crucial for changing the conditions at Popeci and for eliminating any additional cases of occupational disease.

A major success factor can be seen in the implementation of the OSH advisor post. The OSH advisor could dedicate 8 hours a day, 5 days a week solely to health and safety issues within the company.



The cooperation between the OSH advisor, the management, and the health care unit was essential for success.

## **2.6. Further information**

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## **2.7. Transferability**

This case study has highly transferable potential. A cost benefit analysis of the investments made for a healthier workforce and safer workplaces showed the advantages of ensuring good health conditions of employees through a permanent and competent medical assistance resulting in improved performance at work, higher productivity, low medical care costs and workforce stability.

The increasing costs of high quality medical care and the advantages brought in by a permanent and adequate medical assistance within the enterprise constitute a significant stable and satisfaction factor for the workforce confronted with the requirements working in a highly intensive industrial sector.

However, several measures might imply high costs for a smaller company than Popeci. In such a case, however, it might be more feasible to think about contracting external services for conducting several tasks like the health surveillance of employees.