# Chapter 9
# Trade union initiatives to replace carcinogenic solvents

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## 1. Introduction

The Union Institute of Work, Environment and Health (Instituto Sindical de Trabajo, Ambiente y Salud – ISTAS) is a non-profit foundation run by the Spanish Trade Union Confederation (Comisiones Obreras – CCOO). Among its many tasks, ISTAS is responsible for coordinating a network of trade union technical offices which provide advice on the prevention of occupational risks to the territorial and federal members of the CCOO. 100-plus advisers belong to the network, providing direct support to trade union representatives in occupational health matters (around 190.000 in Spain in 2011, some 80% of whom belong to the two major trade union confederations). ISTAS provides these advisers with training on technical and trade union matters, activity protocols, information, technical backing and tools to improve the quality and consistency of the advice given. By analysing the activity of these advisers, the organisation as a whole is able to obtain information about risk prevention and make detailed studies of risk prevention in Spanish workplaces, exchange experience and work out common intervention criteria with a view to improving working conditions.

The emphasis, in terms of the demands of union representatives and action on the part of advisers, has shifted noticeably in recent years, from being for the most part determined by doubts about representation rights and damages (basically injuries resulting from work-related accidents) towards demands relating to exposure. This shift reflects the priority given to collective risk prevention in union occupational health strategy.

In the case of occupational cancer, this network has focused its activities on identifying the risks and helping to eliminate them. In some cases, elimination is simple: once a readily substitutable carcinogen has been identified, the risk can swiftly be removed, after the trade union has communicated the problem and its proposed solution. In other instances, the process is more drawn out, and a great deal of workplace investigation and awareness-raising are necessary, in addition to negotiations with the labour inspectorate or competent institutions, providing them with information and gaining their support.

Considerable effort goes into managing recognition of the occupational origin of cancer cases, the vast majority of which result from exposure to asbestos.

ISTAS has been working consistently in the field of chemical hazards, encouraging the elimination, substitution and control of dangerous substances and concentrating its efforts essentially on those substances on our 'blacklist'[1] of which the most important are carcinogens. The guides and information material that we have available are geared towards promoting trade union action, by encouraging the intervention of union representatives on the basis of a model which incorporates union mechanisms for actively seeking information, gaining the support of workers, activating trade union resources, and demanding protection rights.

CCOO has spearheaded various trade union campaigns to replace solvents and carcinogens. More specifically, during the 'Cancer 0' campaign which we rolled out in 2011 at national trade union level, we produced guides, leaflets and other support materials for all sectors and held numerous meetings and press conferences in addition to various training sessions for advisers[2]. These activities, which are detailed on the website www.cancerceroeneltrabajo.ccoo.es, have definitely helped to increase the knowledge of our delegates and to generate within the organisation the awareness and skills needed to support them.

The case studies described below contain various elements which are commonly encountered in connection with trade union action on exposure to chemical carcinogens.

## 2. Trichloroethylene. Elimination case study

The public works quality control laboratories in the Community of Castile and León carry out various analyses and tests. One frequent activity is to assess asphalt quality. This is done by using trichloroethylene (a substance classified as H350 – may cause cancer – in European legislation) to dissolve the sample (which is also heated and centrifuged), after which it is weighed and compared with its initial weight, thereby providing the necessary quality indicator. Trichloroethylene was also being used to clean the various containers and sieves employed in the process.

In one of the laboratories, in Burgos, workers found that levels of exposure to the substance exceeded permitted environmental levels, and blood tests also provided indications of high exposure.

The risk prevention representatives at the site collected this information and approached the union for assessment; once the risks were known and the right to demand preventive measures had been established, they drew up an action plan whose first step was to inform workers about the problem and demand that the enterprise tackle the cause. The risk prevention representatives forced through the creation of a Health and Safety Committee (CSS) at the site and also presented it to the inter-enterprise CSS.

1. Blacklist of chemical substances. ISTAS. http://www.istas.net/web/index.asp?idpagina=3447
2. These union officials are trained in occupational health and safety. They bring their expertise to the elected representatives of the committees for health and safety in businesses.

The target of the prevention representatives' action plan was to eliminate the carcinogen from workplaces and, meanwhile, to negotiate adequate collective and individual protective measures. While the changes were being discussed and negotiated, the site introduced other measures aimed at providing a better ventilation system and offering more effective and thorough individual protection than that previously provided. However, environmental inspections showed that exposure to the substance had not been eliminated, and workers complained of the cumbersome nature of equipment and the lack of training received.

Management was initially very resistant to change, pointing to the 'inflexibility' of the control standard which prevented the test being carried out in any other way.

Meanwhile, the union advisers sought the backing of ISTAS with a view to finding an alternative to this process. The investigation work threw up the possibility of using an incinerator, which would entirely eliminate the need to use solvents and was also a method already used by the Ministry of Public Works for similar purposes.

Finally, following trials, an incinerator was found to suit the needs of the laboratory and to comply with testing requirements, thus leading to a compromise replacing the former process; later, incinerators were installed in nine provinces in Castile and León, thereby eliminating this risk.

To conclude, a carcinogen which had not raised the concerns of the enterprise or the risk prevention service was eliminated on the initiative of the workers, participation mechanisms were brought into play and the presence and image of the union and its representatives within the enterprise became firmly associated with a proactive stance on health matters, a fact which not only generated the necessary support on the part of the workers, who are now more attuned to occupational health matters, but also led to greater empowerment of union representatives in terms of pursuing other risk prevention initiatives.

## 3. Printing inks. Elimination case study

The firm, which has 125 employees, manufactures plastic bags for large supermarkets. The process involves printing with organic inks.

After investigating a fatal accident in the firm, with the support of a union adviser, and putting forward plans for improved safety, representatives decided to tackle other aspects of working conditions there. The adviser, who at the time was involved in a trade union campaign to eliminate solvents, began visiting the firm. On his first visit, he noticed the strong smell of solvents which permeated all parts of the site. The workers told him that they had got used to it; however, he was able to get the union representatives to conduct an investigation into the matter.

It turned out that the inks used in the printing process contained toluene and butanol. Although neither substance was regarded as carcinogenic, either under the IARC

classification (group 3) or under Spanish law, the adviser's research (ZDHC; IPCS 1985) produced a finding that several entities regarded toluene, in high concentrations, as being carcinogenic for exposed workers and that other studies recommended taking into account the possible presence of benzene (IARC Group 1a carcinogen) as an impurity in industrial toluene; thus, the assessment of the working environment needed to take that finding into account. The representatives therefore planned to take action on the basis of the possible carcinogenic effect of the substances used, whilst also considering other harmful effects of those substances such as neurological or reproductive toxicity, etc.

They found that the plant consumed enormous quantities of solvents, up to 1 200 litres per day, and that the presence of those substances in the environment resulted to a large extent from the manual process of refilling the inkjet tanks (which were leaky themselves).

A review of existing risk assessment documentation showed that the solvents and their risks had been identified, but that no proposals for preventive measures had been adopted. With the support of the adviser, the representatives began to study the various hygiene reports drawn up by the prevention department and demanded a new study. This came to the conclusion that the prevention department's report (which defined the situation as risk-free) did not correctly reflect the laboratory findings, which indicated that exposure was three times the occupational exposure limit permitted in Spain. The workers' suspicions regarding the prevention department were justified, and even increased when the proposal for alternatives eliminating the risk was rejected.

The adviser found that there were safe alternatives to the printing process and that the union had successful experience with replacing inks containing organic solvents with water-based inks which, instead of containing the organic solvents previously mentioned, included ethyl alcohol and 1-methoxy-2-propanol (CAS Nos 6417-5 and 107-98-2 respectively), which are less harmful to health.

A phone call to the ink supplier confirmed that he could also supply that safe option. Armed with this information, the representatives met with management to set out their proposal for a change in the process, following which initial trials took place.

In parallel with this action, the representatives pursued a policy of communicating with their colleagues in order to inform them of the risks and of the need to change the process; with this in mind, they produced awareness-raising material, used the firm's internal bulletins and organised awareness meetings.

The initial trials did not please customers; there were problems with colour quality, and further trials had to be carried out, compounding the firm's resistance to the change. Following a fire near to the ink storage depot, outside the factory, the representatives urgently demanded an external emergency plan and talked with local neighbours to get them to demand an official risk statement and an environmental assessment. The results of the latter, added to the concerns of the firm's foreign partners, were ultimately decisive in getting the organic inks replaced by water-based inks. Nevertheless, meetings with the workers were also needed to make the change acceptable to everyone, as the

work of cleaning the printing machinery is now more burdensome. But everyone is now happy with the change and unreservedly supports the CCOO representatives in trade union elections.

## 4. Conclusions

From our experience, one of the greatest obstacles to preventing the risks deriving from the presence of carcinogens (apart from job insecurity, which obviously has a major impact on the ability of workers and their representatives to exert influence) is the failure to identify carcinogens in the occupational environment. A study carried out by CCOO in Madrid (Mancheño Potenciano *et al.* 2003) in 222 enterprises selected at random from all sectors, found at least one carcinogen in 124 of them. In only 22.6% of cases had these substances been identified by the prevention department (despite which, in the majority of those firms, no preventive measures had been taken). In the remainder of the enterprises, the study provided the first indications of such risks. Since then (2003), very little has changed. Information on carcinogens available to workers, their representatives and even company owners remains lacking, limiting the possibility of exercising protection rights in the presence of a risk. The state survey of working conditions (INSHT 2011) shows that there is a lack of information about chemical substances, particularly among non-Spanish nationals (20.7%), women (19.4%) and workers in small enterprises (14.9% in firms employing between 1 and 10 workers).

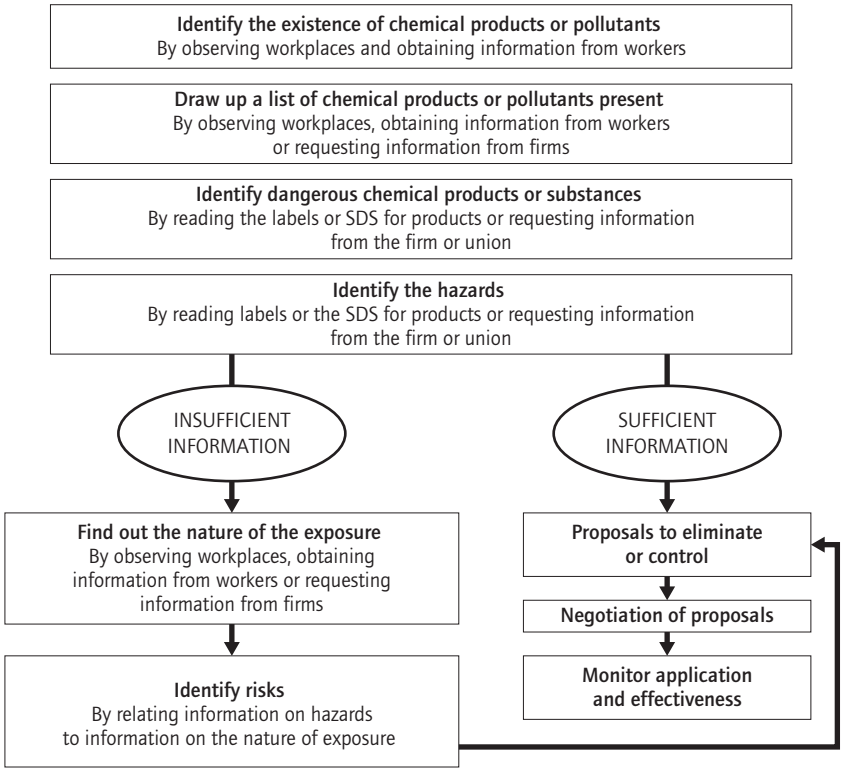
The poor quality of risk prevention work in many prevention departments is another reason. Risk assessments are alarmingly vague about the specific risks associated with exposure to harmful substances, and, apart from training, information and personal protective clothing, there are few proposals to eliminate or control these substances, a matter which is particularly serious in the case of carcinogens. Furthermore, we frequently find that we have to query health and safety reports, which are often incorrect, as well as traditional information sources.

Too often the attitude is one of 'denial' or underestimation of the risk, and this encourages employers to resist change and to levy accusations of trying to alarm the workers and harm the interests of the enterprise and its employees. There is clearly scope for improving the attitude of prevention department officials when negotiating these issues.

We can also draw some positives from our experience in investigating these matters. On the one hand, there is no doubt that, when action achieves the goals set by the parties, the image of representatives among workers and the bodies to which they belong (including public specialist institutions) is visibly enhanced. Issues relating to cancer risks involve an extensive network, which is regarded, in the 'little world' of risk prevention professionals, as involving too many technicalities and complexities. When practical proposals are able to be made, this generates greater confidence to tackle other supposedly problematic issues. Even if not all objectives are achieved, the intervention process has positive effects on relations between representatives and workers and on the dynamics of the bodies to which they belong. The final factor to which we would like

to draw attention is the positive effect of substitution initiatives outside the workplace in terms of reducing environmental hazards and improving the health of local people, and also the potential for establishing links between the trade union and its representatives and the population affected, a strategy which we need to encourage more often in our work.

Figure 1 **Trade union intervention against chemical risk at work**

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