How the Inspectorate handles chemicals in the workplace

The Netherlands has a well-developed chemical industry. Under the patronage of the Ministry of Social Affairs and Employment, the Inspectorate bearing the same name is responsible for keeping tabs on manufacturers of substances posing an increased risk to workers and the environment. One of the priorities for 2017 is ensuring that workers are better protected against hazardous substances.

Pien Heuts Journalist

The Dutch labour inspectorate's policy on the prevention of chemical risks concentrates on large-scale facilities. Image: \odot Belga



The national body responsible for workplace inspections in the Netherlands, the Inspectorate for Social Affairs and Employment (*Inspectie Sociale Zaken en Werkgelegenheid*, SZW Inspectorate for short), celebrated its 125th birthday in 2015¹. Back in 1890, a total of only three inspectors had to handle the task of preventing hazardous situations and fatal accidents. Nowadays the Inspectorate has a staff of 1 100 and oversees around 370 000 companies. Almost 400 of its employees focus their efforts on improving working conditions.

Three thousand people die every year in the Netherlands as a direct result of their jobs. Almost half of these deaths (1 350) are caused by cancers linked to toxic chemicals. Is a healthy working environment a mere pipe dream? Marga Zuurbier, Head of the SZW Inspectorate's Working Conditions Department, categorically rejects this assertion: "No, a healthy working environment is entirely achievable. These 3 000 job-related deaths can be avoided. The same is true for all industrial diseases caused by hazardous substances. Sometimes employers forget that health and safety in the workplace should be our number one priority. Year after year, we identify non-compliances in around 70% of companies where accidents have occurred. We need to do more to ensure that people can work through to retirement age without suffering any ill effects."

1. Rijkstoezicht op de Arbeid: http://www.125jaarrijkstoezichtarbeid.nl. **2.** This Directive is named after the Seveso disaster which took place in Italy. On 10 July 1976, a cloud of dioxin escaped from a reactor at the ICMESA chemical plant and spread over the Lombardy plain, causing significant damage to the local environment and wildlife. The SZW Inspectorate carries out checks and safety inspections on the basis of both legislative provisions and risk assessments; for example, the chemical industry is subject to a strict safety management regime involving annual audits, and regular checks are also carried out on asbestos removal companies. Other businesses working with smaller quantities of hazardous substances can expect less frequent visits from inspectors but must nevertheless adhere to strict rules.

Prevention rather than cure

Almost 400 companies in the Netherlands are classified as high risk due to the fact that they use large quantities of hazardous substances. The consequences of a mishap in one of these companies – many of which manufacture chemicals – could be disastrous for both workers and the environment.

"We started rolling out a new hazardous substances programme this year, which incorporates all of the knowledge we have built up in this field. On top of that, one of our priorities for 2017 is to identify more effectively the substances or combinations of substances which may cause illness or ultimately death in workers who are exposed to them," explains Nicole Kroon, Head of the SZW Inspectorate's Major Hazard Control Department.

"Too many people fall ill or die as a result of exposure to hazardous substances of all kinds, and so we are making them more of a focal point for our inspections. This applies not only to high-risk undertakings but also to asbestos removal or welding companies, for example," adds Marga Zuurbier.

There are 400 companies in the Netherlands which fall under the scope of the Decree on the Control of Major Accident Hazards, adopted by the Netherlands in fulfilment of the EU's Seveso Directive². The aim of this piece of legislation is to prevent

The SZW Inspectorate in facts and figures

The SZW Inspectorate is an agency of the Ministry of Social Affairs and Employment, and monitors around 370 000 Dutch companies which employ more than two people to ensure that they comply with the regulations on illegal employment, fraud, counterfeiting and working conditions. This year, the Inspectorate has focused in particular on psychosocial issues in the workplace (pressure, stress, harassment and discrimination) and accidents linked to flexible working arrangements. Out of a total staff of 1 100, there are 400 inspectors who have the task of monitoring whether the law on working conditions is observed properly by companies, and more than 40 of these are tasked specifically with overseeing companies which present an increased risk due to the exposure of workers and the environment to hazardous substances. These companies are subject to "very frequent" inspections, whereas other companies are inspected on the basis of risk assessments and at intervals ranging from every three years to never in the case of companies and organisations whose operations are solely office-based.

major accidents which may have far-reaching implications for humans, the environment and infrastructure. Since 2014, the SZW Inspectorate has worked together with other supervisory bodies at regional, provincial and municipal level with a view to carrying out inspections and ensuring that companies adhere to the rules. This move was prompted by the realisation that problems which occur in the companies in question almost always have a direct impact on the surrounding area. The SZW Inspectorate is primarily interested in the health and safety of workers rather than of nearby residents, and carries out regular on-site checks – several times per year in some cases - which lend credence to its claims that it has records of all the hazardous substances used, manufactured and registered by these 400 companies. The inspectors also regularly visit around 100 companies which handle equally hazardous substances, but in smaller quantities.

"What do we know at present about the potential risks associated with the use of nanotechnologies, for example?" Nicole Kroon

Risk-based approach

Chemical manufacturers and other companies which use hazardous substances are obliged to keep records of the substances which they use and which are released during the manufacturing process, as well as details of the measures required to provide a safe and healthy environment for workers.

"Nine out of ten Seveso establishments have procedures for registering hazardous substances and their limit values, which are adequate for the most part, and the same is true for their safety management regimes," says Nicole Kroon. "They are very risk-aware. At the same time, however, we have noticed that facilities are starting to show their age. Many chemical undertakings were established around 40 years ago, and the pipework in their factories is nearing the end of its lifetime."

The Inspectorate assesses the safety reports submitted by companies and carries out annual checks to ensure that compliance with statutory requirements is also achieved on the ground. Any company which fails these checks is issued a warning, which may be followed by a formal compliance notice, administrative fines, penalties, the shutting down of operations or even criminal proceedings.

Ever since the Law on Working Conditions was amended in 2007, employers and workers have shouldered a greater part of the responsibility for health and safety at work. Additional tools have therefore been developed with a view to identifying workplace hazards, and catalogues of working conditions (arbocatalogus) and risk inventories and assessments (risico-inventarisaties en -evaluaties, RI&E for short) are used ever more frequently by companies which belong to sectors other than the chemical industry but which use hazardous substances. These tools allow employers and workers within the various sectors to draw up their own inventories of the risks faced by their company or sector.

According to Marga Zuurbier, the voluntary drafting of a catalogue of working conditions is a good way of developing safe working practices on the basis of known emissions and

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Marga Zuurbier and Nicole Kroon

exposures during manufacturing processes. "Companies can use the generic safety measures listed in our approved catalogues of working conditions as a foundation for mitigating the risks associated with many substances originating from industrial processes, such as asbestos, welding fumes, ammonia in silos or quartz powder. Over 150 catalogues of working conditions have been published to date. We ultimately hope to have a catalogue for each industrial sector in order to identify all risks and the associated counter-measures, which means that trade unions and employers still have their work cut out."

With 50/50 hindsight

Several cases have emerged in recent years in connection with the exposure of workers to hazardous substances; for example, around 900 former defence workers have lodged claims against their then employer in connection with the health problems they have suffered after working with paints containing chromium 6 in the 1980s and 1990s. Employees of the Dutch rail operator were also exposed to carcinogens when sanding off layers of old paint. The former chemical giant DuPont (subsequently Chemours) has also been accused of excessive emissions of the carcinogenic chemicals PFOA and later GenX in connection with the production of Teflon. A number of residents of Dordrect (near Rotterdam) have taken part in a health survey, and the results will be made public in spring 2017 (read the article on page 44). Lodewijk Asscher, Minister for Social Affairs, has also ordered an enquiry into the safety measures taken by the employer over the years in order to protect workers against exposure to PFOA. A criminal investigation is also in progress.

The same question is inevitably asked whenever the issue is debated in public: "Where was the SZW Inspectorate?" In the words of Marga Zuurbier: "Our job is to protect workers in the here and now and ensure that they benefit from safe working conditions. We take measures only if this is not the case. Many substances which are regarded as hazardous nowadays were previously in widespread use."

Nicole Kroon adds: "Sometimes a substance which is regarded as a cause for concern is not prohibited by law, and our checks must have a legal basis. In retrospect, and with the benefit of 50/50 hindsight, we sometimes discover that people have died or fallen ill as a result of exposure to certain substances. That does not always mean that their employer failed to take the relevant protective measures according to the rules in force at the time, or that the Inspectorate has shirked its tasks. We have to look at the regulations which applied and the scientific knowledge available back then, and only then can we ask: 'Did the employer do everything that could have been done?' Awareness of the hazardous nature of substances can evolve very rapidly over time. To take just one example, what do we know at present about the potential risks associated with the use of nanotechnologies? Or the effects of the many new substances developed by the chemical industry?"

ILO case filed by trade unions

In 2012, the Dutch trade unions filed a case with the ILO on the grounds that the SZW Inspectorate had failed to comply with ILO Labour Inspection Convention No 81. The case, which related mainly to the number of inspectors, the frequency of their checks and their specialist knowledge and operating procedures, was declared admissible. Ever since 2007, when employers and workers were given chief responsibility for health and safety at work and the state authorities took a step back, the trade unions have seen a drop in the number and frequency of inspections paired with a decrease in compliance with statutory provisions and obligations. They believe that this pulling back by the authorities, and accordingly the SZW Inspectorate, has had an adverse impact on factors such as health and safety at work and the prevention of occupational disease.

The trade unions' case was duly acknowledged by the ILO, which in 2014 addressed a number of recommendations to the Ministry of Social Affairs and Employment, the lead agency for the SZW Inspectorate. According to these recommendations, the Inspectorate must cooperate more effectively with other labour inspection services. The ILO noted that the "self-inspection" system introduced in the Netherlands for employers and workers cannot replace the compliance and enforcement functions of the state authorities, and asked the government to ensure that the number and frequency of labour inspections are sufficient, including in sectors that are not considered to be high-risk. The ILO also requested improvements to the system for recording occupational diseases. In March 2015, Minister Lodewijk Asscher responded by saying that he was happy with the current policy on workplace inspections, but that he welcomed the recommendations and would keep the ILO informed by means of biannual reports.