



Flemish CityChlor workshop means a successful start towards an integrated solution

There is more to CityChlor than finding technical solutions (innovative or otherwise) for soil and ground water contamination by chlorinated solvents in urban areas. The remarkable thing about this project is the heavy emphasis being laid on the socio-economic side of the problem: how should we communicate, how is the soil decontamination work to be financed, and how do we include the decontamination work in a city's spatial plans.

Evidence for the popularity of this integrated approach was apparent from the large numbers of guests at the first Flemish CityChlor workshop. More than 85 participants from various industries (soil decontamination experts, contractors, the private sector, towns, cities and local authorities, the communications and banking sectors, etc.) listened to the information in the morning and took part in the discussions in the afternoon.

An umbrella workshop is being organised on 18 November in Paris, at which all the conclusions from the regional workshops will be examined. We will also be looking at the survey projects in more detail. We therefore hope to be able to greet many guests from Flanders from as many sectors as mentioned before. After all, it is only by working together, using creative approaches and maximum regional know-how, that we can arrive at a truly integrated solution.

A recap of the programme, for those who were unable to attend:

The day started with information about the project. CityChlor is a European project in which nine partners from Germany, the Netherlands, France and Flanders are pooling their information with the intention of jointly setting up new survey and pilot projects. The project covers a period of three and a half years, and is fifty per cent financed by IV-B Noord-West Europa (2.6 million euros), with the remainder coming from the nine partners. They are OVAM (the Public Waste Agency of Flanders), Mortsel, Ghent, Bodem+, the city council of Utrecht, INERIS, ADEME (French Environment and Energy Management Agency), ITVA and the city of Stuttgart. This means we have a total of 5.2 million euros with which to develop and work out the details of an integrated approach. The approach is structured in four work packages which will culminate in a single integrated entity by 2013. There will also be seven pilot projects, designed to verify our theoretical findings.

The first work package involves drawing up an inventory and disseminating knowledge. This includes an extensive study of relevant literature, and a series of workshops to be held in the four countries, the first of which took place in Flanders on 9 March. A final congress in 2013 will guarantee the best possible exchange of information at European level. Survey and decontamination techniques will be closely examined in the second and third work packages. An initial study in this package was explained by VITO during our workshop: a bottleneck analysis of three concrete case files. The conclusion was that extra research would be needed into the cause of contamination before the decontamination work begins. It also appeared from the case files that combining decontamination techniques produced better results than using one fixed technique. Another recommendation from the study was that the focus should primarily lie on the removal of risk, rather than attaining an unrealistic target, being an entirely decontaminated site. The study was just a first step, which we will include during the next few years when testing new technologies in the pilot projects. In the fourth package, we will be looking more deeply at the socio-economic aspects. The seven pilot projects will be testing different facets from the above work packages. Two innovative survey techniques will be tested in Flanders, while another one concerning survey techniques will be conducted in France. A decontamination technique involving the injection of iron to tackle the source zone has also been planned in Flanders, while another technique for dealing with the source zone will be carried out in Stuttgart. The localised approach in which heat/cold storage is combined with a large-scale decontamination operation and bioprocess monitoring has been given the go-ahead in Utrecht. Finally,

the fourth work package includes a pilot project concerning communications at two decontamination sites in Flanders.

In the second part of the programme, we introduced the visions of three important parties to our message: the *'Vereniging van Bodemsaneringsdeskundigen'* (the association of soil decontamination experts), the *'Federatie van de Belgische Textielverzorging'* (federation of Belgian textile care), and the visions of town, cities and local authorities.

As far as the soil decontamination experts are concerned, CityChlor means, more than anything else, encouragement to innovate and exchange knowledge. They are also hoping that effective solutions can be found for the complex matter of decontamination. The federation appealed to all its members to play an active role and to share every piece of relevant information in the project.

The *'Federatie van de Belgische Textielverzorging'* then emphasised the importance of CityChlor for the dry-cleaning sector. The function of VLABOTEX, the decontamination fund for the dry-cleaning industry, was described in great detail, including the general principles and the cost-price for individual companies. The relevant presentation can be found on the www.ovam.be/CityChlor website, as indeed can all the others.

Finally, three cases were highlighted by the town of Mortsel, a CityChlor partner, in which the importance of accurate and well-timed communications during surveys or decontamination work in the town was highlighted. It is the duration of the decontamination process and the many uncertain factors associated with the decontamination of volatile aliphatic chlorinated hydrocarbons in particular that impede communication with residents and other town dwellers.

In the afternoon, everyone had their say during one of the three workshops, which were intended to generate input from the various sectors. The participants expressed their visions via statements or in a forest of post-its, and below are the most important findings to emerge during the workshops. The innovative decontamination and survey techniques workshop was so popular that it was split into two groups. The conclusions of both groups amounted to the same thing: using an innovative technique is not self-evident, commissioning parties are not happy about paying for research and development carried out by an expert, and even when the government is the commissioning party, the law on government-financed assignments places no obligation on it to use these options. It also became clear that contractors and experts very much rely on each other's expertise, even though in reality, codes of practice or specifications are sometimes used as an excuse for not making any criticism. Finally, another point raised was that in addition to a detailed soil survey into contamination by chlorinated solvents, an extra survey would be useful before a specific technique was chosen or a contour determined. Extra communication with the commissioning party for the purpose of explaining this appears to be a problem area: such communication is infrequent as a result of an eagerness to remain competitive. The question was raised in this connection as to whether the government has a role to play here, or whether the views of the soil decontamination expert should be given greater weight.

The workshop dealing with the combination of decontamination and redevelopment with the financial aspect consisted of a mixed group of people from the private sector and the financial world. It emerged from this workshop that a sectoral fund like VLABOTEX is certainly useful, but that the industry itself should make the initiative. A compulsory insurance policy as an option for spreading the costs across the whole sector would appear to be fraught with practical objections. A possible alternative that was suggested was a regional-based approach instead of sector-based one. Other possibilities, like economic incentives for companies willing to carry out decontamination work effectively, or developers prepared to decontaminate a contaminated site and then redevelop it, received a very positive reception by the participants in the workshop.

In the final workshop, the emphasis was laid on communication and the perception of risk. A logical conclusion here was that communication should be in good time, accurate and open – but how this should be achieved in practice appears to depend very much of the size and type of project. General guidelines would be welcome, but it will be necessary to consider each individual case on its own merits. The question of what response communication would generate among residents was also raised: unexpected responses could have a significant impact on the positive feeling associated with the end-result of the decontamination work.

The workshops represented outstanding added value for our project and this is something we would like to build on. We will continue to keep all the participants and anyone else who would like to join informed, and we look forward to receiving feedback, details about studies with which we are not familiar, any related issues and other relevant input at citychlor@ovam.be. After all, this project depends on the cooperation of each sector and their individual members. The surveys are intended for use in everyday practice, but it is from everyday practice that the initial input has to come.

Thank you for your cooperation.

