

Environment & Heritage Series

An Analysis of
Business Sectors
Producing,
Marketing or Using
Chemicals in
Northern Ireland

Technical
Summary Report

December 2006



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Aims and Approach

The Environment and Heritage Service (EHS) takes the lead in advising on, and in implementing, the Government's environmental policy and legislation in Northern Ireland (NI). In line with its objectives, and in relation to the current and future implications of regulation, the EHS is currently developing its approach to chemicals regulation for Northern Ireland.

During the course of this project, it was announced that Health and Safety Executive (HSE) and their counterpart, HSENI, will be taking the role of UK Competent Authority for EU Chemicals Regulations for the Registration, Evaluation, and Authorisation of Chemicals (REACH). EHS anticipates a supporting role in delivering some of the responsibilities for this legislation. The Environmental Policy Division within DOE will continue as the policy lead on chemicals in relation to the environment.

In order to develop a robust approach, the EHS identified a need to establish priorities for chemicals of concern, in a Northern Ireland context, due to their potential impact on the environment. To inform this, the EHS let a contract with PricewaterhouseCoopers LLP, to complete a baseline project to identify business sectors which may be producing, marketing or using chemicals in Northern Ireland.

The overall aims of the project were to review chemicals of concern, develop a database of substances and undertake a sector analysis of business in Northern Ireland that will assist prioritisation of chemicals and the development of the EHS approach to chemicals regulation. The approach used to complete this work included:

- Desktop review of current and future regulation;
- Business sector impact analysis;
- Sector analysis in Northern Ireland; and
- Database design, build and test

The methodology was focused on identifying priorities based on businesses potentially using the chemicals listed from the reviews of regulation, not actual usage. This exercise was a baseline project to help support and inform further work in the development of regulating chemicals in Northern Ireland

Findings and Conclusions.

In concluding the work, individual findings have been assigned to key themes identified during the analysis, namely impact of future regulation, sector diversity, and sector prioritisation.

Impact of Future Regulation

Reviews of legislation resulted in the listing of over 1500 individual chemicals linked to 48 current items, and 18 future items, of legislation. Our analysis has concluded that current controls impact a large number of business sectors, and pending, or future, regulation was identified as having impacts on a broad range of high level business sectors rather than just the chemical producer. The REACH legislation to be implemented across EU member countries in 2007 is a prime example.

The work also highlighted the need for the REACH legislation given that this project identified significant gaps on existing chemicals databases. Only 50% of the substances searched on key sources had information on chemical use and hazard exposure.

Sector Diversity

Over 100 individual sectors and sub sectors were identified as using chemicals in Northern Ireland. Chemicals were potentially being used throughout the value chain in many business sectors from primary material producers right through to retail users. This included the traditional sectors one would expect to use chemicals such as chemicals and allied products, and diverse but important sectors in a Northern Ireland context such as aircraft parts, ship repair, jewellery, refrigeration equipment, dry cleaning and dentistry. Due to the constraints of the methodology, several sectors were excluded from the analysis including petrol stations, dispensing chemists and also public services, for example, water supply.

Although Northern Ireland has a relatively small chemical manufacturing sector, chemicals may, nevertheless, be an issue for regulation across many other diverse sectors. The analysis revealed that 90% of the individual businesses across all sectors using chemicals were Small and Medium-Sized Enterprises (SMEs) with less than 50 employees. Such findings will assist in developing the most effective approach for regulating chemicals in these sectors.

Sector Priorities

In the analysis completed, various sectors identified as having a high potential for using chemicals also had significant numbers of employees and businesses. It is these sectors that should inform the key priorities set as part of the future EHS approach to chemicals regulation. A prioritisation model was developed to highlight these sectors and which provides a mechanism to help focus future activity and further investigations.

The Chemicals and Allied products sector was identified as the top priority by number of businesses and potential number of chemicals used, even though, in relative terms to other sectors, it was not the largest by employee numbers. Pharmaceutical preparations was identified as a priority because it was the dominant sub sector within Chemicals and Allied Products by number of businesses and employees. Priority 2 sectors identified included: Stone, Clay and Glass products; Primary Metal Industries; Electronic and other Electrical Equipment; Nurseries, Lawn and Garden Supplies; Food and Kindred Products; Textile Mill Products; and Lumber and Wood Products.

Database and GIS Mapping

The database captured all of the information gathered as part of the reviews of legislation and the business sector analysis, including GIS (Global Information System) maps of individual sectors. The database includes details on over 1500 chemicals linked to 66 items of regulation. It also captures company information details on over 2700 individual companies across 100 sectors and sub-sectors, presenting 30 GIS maps of selected business sectors.

A separate User Guide for the database has been developed providing simple step by step instruction on database navigation. The Microsoft Access database developed has provided a live data storage and business intelligence solution. Crucially, it has the capability to be developed further and evolve into an effective information centre and management tool.

Study Limitations

This project has identified priorities based on business sectors potentially using the chemicals listed from the reviews of regulation. From this project, it is not possible to draw underpinned conclusions about the extent of actual use of chemicals in Northern Ireland and the risks that these chemicals pose. This can only be done following informed primary research where the type and volume of chemicals produced or used is obtained from various businesses within individual sectors.

Recommendations and Next Steps

Recommendations are presented regarding communication, application of the methodology, and further investigations as follows:

- Communication of developments in future chemicals regulation, including REACH, will be within the remit of a number of agencies. The findings for this study may be used to facilitate communication of Northern Ireland priorities with these agencies and key stakeholders;
- The methodology used for the project, and the database, are both tools that can be used to support future roles in chemicals regulation, and may also be considered for their applicability to other regulatory regimes in EHS; and
- Further investigations could be undertaken to identify what chemicals are being produced and used in Northern Ireland, and in what volumes, in a prioritised way.

A next step is to consider the set up of a database management team. This should enable EHS to get the best value from the existing tool and assist effective management of future database development.

Project Details

This Technical Summary Report relates to information from Project CON 4/4(145) in the following outputs:

An Analysis of Business Sectors Producing, Marketing or Using Chemicals in Northern Ireland
Final Report December 2006

An Analysis of Business Sectors Producing, Marketing or Using Chemicals in Northern Ireland
Database User Guide December 2006

Copies of the Technical Summary and Final Report documents are available on the EHS website at <http://www.ehsni.gov.uk/index/about-ehs/strategy-unit.htm>.

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Disclaimer

This report has been prepared for and only for the Environment and Heritage Service in accordance with the terms of our letter, clarifying our approach, deliverables and timetable, dated 16th May 2006 and for no other party and/or purpose. We do not accept or assume any liability or duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

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