

Harpur Hill, Buxton  
Derbyshire, SK17 9JN  
T: +44 (0)1298 218000  
F: +44 (0)1298 218590  
W: [www.hsl.gov.uk](http://www.hsl.gov.uk)



**Survey of views on Occupational Hygiene Data  
Collection and use of the National Exposure  
Database**

**HSL/2006/18**

Project Leader: **Julie Bell**

Author(s): **Julie Bell**

Science Group: **Human Factors Group**

# CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>3</b>
<b>2</b>	<b>METHODOLOGY.....</b>	<b>4</b>
<b>3</b>	<b>RESULTS .....</b>	<b>5</b>
3.1	Current use of occupational hygiene data and the NEDB.....	5
3.2	Utility and quality of the data currently available.....	5
3.3	Suggested improvements to the NEDB .....	7
3.4	New ideas and creative uses for the database .....	11
3.5	Other potential users of the database.....	12
3.6	Other considerations raised.....	14
<b>4</b>	<b>APPENDIX A .....</b>	<b>16</b>
<b>5</b>	<b>APPENDIX B .....</b>	<b>17</b>

## EXECUTIVE SUMMARY

HSE Occupational Hygienists make site visits to assess what substances people are exposed to in the workplace, the extent of that exposure, what is being done to control it and how it could be done better. This information is usually communicated in some form of report, providing an expert opinion and a professional picture of the workplace. The data collected by HSE Occupational Hygienists are entered into the National Exposure Database (NEBD), a centralised HSE database of factory measurements and observations.

### Objectives

HSL was commissioned by HSE Occupational Hygiene Unit to investigate how the NEDB is currently utilised, why it may be being under utilised and how the use of the database could be extended.

### Main Findings

A total of 17 interviews were conducted with representatives from HSE Units and Divisions. Of these 17, ten had either used the database themselves, had asked for data to be extracted from the database or had used data in the past, but only one of the ten said they used the database regularly. Seven representatives said they had never used the database.

Generally, it was thought that the data in the NEDB are needed for background information, to get a view on what is typical in industry and what is practicable, so from that perspective the data are considered fundamental. However, the quality of the data for this purpose was thought to be 'patchy'; there are few data available for the more esoteric chemicals and in some cases no data are available at all. A clear message from users was that they are typically interested in the contextual information, whether this is from the summary information or the body of the full report, and that this is often difficult to establish because the quality of that information is inconsistent.

A number of suggestions were made for improvements to the NEDB, these related to:

- Summary and contextual information
- Search functionality
- Statistical tools and presentation of data
- General quality and accuracy of data
- Increasing the power of the NEDB
- Information on control measures
- Ways to complete the dataset and ensure the continued collection of data including:
  - Links to other databases
  - Targeting large data sources
  - Programmes of work where hygienists collect data on specific topics or areas of work
  - Greater involvement from industry.
- Additional data that could be collected by occupational hygienists during site visits
- Potential new ideas and creative uses for the database
- Other potential users of the database

The details relating to each of these suggestions are contained in the body of this report.

# 1 INTRODUCTION

HSE Occupational Hygienists make site visits to assess what substances people are exposed to in the workplace, the extent of that exposure, what is being done to control it and how it could be done better. This information is usually communicated in some form of report, providing an expert opinion and a professional picture of the workplace.

The data collected by HSE Occupational Hygienists is entered into the National Exposure Database (NEBD), a centralised HSE database of factory measurements and observations. The NEBD covers most of the elements in an occupational hygiene report but not in great detail. For example, if a Local Exhaust Ventilation (LEV) is present, this is recorded as 'Yes' or 'No' but if it is not suitable for the circumstances the reasons are not discussed. However, the database does link directly to the original report (in many cases), so unstructured data can still be explored.

HSL was commissioned by HSE Occupational Hygiene Unit to investigate how the NEBD is currently utilised, why it may be being under utilised and how the use of the database could be extended. This investigation was focused on gathering information from NEBD subject matter experts, those who may use occupational hygiene data in the course of their work and those who potentially could use the data stored in the NEBD.

The work was commissioned in order to inform a discussion by the Advisory Committee on Toxic Substances.

## 2 METHODOLOGY

The methodology employed to collect the required information was largely determined by the short timescale for the work and a maximum sample size of 20. The HSE Occupational Hygiene Unit supplied a list of five initial contacts, who in turn were asked to suggest others who could contribute to the discussion.

A briefing document was prepared, in order to provide the interviewees with background details to assist their understanding of the information collected by HSE Occupational Hygienists during site visits, and the information stored in the NEDB. It was also designed to encourage them to generate ideas on how this data could be used (Appendix A).

A short, semi-structured interview schedule was developed in consultation with the Occupational Hygiene Unit (Appendix B) and was used to guide the telephone interviews.

All interviewees were initially contacted by telephone, or email if repeated attempts to contact them by telephone failed, and asked to participate by agreeing to a telephone interview in the near future. The briefing document was then sent via email and the telephone interview conducted, usually within a few days of the document being sent. Each interview was approximately 30 minutes in duration.

## 3 RESULTS

A total of 17 interviews were conducted with representatives from the following HSE Units and Divisions:

- COSAS - Epidemiology and Statistics Unit
- Corporate Science Knowledge Unit (CSKU)
- HSE Occupational Hygiene Unit
- HSE Specialist Groups
- HSL Occupational Hygiene Section
- Industrial Chemicals Unit
- Biological Agents Group
- Fit3 Science Co-ordination Unit

The main findings are summarised in the following sections. All the views expressed are those of the respondents and not the author of this report.

### 3.1 CURRENT USE OF OCCUPATIONAL HYGIENE DATA AND THE NEDB

Of the seventeen representatives interviewed for this survey:

- Four said they used data from the NEDB but did not use the database directly themselves i.e. they asked others to extract the data for them.
- Three said that they used the database themselves but infrequently. Reasons for this included: “it doesn’t always give me the information I need when I use it”, “I only use it to check for information about visits involving non-standard circumstances or chemicals”, “I only need it for a project I am currently involved with”.
- Two said they had used the database in the past but did not need to use it for their current job.
- Seven said they had never used the database.
- Only one person said they used the database regularly.

For ease of reference, in the following sections those who have never used the NEDB are classed as ‘non-users’ and the remaining group are considered ‘current users’.

### 3.2 UTILITY AND QUALITY OF THE DATA CURRENTLY AVAILABLE

#### 3.2.1 Data typically currently used

The typical data looked at by current users of the database, included:

- Name of company, particularly to see when they were last visited.
- Typical exposures in particular parts of the industry.
- Typical tasks in the industry as a whole.
- Any numerical data.
- Controls.
- Comments regarding improvements that could or should have been made.

Data that would be of interest to non-users included:

- Chemical name.
- Exposure level.
- Duration of exposure.
- Period of time involved in a task that could lead to the exposures.
- Any monitoring or sampling taken at similar sites or sites using the same process to show that there was proof of exposure associated with the task or chemical etc.
- Control measures and what people are actually exposed to.
- Any information to inform trend analysis.
- Details about the people doing the job, including length of time in workplace, age, years of experience, their employment level in company. This information may be seen as invasive and difficult to record but it would be useful in terms of people and organisational factors.

### **3.2.2 Quality of data contained in the NEDB**

A range of views were expressed by current users on the quality of the data used from the NEDB.

Generally, it was thought that the data are needed for background information, to get a view on what is typical in industry and what is practicable, so from that perspective the data are considered fundamental. However, the quality of the data for this purpose was thought to be 'patchy'; there are few data available for the more esoteric chemicals and in some cases no data are available at all. A clear message from users was that they are typically interested in the contextual information, whether this is from the summary information or the body of the full report, and that this is often difficult to establish because the quality of that information is inconsistent.

Experienced occupational hygienists commented that they were only interested in looking at the database for chemicals they were not familiar with or for circumstances they did not commonly come across, but that this, typically, was the sort of information that was not in the database.

### **3.3 SUGGESTED IMPROVEMENTS TO THE NEDB**

#### **3.3.1 Underlying structure and reorganisation of the database**

Current users of the database made comments on the structure, content and accuracy of the information contained in the NEDB; these are summarised in the following sections:

##### **Summary and contextual information**

It was acknowledged that not all information collected via visit reports can be summarised into searchable fields in the database, so one idea was to make summary text and contextual information available in a different way. However this is achieved, current users would like quicker and easier access to the full hygienist report because while some reports are online and linked directly to the NEDB, many are not and a paper copy must be requested.

Those interested in large data sets wanted more contextual occupational hygiene information with each data point. They noted that currently it is not possible to obtain the contextual information needed without looking at the individual visit reports and it was not feasible to do this when they are interested in 1000 data points.

##### **Search functionality**

A common concern was the lack of flexibility in the search function of the NEDB. Currently, searches are only possible on the chemical and not the product, so for example a user cannot search on 'paint', only the constituent chemicals used to make paint. One user commented, "Unless I put in exactly the right search terms it comes up with little, if any, information. It's just not flexible for the user."

##### **Statistical tool and presentation of data**

One of the important uses for the database is the extraction of a collection of data points for further analysis. Currently, users extract this data to a spreadsheet for further analysis but having this functionality, as a standard option in the NEDB, would be useful. The following statistical and presentational suggestions were made:

- Simple statistics e.g. geometric mean, percentile information etc.
- Charts such as histograms and scatter plot etc. depending on why the information is needed.
- A standard report output. This could detail the search parameters, the results and summary data etc.

It was recognised that the limitations of the current underlying data structure restricts what can be done with the data, but that statistics and report outputs could be added on quite easily.

##### **Quality and accuracy of data**

The regular user of the NEDB noted that all of the fields are useful but that the quality of the contents is variable. The NEDB was thought to contain incomplete records and inaccuracies in the information (e.g. milligrams instead of micrograms etc.), so there is a chance that inexperienced staff could take the data and make incorrect assumptions. It was suggested that a better quality control system was required to ensure accuracy of data.

### **3.3.2 Increasing the power of the NEDB**

#### **Information on control measures**

Current users: A common message from the interviews with users is that more information on work design, control measures and other modifiers is required to ensure that the context for exposure data is clear. Specifically, more information about the quality of control measures is required, for example, a view on whether the measures are adequate or not for the purpose. This information would help in the development of strategies, to understand the quality of controls in particular sectors. While this information is available in some hygienist reports, a full report with this level of detail is not being prepared routinely, so the information is becoming more inconsistent.

It was thought that the current respiratory protective equipment (RPE) and LEV information is not sufficient to meet the demand for information on control measures; the COSHH glossary of terms defines a wide ranging set of control measures e.g. behaviour, process temperatures, engineering hardware, ways of working, personal protective equipment (PPE) etc. and this is not reflected in the NEDB.

It was suggested that risk control indicator information would be useful; hygienists could provide a subjective view of the occupational hygiene standard encountered at each visit on a scale for example from 0 to 5, with 0 meaning 'non-existent' and 5 meaning 'exemplary', 4 could mean 'meets COSHH requirements' etc. This information could be built up and over time HSE could start to see differences in risk control. Other users of the database raised this point and it was suggested that the work developed for risk control indicators in the area of motor vehicle repair is an indication of how it could be done; an example of hygienists now forming a view on the quality of controls.

#### **Completing the dataset**

The lack of data on some subjects combined with changing priorities in HSE, which mean that less data is being collected, was highlighted as a serious concern. No mechanism for collecting data for NEDB was thought to exist and that this was a fundamental problem because, while the structure of the database could be improved, if the data collection does not continue then the database becomes redundant.

This was reinforced by comments about the trend for hygienists not to collect all the information that is listed in the briefing document; they tend not to write a summary report, therefore limited if any, data can be entered into the NEDB. This is because the 'customer' for work does not require a full report, they have a specific question to be answered by the hygienist's visit and often this does not require in-depth data collection and report writing.

It was thought by some of the users that HSE should proactively identify the gaps in the database, to identify where data are missing on specific industries or chemicals and then attempt to fill those gaps and make the database more complete. Suggestions on how to do this include:

- Links to other databases

It was suggested the one way to increase the HSE knowledge base on exposure data was to have reciprocal arrangements with other National and International databases e.g. that held by the National Institute for Occupational Safety and Health (NIOSH). This is because other countries

may have information on chemicals that the UK NEDB does not. Access to other databases could be achieved with, for example a corporate license via the Internet. (Other comments were made about making more use of the Internet see Section 3.4)

It was also suggested that the database could be reworked into a database that is compatible with international databases, so that data from other countries could be shared easily (data could be imported), making European risk assessment work an easier and more viable possibility. However, it was recognised that this would require considerable work to be undertaken and would present significant challenges.

- Target large data sources

One suggestion was to make better use of industrial data collected by private companies (e.g. large scale operators), and other sources of information that can provide large data sets in one go. For example, one interviewee was aware of some 40,000 data points (data that would otherwise have been lost because the company was closing) that have been sourced for the NEDB. He feels that there should be more scope to look for large data sources to add to the database and not to rely on ad hoc collections. There is currently a lack of willingness for industry to provide information because companies are concerned about being identified and targeted by HSE.

- Programme of work where hygienists collect data on specific topics or areas of work

Suggestions were made that the most valuable data in the NEDB was derived from deliberate surveys. It was therefore suggested that targeted information collection should be initiated to inform the database. Therefore, HSE should put resources into generating data for specific purposes and that this should be a rolling programme to capture targeted information that is of interest to HSE. This would collect long-term information for HSE that could inform the future direction for HSE. It was thought that HSE are creating a situation where there is insufficient information to make robust decisions in the future.

- Greater involvement from industry.

A suggestion made by both users and non-users was the possibility of providing industry with greater access to the sort of data collected and stored in the NEDB. A system, directly accessible by industry to gain feedback on their current exposure levels, could also be used to capture information for the NEDB. Health and Safety Professionals in industry are also a source of data for the NEDB, but it was thought that there is currently a lack of willingness for industry to provide information because companies are concerned about being identified and targeted by HSE.

In addition, it was suggested that if the NEDB data could be externally validated this would make it stronger and allow data to be benchmarked against international data.

### **Comments by non-users about use of the NEDB:**

These comments were made primarily as a result of asking the questions 'Could the data in the NEDB be of use to you?' 'What sort of information would be useful to you?'

- A mixture of routine and incident data populates the database and it would be useful to be able to distinguish between the two, this is important because incident data tends to be at the upper end of the exposure distribution.

- Contextual information when looking at and interpreting the data is useful but the whole database is in text format. It would be useful if there was a way of codifying the data for extraction and use, because at the moment there is a risk of over interpreting the data.
- If the NEDB was a definitive source of data for hygiene and chemical exposure data then this would be the first choice place to go for data. The question was asked whether the NEDB could be mutated into a job exposure matrix because while the database gives useful information now, this would give population information at the UK level and provide an indication of numbers and distributions and change over time. While the NEDB is being used currently, it is not one definitive source of data; it could be useful for building up a picture of best practice/ a source of describing best practice.
- For epidemiological purposes, the NEDB data would need to be stored in a way that was more readily analysed. For example, hygienists could provide a score following each visit and these scores could be analysed over time. A rating scale could be developed that would go from '1 vast amount above MEL' to '10 Perfected conditions', with most premises being somewhere in the middle. This data would be much more useable, because HSE could use it to see things like, the proportion of scores that fall above the national average etc. However, before this is done, HSE need to establish if this is a sensible exercise because for the data to be meaningful there needs to be at least 1000 data points in the NEDB; small numbers of data points would diminish its value.
- If information from incident investigations were routinely included (e.g. a recent incident looking at cooling fluid/ use of biocides in the fluid investigation data) then the data could be useful to look at. It is unlikely to be included because biocides and pesticides tend to be a low priority for HSE and, therefore, data is not being collected.
- Current practice for one unit is to use HSL to collect the data as needed. As that database grows then there may be similarities between different classifications of biocides that could mean that conclusions can be made and decisions informed by the data already collected on those other substances

### **Comment on the perceived bias of the NEDB data**

- The NEDB data could be used for looking at trends and it was noted that critics of the database would say that the data in there tends to be based on the worst end of the exposure data spectrum. However, if the data collected at the worst end of the scale show an improvement, then the situation at the other end of the scale is almost certainly going to be improving too, as well as the bits in the middle – the standard of all related companies is probably improving if the worst ones are. The respondent who made this comment said that there is public health theory to support this view. Chemical data trends are very useful, especially if they are linked to legislative activity, to see if the trends (and activity) are moving in the right direction.

### **3.3.3 Additional data to be collected**

Current users suggested occupational hygienists could collect the following during site visits:

- Measurable information for dermal exposure, and qualitative measurements would add value to the database. Currently only results relating to inhalation data are provided but hygienists can also record if dermal and biological monitoring samples were taken, but the details are not recorded in the database. It would make sense to provide the results in the database rather than having to search into the individual reports.
- HSE needs to move towards more biological monitoring rather than focusing on air samples. This should be recorded in the database.
- Photographs would provide a great deal of context and understanding to measurements. These are often taken on site, but not included in the NEDB.
- More information on the training, supervision and risk management of staff exposed to chemicals; the less straightforward information that would add value to the work of HSE.

Non-users suggested occupational hygienists could collect the following during site visits:

- Information on whether other people in the workforce have shown the same effects. So, if in a workplace there were 100 people and 1 in 100 or 90 in 100 had shown the same effects, then that is valuable information.
- That hygienists could rate the quality of exposure controls against a criteria (working group could define these criteria), this could be used to establish quality of controls over time etc.

### **3.4 NEW IDEAS AND CREATIVE USES FOR THE DATABASE**

Comments made by current users included:

- Contextual information from the NEDB is often retrieved for analysis and reclassified by staff for their own purposes but there is no way storing this information on the system for future reference. This would be useful and, ideally, this should be done in the database and automatically. The quality of the database would then improve and develop with time, and any new reports input to the system would automatically be entered into the additional fields.
- A similar idea was that researchers could use the data stored in the NEDB to generate reports on behalf of HSE. These reports would be on specific topics and would be accessible to all who use the database. This would reduce the duplication of effort currently experienced by users of the NEDB.
- There are two key areas of the NEDB, the first is the actual numerical hygiene data and the second is the visit report summary (or linked report documents). This second area is important because it could be used by anybody who generates visit reports, it does not have to be limited to hygienists' reports. For example, Ergonomists, PPE Specialists and Occupational Health Specialists could use the database to store their site visit information; in this way it becomes a source of occupational knowledge. Therefore, perhaps the NEDB should be renamed because it is essentially a HSE Knowledge Bank that needs to be refined and its capabilities and potential explored.

- A second user of the database expressed a similar view. He discussed how the Occupational Hygienist Visit Report database was combined with the NEDB and went on to say that the NEDB title is old fashioned and wrong - the Occupational Health and Hygiene database was suggested as an alternative. This is because a wide range of information can be, and is, stored in the database, for example it currently contains information on noise and asbestos. Data from a range of disciplines could be brought together into one source so it is clear to see who has written what on what subject. This was thought to be part of a bigger vision and would need to have commitment from all disciplines.
- A web-based version of the NEDB was suggested to increase accessibility both for analysis and data entry. It was said that there are potentially many different uses for the data including for example, epidemiology and risk assessment. If the NEDB could be hosted as a web version it would be possible to control who can input into the database (to maintain quality) but it would be more visible to potential users. This could encourage industry to provide more information - data is currently biased by the reason it was collected yet this is used to inform regulatory exposure models. It could potentially be reworked into a database that is compatible with international copies, allowing data from each country to be shared easily and making European risk assessment work much more meaningful.

### **3.5 OTHER POTENTIAL USERS OF THE DATABASE**

Most of the 17 interviewees raised the point that there are confidentiality issues associated with non-HSE bodies using the data and that the details relating to the name and address of premises etc. would need to be removed. Many also thought that access to the NEDB should be restricted to Occupational Hygiene specialists. These views have been included in the list below along with other comments made by both users and non-users of the database.

Current users thought the following were potential users of the database:

- Policy staff in Rose Court who work with chemicals could use the data, but they should not use the NEDB directly. It is better for them ask hygienist professionals for information and for hygienists to distil the information from the database. The individual making this comment said that they were not sure if policy staff already use data from the NEDB, but if they did not then they certainly could.
- Other units in HSE may have expertise to make use of the data once it has been retrieved but it needs to be interpreted by an occupational hygienist or experienced person who knows what they are doing. Parts of HSE could make better use of the database but needs scientific professionals to have access and interpret the data.
- The important thing about the data from the NEDB is that it needs to be interpreted. The search, therefore, should be conducted by somebody with relevant expertise, they should also analyse and interpret the data because the list of numbers generated as an output to any search could lead to the wrong conclusions being made. Any output needs to be linked to an expert interpretation. The data side should remain in the hands of the occupational hygiene community, which extends beyond HSE. For example, the Institute of Occupational Medicine have a research group who has extracted data from the NEDB, for the particular project they were bound by the HSE contract so the issue of company names and addresses was not a problem.

- The data could be used internationally; there have been examples of this with asbestos data being sent to the Dutch, and other data sent to America and Canada.
- The data could be put to better use in strategic planning, for example quality monitoring and the success of regulations. It could be used to form a longer-term view in HSE on the intelligence being held by NEDB.
- Non-HSE users of the data could include researchers who could look at specific topics and help to provide more data to HSE on how well we are doing against our targets. If more data was available this could be used to provide feedback to individual companies on how well they are doing. Providing feedback would also be a way of facilitating the collection of more information, because industry may be more inclined to do so if they get something out of it. This data is useful for providing a longer-term view about chemical use and control in the UK.
- Toxicologists, employment medical advisers (EMAs) and Epidemiologists could all make use of the NEDB, but not policy because they tend to look at the figures rather than the full picture. They have a very different background to occupational hygienists and not necessarily a scientific one. Policy staff should speak to the right people but should not have access to the actual technical information that they might misinterpret.
- Anybody working in risk assessment or epidemiology could use the NEDB; both front line staff and researchers. Those involved in risk assessment could use the data to see how their exposures compare with the national average (again, this would only be possible if the database were more accessible).
- Disease reduction teams could use the data for evaluation purposes. It would be possible to generate a benchmark from the database, carry out an intervention and then look at exposure trends over time.
- HSE Programme managers could make use of the data. A picture of exposure data for the various sections could be prepared but this is something that should be done with occupational hygiene specialists to ensure the data is translated correctly. Universities and researchers could use the data with proper controls to look at trends and process changes. He suggests this should be actively pursued and HSE should not be afraid of sharing information. This approach could generate research questions.

Non-users made the following comments about potential users of the database:

- If contacts outside of HSE want to use the information in the database then HSE can supply it but access to the database itself should not be extended to non-HSE users.
- Industrial companies might find the information useful. Occupational Hygienists in industry could use the data to benchmark their company against others. This would work best if the data were available on the Internet, so not requiring HSE involvement (as this would inhibit companies from asking for information, because it would draw attention to themselves).
- Much of the programme planning for the Disease Reduction Programme has been done without reference to the NEDB; it could be useful for the planning of interventions.

- One suggestion was to actively market the NEDB to other parts of HSE who might benefit from using it.
- Users outside of HSE might include the Chemical Industries Association or the Trades Union Congress (TUC).
- Possibly open up the NEDB to external researchers, with the right clearance, e.g. Environmental Protection Agency or the Health Protection Agency. The NEDB could be considered a national resource and, therefore, could be shared with other researchers and industry.
- People working with Biocides could use it, for example consultants on a paid basis. External users would need to have an anonymised version because there are issues of confidentiality.
- The database could be useful for legal cases.
- Universities would welcome access to the database for projects for students etc.
- Perhaps those in HSE working for the Notification of New Substances, for example the Industrial Chemicals Unit and the Biological Agents Unit could use the database.

### **3.6 OTHER CONSIDERATIONS RAISED**

Current users of the database also made the following comments:

- The data in the NEDB could be improved by developing an aid memoir for both investigations and visit report writing. This would improve the quality of data we collect and the reports written, by ensuring a consistent approach to the data that is collected, ensuring that the correct questions are asked and answered during site visits. HSE needs to be clear about why the report was written; what question was being addressed.
- Reports, written by Occupational Hygienists for HSE Inspectors, are usually sent via the inspector direct to the company. These reports should be public documents and will become so in the future, particularly with the Freedom of Information Act. This has implications for how HSE writes reports; there is a need to be clearer and more specific. In the USA, NIOSH reports are already published on the Internet. HSE needs to anticipate this change and agree a process for access to the NEDB.
- NEDB controllers need to ensure the NEDB continues, because there will be pressure with the release of the HSE corporate operational information system (COIN) for other smaller databases to be closed. If this happens to the NEDB, HSE will lose valuable hygiene information. It needs to be developed into a general occupational health database that cuts across HSE/ across the pools.
- There are lots of lessons that can be learned from the database. NEDB data needs to be used more forensically. It tends to be used passively but HSE are not going to continue getting numbers. HSE needs to use it to generate research questions.
- The NEDB is part of HSE knowledge management duties, therefore we should build on something HSE already has and work smarter. Site visits are becoming less and less

frequent, programme work means HSE visit fewer and fewer sites and a more limited range of sites. Therefore, we are not producing the standard occupational hygiene report and we can never go back to the 'good old days' but we can build a database as a central resource.

Non-users made the following comments in addition the points reported above:

- The NEDB could be an extremely powerful tool but it is difficult to keep the data consistent. There is potential in the NEDB but it is difficult to know if it could be used in an intelligent way, it is easier for non-users to talk to an occupational hygienist and ask them to give me their professional view on, for example, an exposure or task etc. There is a risk that non-users could spend half-an-hour trawling the database and then not get sufficient information to answer the question, and there is room to misunderstand or misinterpret that data.
- There is a need for the NEDB to be compatible with COIN. If it were linked to other databases this would mean less duplication of effort and make the collating of data much easier than multiple databases. How this database is developed should be a template for other HSE databases.

## **4 APPENDIX A**

**5 APPENDIX B**