

Developing options for providing COMAH site information to the public, under the Seveso III Directive

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The Control of Major Accident Hazards (COMAH) regulations (UK, 1999) will be updated in June 2015, to transpose into UK law the requirements of the Seveso III Directive which was published in 2012 (EC, 2012). The new Directive requires more information on the risk posed by major hazard sites to be made available to the public. Some of this information must be made “permanently electronically available” whilst other information, including safety reports, must be “available on request”.

In 2012, the UK COMAH regulators established a project to explore the options for providing this information to the public. The aim was to strike a balance between the Directive requirements to make information available to the public and the need to restrict public access to certain information for national security or commercial confidentiality reasons. The regulators have worked with the Government and industry to produce examples of COMAH site public information for nine existing top-tier COMAH sites.

Keywords: COMAH; Seveso Directive; Environmental Information Regulations; Aarhus Convention.

Background

The Seveso II Directive (EC, 1996), was transposed into UK law as the COMAH regulations (UK, 1999), which were implemented by the Health and Safety Executive (HSE), Scottish Environment Protection Agency (SEPA) and the Environment Agency (EA) acting jointly as the COMAH Competent Authority (CA). The Directive introduced a requirement for safety reports to be made available to the public, though certain information could be withheld “for reasons of industrial, commercial or personal confidentiality, public security or national defence”. The CA set up a system of COMAH public registers in SEPA and EA offices where there were already public registers holding environmental information under other legislation. Although some COMAH site information was placed on the registers, safety reports were withheld awaiting a decision by the Government on the information that should be excluded for security reasons. Then in November 2001, a few weeks after the 9/11 terrorist attacks on the World Trade Centre in New York, the UK Government issued a security direction to the CA to keep all COMAH safety reports off the public registers. That security direction has remained in force ever since.

Transposition of the Seveso III directive into UK law

The European Commission considers the Seveso III Directive to be a piece of environmental legislation, so it is the Department for Environment Food and Rural Affairs (Defra) who are the lead UK Government department responsible for its implementation. While the Directive was being negotiated Defra set up a Cross-Government Group for the Implementation of the Seveso III directive with representatives from the Home Office, Health Protection Agency, Communities and Local Government, the Scottish and Welsh Governments, the COMAH CA and the COMAH regulators for Northern Ireland. The representation on the group reflects the broad scope of the directive, covering land use planning, site regulation and emergency planning. Defra delegated responsibility for most aspects of negotiating and implementing the directive to HSE. The Directive was published in July 2012 and must be implemented into UK law by June 2015. This will require some changes to land-use planning legislation and new COMAH 2015 regulations which will supersede the existing COMAH 1999 regulations.

Seveso III Directive public information requirements

The Seveso III directive has extended and updated the public information requirements for major accident hazard sites in Europe. The most significant changes from the previous Directive are:

- Article 14(1) requires certain information on top tier and lower tier sites, to be made “permanently available to the public, including electronically”. This information is listed in Annex V and includes details of the operator, the substances present, action to be taken by the public in the event of an accident and the date of the last inspection. The previous Directive did not specify that information had to be “permanently” or “electronically” available, so it was sufficient for the information to be available in a public register accessible only during normal office hours.
- Article 14 (2) (b) requires safety reports to be “available on request”, although certain parts of the report can be withheld for reasons of commercial confidentiality or national security in accordance with Article 4 of the Environmental Information Directive (EC, 2003), (which has been transposed into UK law as the Environmental Information Regulations (UK, 2004), and implements the principles of the UNECE Aarhus convention (UN, 1998)). If some information contained in the safety report is withheld the Directive requires that “an amended report, for instance as a non-technical summary shall be made available.”

- Article 14 (2) (c) requires the inventory of dangerous substances to be “available on request” subject to the same caveats about withholding information as described above for safety reports.

During the negotiations on the Seveso III Directive it became clear that the European Commission (and most member states) believed that the public right to know about major hazard sites generally outweighed concerns over security issues. This is reflected in Recital 19 of the Directive which states that the level and quality of information to the public should be improved, to promote the three guiding principles of the Aarhus convention:

- Access to environmental information
- Public participation in environmental decision-making
- Access to justice in environmental matters

The Commission has made it clear that the UK Government security direction keeping all safety reports off the public registers would not be acceptable beyond June 2015 when the new directive comes into force, although some information could be withheld on a case by case basis.

Implications for the transposition of Seveso III into UK law

In order to satisfy the Article 14(1) requirements to make information permanently electronically available, the CA is planning to provide a COMAH site public information website, linked to a database containing the Annex V information. This has presented a number of practical difficulties:

- SEPA and the EA already have websites providing the public with information on the releases of pollution from industrial installations. These could potentially be expanded to hold COMAH information but this would involve splitting the database geographically and the public would have to access two different websites. This situation was further complicated in April 2013 when Natural Resources Wales was created and became a fourth member of the COMAH CA.
- The information will have to be updated on a regular basis, especially the date of the last inspection, which then leads to the question of how to define an “inspection”.
- Operators should be able to load their site information directly into the website and database. This system should be simple and easy to use, to minimise the burden on industry.
- The website and database should be as simple as possible to ensure the system can be up and running by June 2015.

By late 2013 the CA had decided to set up a new website and database for the Annex V information, based on modifying an existing HSE database. This will provide a single system covering the whole of Great Britain.

In order to satisfy the Article 14(2) (b) requirements to make safety reports available on request the CA will have to resolve a number of issues:

- The Government will have to decide what information should be withheld for reasons of national security on each COMAH site. This proved to be an almost intractable problem when the COMAH 1999 regulations were introduced and was only resolved when the 2001 security direction required all safety reports to be kept out of the public domain.
- Operators will have to specify the information they would like to be withheld for reasons of commercial confidentiality. There are existing arrangements for doing this under the COMAH 1999 regime which some operators have been using, but other operators have not done so because they knew that the security direction would keep the whole safety report out of the public domain.
- The Government, CA and operators will have to decide how and when the security sensitive and commercially confidential information will be removed from safety reports:
 - should the operator submit a public version of the safety report and a separate annex containing the confidential information? or,
 - should the CA redact the sensitive information only if and when a member of the public asks to see the safety report?
- The CA will have to decide on a mechanism for making safety reports available on request. They are usually very large documents containing numerous process diagrams and site plans, supplied to the CA only as paper copies. They are not suitable for electronic transmission and it would be costly and time consuming to photocopy them.

In 2012 these issues were discussed at a meeting of the Cross Government Group for the Implementation of the Seveso III Directive. The CA proposed setting up a project sub-group to develop a number of exemplar Non-Technical Summaries (NTSs) of safety reports that would contain the information required by the directive whilst excluding any security sensitive or commercially confidential information. The group endorsed the idea and the CA set up the Non-Technical Summaries project.

In order to satisfy the Article 14(2) (c) requirements to make an inventory of dangerous substances available on request, the CA will have to decide on the level of detail that will be provided, for both the description of dangerous substances and the quantities present.

Security issues on COMAH sites

The main terrorist threats to COMAH sites are that someone will release a dangerous substance in order to cause harm to local people or the environment, or that someone will steal dangerous substances that can be used to cause harm elsewhere. The Government has provided guidance on the information that should not be disclosed, which includes:

- Detailed descriptions of the site;
- Specifics about the substances on-site;
- Actual volumes of material stored;
- Detailed information about pipelines and associated storage systems;
- Staffing levels;
- Emergency procedures;
- Scenario consequences;
- Safety/emergency response equipment;
- Security arrangements;

Much of the detailed information provided in existing safety reports could be described under the headings above. The challenge under Seveso III is to summarise the information and present it in such a way that it is informative to the public but does not contain sufficient detail to be usable by a terrorist for site selection purposes.

Developing the exemplar Non Technical Summaries (NTSs)

The first challenge for the project was to find a selection of COMAH operators who would be willing to participate in the project by allowing the CA to write an NTS based on the information in their existing safety report. The CA gave a presentation on the project at a Seveso III seminar in Leeds in October 2012, attended by approximately 150 COMAH operators, safety consultants and trade associations. The idea was enthusiastically received and a number of operators volunteered to participate. The CA also made direct approaches to recruit operators in Scotland, Wales and Northern Ireland. By November 2012 the nine COMAH sites shown in figure 1 had been selected, representing a broad range of locations, sizes, activities, dangerous substances, security issues and commercial confidentiality issues.

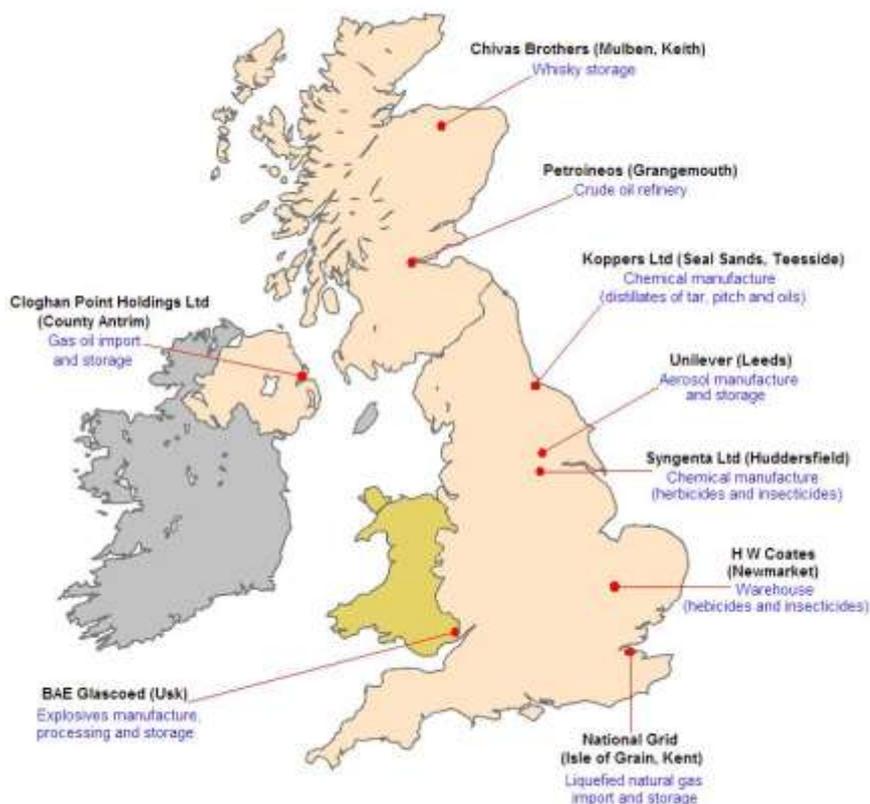


Figure 1. COMAH establishments participating in the Non-Technical Summaries project

The project team prepared an NTS template that focussed on presenting the information in a way that would be understandable to the public. The template deliberately avoided using terminology that would only be understood by process safety experts. The template was sent to local Inspectors who wrote the NTSs for the participating sites based on the information in the existing safety report. These first drafts were sent to the operators for checking to ensure they were accurate. The draft NTSs were protectively marked to prevent them being circulated outside the CA and Government because they were part of regulatory policy development and they contained site specific information that operators had not given permission to be circulated. To overcome these restrictions the project team wrote an NTS for a fictitious operator and site – The Long Established Chemical Company (LECC), located in Bigtown. This fictitious NTS did not need to be protectively marked and so could be widely circulated. The project team ran a workshop with the participating companies in May 2013 to review the first draft NTSs and reported progress to the Cross Government Group for the Implementation of the Seveso III Directive.

The NTSs were about 6 to 8 pages in length and contained the following sections:

1. Site history
2. Introduction
3. Activities on site
4. Substances held on site which could give rise to a major accident
5. Major accident scenarios and control measures
6. Maps
7. Emergency arrangements
8. Further information (where to obtain it)

The main findings from the review of the first draft NTSs were:

- It is quite difficult to describe the harmful effects that dangerous substances may cause to members of the public who might be exposed to them during an incident, in a way that is accurate without being alarmist. Public Health England (PHE) (formerly the Health Protection Agency) offered to provide the project with a set of standard phrases that they have developed to describe the effects of smoke and chemicals to the public.
- Few of the existing safety reports highlighted the use of inherent safety and industry standards in the design of their operations, even though such features are easy to explain and would provide significant reassurance to the public. For example many operators did not mention basic features such as ensuring adequate separation between buildings to prevent the spread of fires or storing incompatible materials in separate locations.
- The Government was concerned about the security implications of mentioning certain named substances and would prefer the NTSs to use the generic categories such as “toxic” or “flammable”.
- The main focus for the CA had been how to handle security sensitive information contained in safety reports, when the security direction lapses in 2015. However it emerged that several of the operators participating in the NTS project were equally concerned about the consequences for commercially confidential information. Concerns about commercial confidentiality were confirmed by a number of operators at a Seveso III seminar organised by IChemE that was held in London in March 2013.
- A site history is not required by the Directive but is useful to the public because many sites have changed ownership and activities over the years.
- A map is not required by the Directive but is useful to the public because it shows the site location and the area that might be affected by an incident. This is the Public Information Zone (PIZ) within which the residents are provided with information on the site and the action they should take if an incident occurs. However the CA recognised there may be practical difficulties getting operators to provide consistent good quality maps and incorporating them into documents.

Striking the balance between security concerns and making information available to the public

The Government, CA and operators have all become accustomed to the COMAH regime operating within the restrictions imposed by the security direction that was issued in 2001. The wide scope of the direction meant they were able to avoid having to make difficult decisions about what information should be withheld and what should be made available to the public. Producing the exemplar NTSs has proved invaluable in highlighting the issues involved in making COMAH site information available to the public, as required by the new Directive. The CA has also taken into account the other sources of information about COMAH sites that have emerged over the last 15 years, such as electronic public registers of planning applications and information published on the internet. There would be little point withholding information under the COMAH regime if it had already been published elsewhere. In 2001 it was considered adequate for an operator to provide the public with basic information about what to do in the event of an incident in the form of a leaflet. This would be distributed to local residents living within the PIZ and would advise them to tune into the local

radio station for further information. Nowadays the public might reasonably expect to receive emergency information on Twitter via their mobile phones.

Some of the typical issues involved in providing safety information to the public are illustrated by two maps which show LECC, the fictitious top tier COMAH site located in Bigtown. Figure 2 shows a typical map that might be included in a safety report or produced by the CA during safety report assessment and used to provide land-use planning advice to the local planning authority. It shows the three concentric consultation distances around the site - the outer, middle and inner consultation zones. The CA would routinely advise against certain types of new developments being built within specific zones. In this fictitious example it is clear from the curved shape of the inner consultation zone that there are two locations within the site that could generate a major accident, which is exactly the kind of security sensitive information that the Government does not want to be available to the public. The consultation zones are scientifically valid but are not particularly informative for the public, for example a zone might include the properties on one side of a road, but not the other side, or it might include only half the buildings in a large school. Figure 3 is a map that is better tailored to the needs of the local population. The area enclosed within the outer consultation zone has been modified to create a PIZ that takes account of the local geography. In the west it has been extended to include complete roads within the housing estate and to the north it has been reduced to exclude the far bank of the river where there are no properties. Modifying the consultation zone to create the PIZ also disguises the presence of the two locations that could generate a major accident.

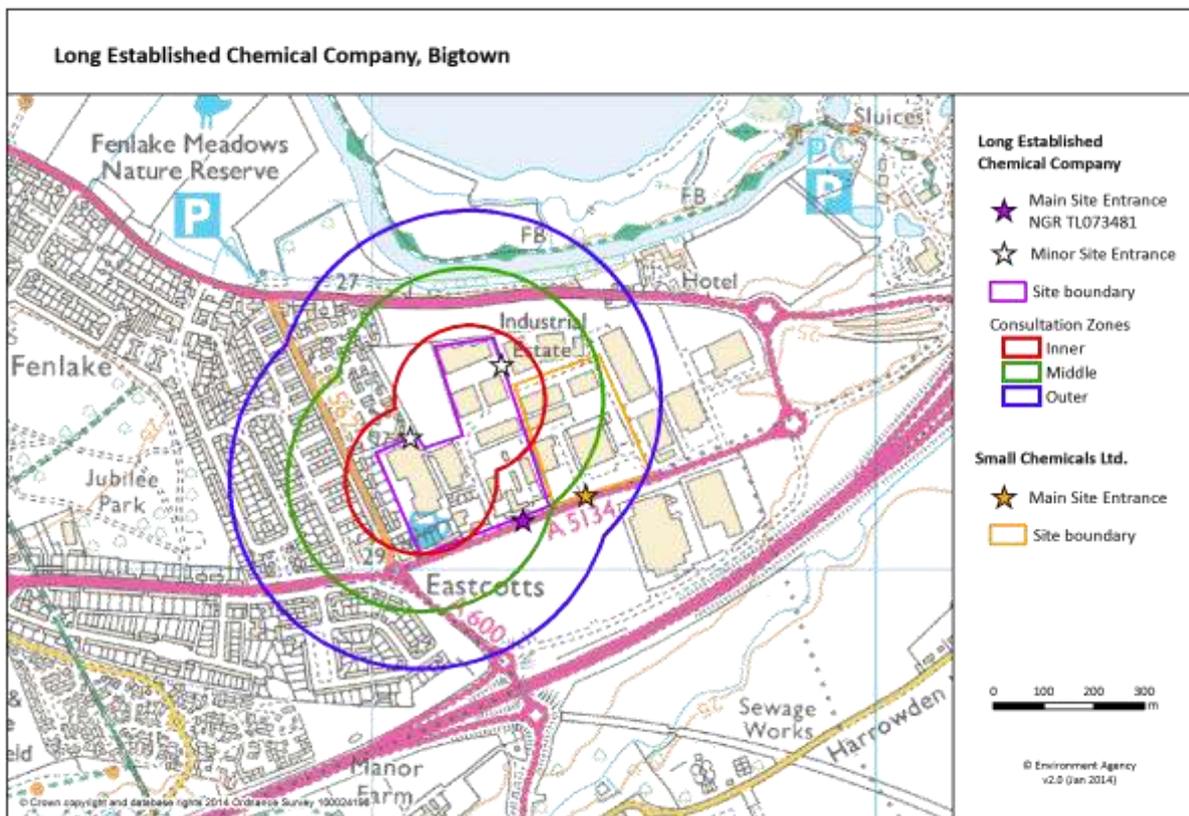


Figure 2. Map of LECC showing consultation distances

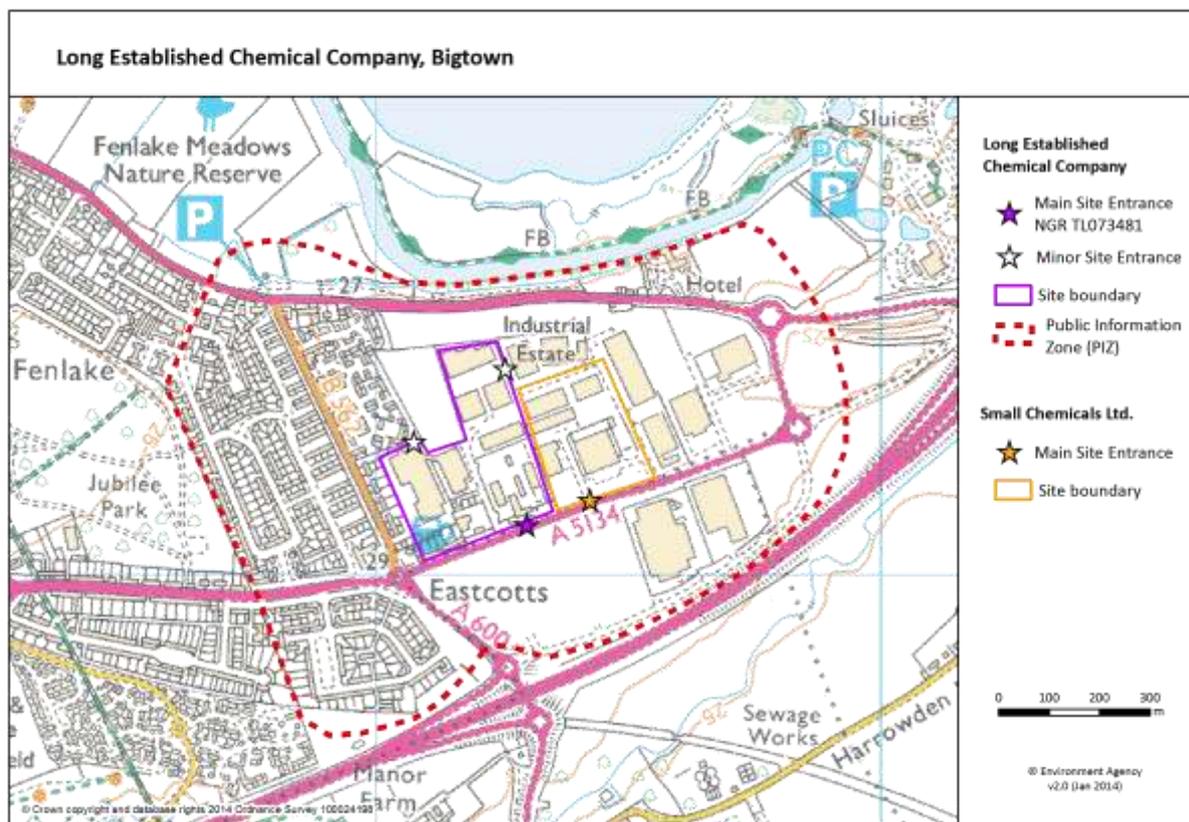


Figure 3. Map of LECC showing Public Information Zone

NTS project review – autumn 2013

The NTS project team held meetings with the Government to review first draft NTSs. The Government was generally content with the progress that had been made and the proposals for resolving the issues that had been raised. They also gave a strong steer that the presence of individual named substances (such as hydrogen, methanol or oxygen) should not be disclosed to the public but that the generic categories (such as acute toxic or flammable gases) should be used instead. They asked the project to carry out further work using generic categories and to identify if it emerged that there were major difficulties in adopting this approach. In addition to security considerations, the CA has identified a number of potential benefits in adopting this approach:

- Using generic categories would reduce the number of substances that have to be listed – something that is particularly important for warehouses that store hundreds of products containing dangerous substances. This would make it easier to provide the public with an inventory of dangerous substances.
- While the generic categories are described using terminology that is generally understood by the public, such as explosive, toxic or flammable, many of the named substances are almost meaningless to the public, for example ethyleneimine, boron trifluoride or piperidine.
- All of the properties of the named substances fit within the descriptions of the generic categories. They are listed separately in the Directive in order to give them different qualifying thresholds and not because they have markedly different dangerous properties. Therefore describing a named substance by its generic dangerous properties does not significantly reduce the quality of hazard information provided to the public.

In October 2013 the NTS project team presented their work to the Seveso III Programme Board that HSE had set up to oversee the practical delivery of the new COMAH 2015 regulations. The Programme Board decided that:

- the information contained in the draft NTSs was very similar to the Annex V information that has to be made permanently electronically available.
- The draft NTSs contained too little information to be considered a substitute for a safety report so if somebody requested a copy of a safety report the CA would have to provide the full report (or a redacted version with any security or commercially confidential information removed).
- Future work on NTSs should be integrated with the provision of Annex V public information.

Drafting the COMAH 2015 regulations

The transposition plan for the Seveso III directive includes carrying out a formal public consultation on a set draft COMAH regulations in the spring of 2014. In drafting the new regulations the CA has been guided by principles given in the HM Government Transposition Guidance, which are “aimed at ensuring the UK systematically transposes so the burdens are minimised and UK business are not put at a disadvantages relative to their European competitors”. The principles state that, when transposing EU law, the Government will:

- a. ensure that (save in exceptional circumstances) the UK does not go beyond the minimum requirements of the measure which is being transposed
- b. wherever possible, seek to implement EU policy and legal obligations through the use of alternatives to regulation;
- c. endeavour to ensure that UK businesses are not put at a competitive disadvantage compared with their European counterparts;
- d. always use copy-out for transposition where it is available, except where doing so would adversely affect UK interests e.g. by putting UK businesses at a competitive disadvantage compared with their European counterparts or going beyond the minimum requirements of the measure that is being transposed. If departments do not use copy-out, they will need to explain to the Reducing Regulation Committee (RRC) the reasons for their choice;
- e. ensure the necessary implementing measures come into force on (rather than before) the transposition deadline specified in a Directive, unless there are compelling reasons for earlier implementation; and
- f. include a statutory duty for ministerial review every five years.

The CA must ensure that the new COMAH regulations fully transpose the public information requirements of the Directive. The drafting process has led to a re-assessment of the work that had been done on NTSs and how best to handle sensitive information regarding national security and commercial confidentiality. Figure 4 shows the scope and relative sensitivity of the information. The outcomes of that assessment were:

- The main differences between the Annex V information and the NTS are that the NTS contains a site history and site map in addition to the Annex V information.
- The term Non-Technical Summary, has a particular meaning in the Directive and only applies to top tier establishments (because only top tier establishments have to produce a safety report). The site public information must be provided for both top tier and lower tier COMAH establishments.
- The extent of the differences between a full safety report and a redacted safety report will vary from one establishment to another. In some cases only a few pieces of information may have to be redacted – e.g. the precise location of storage tanks containing a dangerous substance.

The CA concluded that the information that has been developed to date was best described as an enhanced version of the COMAH site public information described in Annex V of the Directive rather than being described as an amended or simplified safety report. This is shown in figure 4. The site public information is required for both top tier and lower tier sites, though more detail is required for top tier sites.

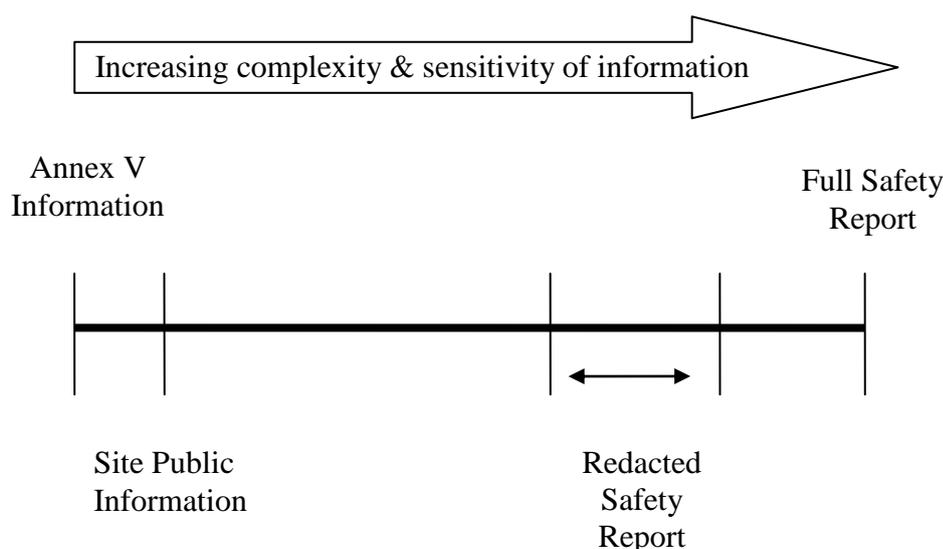


Figure 4. Relative sensitivity of information provided to the public under Seveso III

Conclusion

During 2012 and 2013 the CA has been developing its ideas on the policy options for implementing the Seveso III Directive. This has included a significant amount of informal consultation with industry, at routine meetings with trade associations and at several seminars organised by bodies such as the Yorkshire Chemicals Forum, Health and Safety Laboratory and IChemE. The work done in developing the nine NTSs has highlighted the issues involved in making COMAH site information available to the public in a way that would not have been possible without using real life examples. The CA is grateful to the nine participating companies for their involvement in the Non-Technical Summaries project and is hoping they will continue to be involved in further development of COMAH site public information. The CA has also worked closely with the UK, Scottish and Welsh Governments and Northern Ireland to ensure that transposition of the Directive will meet the sometimes conflicting demands of national security, public access to environmental information and minimising the regulatory burden on industry. The CA has narrowed the range of implementation options sufficiently to be able to consult on a set of draft COMAH regulations in spring 2014 and remains on track to achieve transposition of the Seveso III Directive by June 2015.

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