

High Hazard Operations: Volume 1 SEVESO III: The Regulatory Framework for Major Industrial Accidents in the EU

THIS EBOOK REVIEWS THE ROLE OF DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 4 JULY 2012 ON THE CONTROL OF MAJOR-ACCIDENT HAZARDS INVOLVING DANGEROUS SUBSTANCES (SEVESO III)

BY MEGHAN WHITE, SPECIALTY TECHNICAL CONSULTANTS



introduction

This eBook is the first in a series to examine the management of high hazard operations. It begins the conversation by reviewing the **European Union's requirements** for preventing major industrial accidents involving dangerous substances and protecting people and the environment from the consequences of such accidents.

Future publications will look at additional jurisdictions, as well as related topics, such as risk analysis/ hazard assessment requirements for high hazard operations. Examples of high hazard operations are chemical installations, petrochemical and oil refineries, and storage facilities containing dangerous substances.

The consequences of industrial accidents can be far-reaching. They include environmental damage,

bodily injury to workers and the public, property damage and economic losses. It is therefore crucial to comply with the applicable legislation and adopt best management practices and procedures for preventing major industrial accidents is crucial.

The regulatory regime set out in Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the Control of Major-Accident Hazards Involving Dangerous Substances, Amending and Subsequently Repealing Council Directive 96/82/EC (SEVESO III) is an example of such legislation and apples to facilities engaged in high hazardoperations in the European Union.

Meghan White

Specialty Technical Consultants, 2017





contents

The Regulatory Framework for Major Industrial Accidents in the EU

Introduction	2
Why SEVESO?	4
How SEVESO Works Today?	5
Status of SEVESO III Implementation	6
Complementary Initiatives in the EU	7
Management of High Hazard Operations	
Around the World	7
Concluding Remarks	8
Resources	8
Table 1: SEVESO Implementing Legislation	10
About the Author	13

Why SEVESO?

On 10 July 1976, the town of Seveso, Italy became the survivor of a major industrial accident that occurred at a small chemical manufacturing plant. The accident occurred when a disc on a chemical reactor ruptured, which resulted in the release of a dense white cloud. The cloud contained a small deposit of a highly toxic substance known as 2,3,7,8-Tetrachlorodibenzop-dioxin ('TCDD' or 'dioxin'). In the aftermath of the accident, several failures were identified, including incorrectly implemented operating procedures, as well as inadequate relief/vent systems and reactor control systems. In addition, there was no device to collect or destroy the toxic materials. The emergency response and spill control measures ranged from being limited to being non-existent. Information on the chemicals released and the associated hazards was not available at the plant. Communication between the facility and local authorities and regulatory authorities was confused and inadequate.

With these and other shortcomings identified, it became apparent that there was a growing need to adopt legislation on the prevention and control of major industrial accidents. For the European Union (EU), the Council Directive 82/501/EEC of 24 June 1982 on the Major-Accident Hazards of Certain Industrial Activities (known as SEVESO) was developed. The purpose of SEVESO was to adopt provisions relating to any industrial activity that involves (or has the potential to involve) dangerous substances and that may have serious consequences for humans and the environment in the event of a major accident. The onus was on the manufacturer to take the necessary measures to prevent such accidents and to limit the consequences of any such accidents. SEVESO emphasized the necessity of training and providing information to workers at any industrial site.

The scope of SEVESO was simple. A major accident was considered an occurrence, such as a major emission, fire or explosion, resulting from uncontrolled developments during an industrial activity, leading to a serious danger for persons, immediate or delayed, inside or outside the facility, and/or the environment, and involving one or more dangerous substances. The dangerous substances subject to SEVESO were provided in the Annexes to the Directives.

The provisions of the SEVESO were not immediately applicable to the impacted manufacturers. EU Directives are legislative acts that establish goals that all EU countries or member states must achieve. While the measures of the Directive must be implemented in national legislation, the individual countries have the discretion to adopt their own legislation to achieve the goals of the original Directive.



In other words, member states could maintain or adopt stricter measures than those contained in SEVESO.

The original SEVESO was not the end of the line for European legislation on major industrial accidents. In the aftermath of further major accidents around the globe in Bhopal (India), Mexico City (Mexico), Toulouse (France) and Enschede (Netherlands), the original version of SEVESO was reworked into Council Directive 96/82/EC of 9 December 1996 on the Control of Major Accident Hazards Involving Dangerous Substances (SEVESO II). One of the primary focuses in the second iteration of the Directive was to adopt measures addressing the hazard that arises when dangerous facilities and dwellings are close together. New provisions were included on land-use planning when new installations are authorized and when urban development takes place around existing installations.

In 2012, a third iteration of the legislation was adopted, titled the Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the Control of Major-Accident Hazards Involving Dangerous Substances, Amending and Subsequently Repealing Council Directive 96/82/EC (SEVESO III). As described below, SEVESO III introduces two different classes of establishments, revises the list of dangerous substances, and strengthens requirements for public information.

How SEVESO Works Today

SEVESO III adopted the concepts of its predecessors with some additional measures. As mentioned above, a Directive needs to be formally implemented and adopted through national legislation. Each member state is required to ensure that the applicable measures are incorporated into national requirements. Before delving into national implementation, it is important to understand the fundamental requirements of SEVESO III.

Similarly to SEVESO and SEVESO II, SEVESO III applies to operators that control establishments that carry out activities where dangerous substances are present in one or more installations, including common or related infrastructure or activities. In the most recent

Directive, establishments are classified as either lowertier or upper-tier.

- Lower-tier establishment means an establishment where dangerous substances are present in quantities equal to or in excess of the quantities listed in Columns 2 of Parts 1 or 2 of Annex I to the Directive, but less than the quantities listed in Columns 3 of Parts 1 or 2 of Annex I;
- Upper-tier establishment means an establishment where dangerous substances are present in quantities equal to or in excess of the quantities listed in Columns 3 of Parts 1 or 2 of Annex I.

If there is more than one dangerous substance present at the establishment, the summation rule applies, which is detailed in note 4 to Annex I to the Directive.

Member states are required to ensure that operators of these establishments take all necessary measures to prevent major accidents and to limit their consequences for human health and the environment.

Examples of these requirements include:

- Notification of all concerned establishments defined above (Article 7);
- Implementing a major accident prevention policy (Article 8);
- Producing a safety report for upper-tier establishments (Article 10);
- Producing internal emergency plans for upper-tier establishments (Article 12); and
- Providing the required information in case of accidents (Article 16).

Member states are also required to ensure that the following measures can be achieved:

- Developing external emergency plans for upper-tier establishments (Article 12);
- Implementing land-use planning for the siting of establishments (Article 13);
- Making relevant information publicly available (Article 14);
- Ensuring that any necessary action is taken after an accident, including emergency measures, remedial measures and steps to inform persons likely to be affected (Article 17);
- Reporting accidents to the European Commission (Article 18);

- Prohibiting the unlawful use or operation of establishments (Article 19);
- Conducting inspections (Article 20).

One of the main changes from SEVESO II to SEVESO III is that the list of substances in Annex I has been updated and aligned to the Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on Classification, Labelling and Packaging of Substances and Mixtures, Amending and Repealing Directives 67/548/EEC and 1999/45/EC, and Amending Regulation (EC) No 1907/2006 (CLP Regulation). Two examples of substances that were added to Annex I are anhydrous ammonia (entry 35) and hydrogen sulphide (entry 37).

SEVESO III also contains stronger requirements for the provision of public information, including a duty for lower-tier establishments to provide public information. There are enhanced provisions for electronic access to up-to-date public information. Information relating to activities should be provided proactively and not just on request. In addition, a new provision requires that the public concerned is given early opportunity to give its opinion on external emergency plans when they are being established or substantially modified. The intent was to align the requirements with the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention).

Status of SEVESO III **Implementation**

Member states were required to adopt implementing legislation by 31 May 2015. To date, most member states have incorporated SEVESO III requirements into national legislation, as listed in Table 1 below. Table 1 does not include all implementing measures. It is intended to provide an overview of the primary national legislation transposing SEVESO III.

SEVESO III sets minimum requirements for implementing legislation and it is interesting how members states are attempting to ingrain the concepts of major industrial accident prevention and protection within the culture of their countries. As an example, in the United Kingdom, the Control of Major Accident Hazards Regulations 2015 (COMAH15) came into force on 1 June 2015 to implement the majority of SEVESO

Northern Ireland has adopted its own legislation and landuse planning requirements have been implemented through planning legislation. The concept of lower-tier establishment and upper-tier establishment are consistent with SEVESO III in relation to the substances listed in Schedule 1 to COMAH15. Schedule 1 includes the list of substances applicable to the Classification, Labelling and Packaging (CLP Regulation), which aligns with SEVESO III. The structure of COMAH15 aligns with SEVESO III. On-line guidance in the United Kingdom indicates that major accident prevention should be based on the principle of reducing risk to a level as low as is reasonably practicable (ALARP) to humans and using the best available technology not entailing excessive cost (BATNEEC) for environmental risks.

More than two years have passed since the required implementation date for SEVESO III. The European Commission's most recent report on implementation success of SEVESO requirements was in June 2013 (specifically addressing SEVESO II). For the purpose of this report, success meant that EU member states were actually adopting national measures and that the number and severity of accidents were decreasing. The Report on the Application in the Member States of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances for the period 2009-2011 indicated that implementation was continuing to improve with each reporting period. The number of "establishments" was on the rise, but the number of major accidents was remaining stable. For that time period, there was an average of 27 major accidents reported each year. Of particular note was the significant decrease in the number of fatalities and injuries.

Because of the noted improvements, the focus of SEVESO III was not on dramatically improving the stringency of the measures, but on harmonizing legislation and ensuring public access to information. The European Commission has not yet published a report on SEVESO III and statistics have not been extensively published for the post-SEVESO III implementation period. As this information becomes available, it will be interesting to review the success of SEVESO III implementation.

Complementary **Initiatives in** the EU

As the SEVESO regulatory regime was being implemented, the UNECE was implementing some measures of its own. The Convention on the Transboundary Effects of Industrial Accidents was adopted on 17 March 1992 and entered into force on 19 April 2000. It now included 40 contracting Parties. The Convention has the same fundamental goals as SEVESO. It aims to protect human beings and the environment against industrial accidents by preventing such accidents as much as possible, by reducing their frequency and severity and by mitigating their effects.

The relevance of this Convention to the implementation of SEVESO III in the EU relates to measures that member parties are taking to comply with both SEVESO and the Convention. In the 2015/2016 reporting year, UNECE requested that member parties highlight good practices and guidelines in their national implementation reports relating to the Convention. The following are some examples of these national measures to prevent major industrial accidents and protect humans and the environment:

- Austria, the Czech Republic and the United Kingdom (UK) indicated that they review the relevant national legislation continuously.
- Germany highlighted its Commission on Process Safety (KAS), which has published an extensive list of guidance documents and reports to support implementation, such as Guidance KAS 18 – Recommendations for separated distances between establishments covered by the Major Accidents Ordinance (Störfall-Verordnung) and areas worthy of protection within the framework of land-use planning (implementation of Article 50 of the Federal Imimission Control Act (Bundes-Immissionsschutzgesetz, BImSchG).
- The Netherlands reported that it has established a public risk map on hazardous activities, which also includes information on possible transboundary effects.

- Portugal has been operating the Internet site "Participa" since July 2015, which was exclusively dedicated to promoting public consultations. Portugal has also published guidelines specifically related to the obligations of operators of establishments.
- Sweden has finished a project to improve land-use planning around the siting of hazardous activities. It also reported on the existence of new guidelines, available in Swedish only, on topics such as, safety reports, the major-accident prevention policy and safety management system, external emergency plans, and land-use planning.

Another point to mention is that the Major Accident Hazards Bureau (MAHB) of the European Commission's Joint Research Centre provides member states with policy, scientific and technical support in SEVESO III implementation. The MAHB also provides a centre of reference for risk analysis of industrial accidents for benchmarking models and tools and for applications of risk assessment in specific locations and for general policy implementation, as well as accident data management systems and analysis.

Management of High Hazard **Operations Around the World**

Other countries around the work adopt requirements addressing the prevention of major industrial accidents. Here is a list of examples of comparable applicable legislation:

Canada: Environmental Emergency Regulations (SOR/2003-307) establishes notification and reporting requirements for any person who owns or has the charge, management, or control of a substance listed in Schedule 1 to the Regulations.

- **China:** *Identification of Major Hazard Installations for* Dangerous Chemicals - GB 18218-2009, provides that a major hazard installation refers to a facility, workplace or installation that usually or temporarily manufactures, processes, conveys, uses, or stores dangerous chemical substances listed in the Standard. The Implementing Measures for the Regulations on Safe Production Permits of Dangerous Chemical Production Industry and the Interim Provision on Supervision and Management of Major Hazard Source of Dangerous Chemicals provide concrete requirements.
- **India:** The Major Accident Hazard Control Rules, 1997 and the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 apply to industrial activities or isolated storage in which a subject hazardous chemical is involved. The scope of the requirements in these two pieces of legislation is similar, but the applicability is somewhat different.
- Mexico: NOM-028-STPS-2012, Workplace Management -Chemical Substances Process Safety establishes processes for the safe handling of chemical substances to prevent major accidents and protect against harm to workers and damage to workplaces.
- United States: 19101910.119 Process Safety Management of Highly Hazardous Chemicals establish the process safety management (PSM) framework and requirements for addressing unexpected releases of toxic, reactive, or flammable liquids and gases in processes involving highly hazardous chemicals. One of the key provisions of PSM is process hazard analysis (PHA)—a careful review of what could go wrong and what safeguards must be implemented to prevent releases of hazardous chemicals.* OSHA 3132 – Process Safety Management and OSHA 3133, Process Safety Management - Guidelines for Compliance provide a detailed analysis of the requirements.
- * Note that SEVESO III provisions do not include hazard analysis/risk assessment requirements; however, these are addressed in various laws as well as other global legislation. Future articles will discuss global approaches to hazard analysis/risk assessments.

Concluding Remarks

With most EU member states actively engaging in organizations like UNECE and MAHB, the implementation of SEVESO III has gone above and beyond complying with the mandatory requirements. With the adoption of best management practices, member states are attempting to create a culture of prevention. The possible occurrence of major accidents due to the presence of hazardous substances is a global concern. Providing facilities in any country with as much knowledge as possible on the regulatory requirements, as well as information on where to find guidance and technical support is key to promoting safe workplaces and a healthy and clean environment.

Resources

EU Legislation

- Council Directive 82/501/EEC of 24 June 1982 on the majoraccident hazards of certain industrial activities, OJ L 230, <u>1982-08-05</u>
- Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances, OJ L 010, 1997-1-14
- Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC, OJ L 193, 2012-07-24 (SEVESO III)
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, OJ L 353, 2008-12-31

EU Sources

- <u>European Commission General Guidance on Major</u> Accident Hazards:
- **European Commission Communication and** Information Resource Centre for Administrations, **Businesses and Citizens:**
- European Commission's *Directive 2012/18/EC SEVESO* III – Questions & Answers, 1 March 2016
- European Commission's Report on the Application in the Member States of Directive 96/82/EC on the control of major-accident hazards involving dangerous substances for the period 2009-2011, 28 June 2013
- European Commissions' FAQ Seveso III
- <u>European Commission's MINERVA Portal Lessons</u> **Learned Bulletins**

UK Resources

- The Control of Major Accident Hazards Regulations 2015, S.I. 2015 No. 483 (COMAH)
- UK Health and Safety Executive's General Guidance on **COMAH**
- UK Health and Safety Executive's General Guidance on the Seveso III Directive

Other Sources

- United Nations Economic Commission for Europe, Convention on the Transboundary Effects of Industrial Accidents, 17 March 1992 as amended on 15 December 2015
- United Nations Economic Commission for Europe, Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, 25 June 1998
- **UNECE's Good Practices Guidance on Industrial Accidents:**
- Canada's Environmental Emergency Regulations (SOR/2003-307)
- China's Identification of Major Hazard Installations for Dangerous Chemicals - GB 18218:-2009
- India's Major Accident Hazard Control Rules, 1997
- India's Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
- Mexico's NOM-028-STPS-2012, Workplace Management -**Chemical Substances Process Safety**
- <u>United States' Process Safety Management of Highly</u> Hazardous Chemicals



hoto credit: New York National Guard photopin.com

	Table 1: SEVESO Implementing Legislation		
EU Member States	National Transposition Measures		
Austria	Oö. Katastrophenschutzgesetz-Novelle 2015. Official publication: Landesgesetzblatt (LGBl.); Number: 70/2015; Publication date: 2015-06-30		
Belgium	VLAAMSE OVERHEID - 20 MEI 2016 Decreet houdende instemming met het samenwerkingsakkoord van 16 februari 2016 tussen de Federale Staat, het Vlaamse Gewest, het Waalse Gewest en het Brussels Hoofdstedelijk Gewest betreffende de beheersing van de gevaren van zware ongevallen waarbij gevaarlijke stoffen zijn betrokken. Official publication: Belgisch Staatsblad; Publication date: 2016-05-30; Page: 33543-33543		
Bulgaria	Наредба за предотвратяване на големи аварии с опасни вещества и за ограничаване на последствията от тях. Official publication: Държавен вестник; Number: 5; Publication date: 2016-01-19		
Croatia	Pravilnik o registru postrojenja u kojima su prisutne opasne tvari i o očevidniku prijavljenih velikih nesreća. Official publication: Narodne Novine; Number: 139/14		
Cyprus	Οι Περί Ασφάλειας και Υγείας στην Εργασία (Αντιμετώπιση Κινδύνων Ατυχημάτων Μεγάλης Κλίμακας Σχετιζόμενων με Επικίνδυνες Ουσίες) Κανονισμοί του 2015. Official publication: Cyprus Gazette; Number: 4900; Publication date: 2015-10-23; Page: 02109-02137		
Czech Republic	Zákon č. 224/2015 Sb., o prevenci závažných havárií způsobených vybranými nebezpečnými chemickými látkami nebo chemickými směsmi a o změně zákona č. 634/2004 Sb., o správních poplatcích, ve znění pozdějších předpisů, (zákon o prevenci závažných havárií). Official publication: Sbirka Zakonu CR; Publication date: 2015-09-11		
Denmark	Bekendtgørelse om kontrol med risikoen for større uheld med farlige stoffer. Official publication: Lovtidende A; Publication date: 2016-04-25		
Estonia	Information not available		
Finland	Valtioneuvoston asetus vaarallisten kemikaalien käsittelyn ja varastoinnin valvonnasta / Statsrådets förordning om övervakning av hanteringen och upplagringen av farliga kemikalier (685/2015) 21/05/2015. Official publication: Suomen Saadoskokoelma (SK); Number: 685/2015; Publication date: 2015-05-29		
	Valtioneuvoston asetus vaarallisten kemikaalien teollisen käsittelyn ja varastoinnin turval- lisuusvaatimuksista annetun valtioneuvoston asetuksen muuttamisesta / Statsrådets förordning om ändring av statsrådets förordning om säkerhetskraven vid industriell han- tering och upplagring av farliga kemikalier (686/2015) 21/05/2015. Official publication: Suomen Saadoskokoelma (SK); Number: 686/2015; Publication date: 2015-05-29		
France	Arrêté du 10 mai 2000 relatif à la prévention des accidents majeurs dans les installations classées mentionnées à la section 9, chapitre V, titre ler du livre V du Code de l'Environnement. Official publication: Legifrance; Publication date: 2014-06-11		
Germany	Verordnung zur Umsetzung der Richtlinie 2012/18/EU des Europäischen Parlaments und des Rates vom 4. Juli 2012 zur Beherrschung der Gefahren schwerer Unfälle mit gefährlichen Stoffen, zur Änderung und anschließenden Aufhebung der Richtlinie 96/82/EG des Rates. Official publication: Bundesgesetzblatt Teil 1 (BGB 1); Number: 3; Publication date: 2017-01-13; Page: 00047-00067		
Greece	Κ.Υ.Α. 172058/2016, Καθορισμός κανόνων, μέτρων και όρων για την αντιμετώπιση κινδύνων από ατυχήματα μεγάλης έκτασης σε εγκαταστάσεις ή μονάδες, λόγω της ύπαρξης επικίνδυνων ουσιών, σε συμμόρφωση με τις διατάξεις της οδηγίας 2012/18/ΕΕ «για την αντιμετώπιση των κινδύνων μεγάλων ατυχημάτων σχετιζομένων με επικίνδυνες ουσίες και για την τροποποίηση και στη συνέχεια την κατάργηση της οδηγίας 96/82/ΕΚ του Συμβουλίου» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 4ης Ιουλίου 2012. Αντικατάσταση της υπ' αριθ. 12044/613/2007 (376/B), όπως διορθώθηκε (2259/B/2007). Official publication: ΦΕΚ 354/B; Publication date: 2016-02-17		

Table 1: SEVESO Implementing Legislation (continued)		
Hungary	1952. évi III. törvény a polgári perrendtartásról. Official publication: Magyar Közlöny; Number: 48; Publication date: 1952-06-06; Page: 00422-00495	
Ireland	The Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015, S.I. 209 of 2015. Official publication: Irish Statue Book; Publication date: 2015-05-29	
Italy	Attuazione della direttiva 2012/18/UE relativa al controllo del pericolo di incidenti rilevanti connessi con sostanze pericolose (DECRETO LEGISLATIVO 26 giugno 2015, n. 105). Official publication: Gazetta Ufficiale; Publication date: 2015-06-26	
Latvia	Information not available	
Lithuania	Lietuvos Respublikos administracinių teisės pažeidimų kodekso pakeitimo įstatymas Nr. XII-1236. Official publication: Teisės aktų registras; Number: 2014-15013; Publication date: 2014-10-28	
Luxembourg	Règlement grand-ducal du 28 avril 2017 modifiant le règlement grand-ducal du 14 septembre 2000 concernant les études des risques et les rapports de sécurité et abrogeant le règlement grand-ducal modifié du 17 juillet 2000 concernant la maîtrise des dangers liés aux accidents majeurs impliquant des substances dangereuses. Official publication: Journal Officiel du Grand-Duché de Luxembourg; Publication date: 2017-05-04	
Malta	Control of Major Accident Hazards (Amendment) Regulations, 2014. Official publication: The Malta government gazette; Number: 19,194; Publication date: 2014-01-14; Page: 00012-00012	
Netherlands	Besluit van 25 juni 2015, houdende vaststelling van het Besluit risico's zware ongevallen 2015 en herziening van enkele andere besluiten in verband met de implementatie van Richtlijn 2012/18/EU van het Europees Parlement en de Raad van 4 juli 2012 betreffende de beheersing van de gevaren van zware ongevallen waarbij gevaarlijke stoffen zijn betrokken, houdende wijziging en vervolgens intrekking van Richtlijn 96/82/EG van de Raad (Besluit risico's zware ongevallen 2015). Official publication: Staatsblad (Bulletin des Lois et des Décrets royaux); Number: 272; Publication date: 2015-07-07	
Poland	w sprawie rodzajów i ilosci substancji niebezpiecznych, których znajdowanie sie w zakladzie decyduje o zaliczeniu go do zakladu o zwiekszonym ryzyku albo zakladu o duzym ryzyku wystapienia powaznej awarii przemyslowej (Dz. U. 2016, poz. 138). Official publication: Internetowy System Aktów Prawnych; Publication date: 2016-01-29	
	w sprawie wymagan, jakim powinien odpowiadac raport o bezpieczenstwie zakladu o duzym ryzyku (Dz. U. 2016, poz. 287). Official publication: Internetowy System Aktów Prawnych; Publication date: 2016-02-23	
Portugal	Decreto-Lei n.º 42/2014. D.R. n.º 54, Série I de 2014-03-18 Ministério do Ambiente, Ordenamento do Território e Energia Procede à primeira alteração ao Decreto-Lei n.º 254/2007, de 12 de julho, transpondo o artigo 30.º da Diretiva n.º 2012/18/CE, do Parlamento Europeu e do Conselho, de 4 de julho de 2012, relativa ao controlo dos perigos associados a acidentes graves que envolvem substâncias perigosas, que altera e subsequentemente revoga a Diretiva n.º 96/82/CE do Conselho. Official publication: Diaro da Republica I; Number: 54; Publication date: 2014-03-18; Page: 02072-02074	
Romania	Lege Nr. 59/2016 din 11 aprilie 2016 privind controlul asupra pericolelor de accident major în care sunt implicate substanțe periculoase. Official publication: Monitorul Official; Publication date: 2016-04-18	
Slovakia	Zakon zo 6. mája 2015 o prevencii závažných priemyselných havárií a o zmene a doplnení niektorých zákonov; Official publication: Zbierka zákonov; Publication date: 2015-05-06	

Table 1: SEVESO Implementing Legislation (continued)		
Slovenia	Zakon o spremembah in dopolnitvah Zakona o varstvu okolja. Official publication: Uradni list RS; Number: 30/2016; Publication date: 2016-04-25; Page: 04233-04239	
	Uredba o spremembah Uredbe o vsebini in izdelavi načrtov zaščite in reševanja. Official publication: Uradni list RS; Number: 78/2016; Publication date: 2016-12-05; Page: 11201-11201	
Spain	Real Decreto 840/2015, de 21 de septiembre, por el que se aprueban medidas de control de los riesgos inherentes a los accidentes graves en los que intervengan sustancias peligrosas. Official publication: Agencia Estatal Boletín Oficial del Estado; Publication date: 2015-10-20	
Sweden	Förordning om åtgärder för att förebygga och begränsa följderna av allvarliga kemikalieolyckorförfattningssamling (SFS). Official publication: Sveriges Riksdag; Publication date: 2015-04-23	
United Kingdom	Control of Major Accident Hazards Regulations 2015, S.I. 2015 No. 483. Official publication: legislation.gov.uk; Publication date: 2015-03-02	

ABOUT THE AUTHOR



Meghan White

Professional experience includes:

- Environmental consulting and regulatory compliance
- Tracking and analyzing EHS regulatory developments
- Authoring audit protocols

Meghan White, a Program Director with Specialty Technical Consultants (STC), has over 10 years of experience in environmental consulting and regulatory compliance. Ms. White manages STC's international regulatory services, including contributions to the international Audit Protocols produced by Specialty Technical Publishers (STP).

Ms. White is directly responsible for tracking and analyzing environmental, health and safety regulatory developments in several countries and regions, including Canada, the UK, Australia, and the European Union. She advises clients in the pharmaceutical, chemical, mining, manufacturing, petroleum and utility industries on regulatory requirements and policy implications.

Ms. White has also assisted clients with implementing software for EHS management systems in order to track performance of environmental and sustainability programs and to ensure compliance with EHS legislation and policy.



1 800.251.0381

Head Office

2188 Yukon Street, Vancouver, BC, Canada V5Y 3P1

Copyright © 2017 Specialty Technical Publishers. All Rights Reserved.

This publication does not constitute legal, accounting or other professional advice. STP Specialty Technical Publishers and its authors make no warranties, whether express or implied, regarding the accuracy of any information or materials contained herein or the results of any course of action described herein, and STP and its authors expressly and specifically disclaim the implied warranties of merchantability and fitness for a particular purpose.



www.stpub.com