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Keeping Abreast of Changes in Information Technology

by Andrew Dsida

For this quarter's topic, I want to discuss the challenges and opportunities that new technology brings for a company like ChemADVISOR. And to do so, we've decided to use some of that technology to provide "articles" in video format recorded and hosted using commonly available software and hardware.

Obviously one of the challenges in running ChemADVISOR is keeping on top of two dynamic fields—EH&S regulations and IT. Both are integral to our business, one as the core knowledge base that we sell in our products and services, and the other as the enabler to organize and deliver that knowledge in ways that our customers require. In both cases the requirements change over time and we have to decide how and when to change our business accordingly.

Trying to stay with the times, we began offering GoToMeeting webinars over the last couple of years and we've recently set up ChemADVISOR with Facebook and Twitter accounts, although we're still determining if and how these will be useful for our line of business. Mobile applications, like the Chemobi one we recently collaborated with Symyx and Chemspider on, provides access to small portions of our data to people who are not necessarily tied to an office computer and it opens up new customer groups and new potential uses for environmental and health and safety data. Even our newsletter has progressed from being produced at a typesetter and physically mailed to a small group of customers to now having portions distributed and available to anyone through YouTube. Changes like these are visible to our customers but they are only a portion of what we need to track. Behind the scenes changes to database versions, the advent of XML, creating compatibility with new operating systems and browsers—that's all a part of being in a technology related business in the 21st Century.

OSHA Releases Proposed Rulemaking to Revise the Hazard Communication Standard (HCS)

By Darlene Susa-Anderson

OSHA has published its long awaited proposed rulemaking to bring the existing Hazard Communication Standard (HCS) (29 CFR 1910.1200) in line with Revision 3 of the United Nation's Globally Harmonized System of Classification and Labelling (GHS) which also is known simply as the Purple Book.

The Proposed Rulemaking issued on September 30, 2009 has a 90 day comment period with written comments due back by December 29, 2009.

OSHA is intending to adopt all physical and health hazard endpoints found in the latest edition of the Purple Book with the following exceptions:

- Acute Toxicity Category 5 for oral, dermal and inhalation exposures
- Skin Corrosion/Irritation Category 3
- Aspiration Hazard Category 2
- Hazardous to the Environment (all)

These exclusions are consistent with the existing scope of coverage found in 29 CFR 1910.1200 effective November 25, 1985.

Hazards not specifically addressed by the United Nation's Globally Harmonized System of Classification and Labelling (GHS) are termed 'unclassified hazards' by OSHA.

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ChemADVISOR Earns Kodak Supplier Certification

PITTSBURGH, PA - September 29, 2009

ChemADVISOR, Inc., (www.chemadvisor.com) has earned Certified Supplier Status from Eastman Kodak Company. The certification was awarded to ChemADVISOR after a lengthy evaluation process in recognition of the high quality services offered to Kodak.

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REACH Exposure Scenario Building

By Wolfgang Urhahn

Many companies may be required to carry out an exposure assessment under REACH. Substances subject to registration and manufactured or imported into the EU in quantities larger than 10 tons per year, classified as dangerous or regarded as a PBT/vPvB will require an exposure assessment. The exposure assessment includes the building of exposure scenarios and should cover all identified uses for a substance. The assessment also includes the estimation of the exposure to be expected and the comparison of this exposure with the no effect levels determined in the hazard assessment. Based on these steps, the registrant can demonstrate that the risks for all uses and the entire life cycle of a substance can be adequately controlled.

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In this Issue

Focus On: Weisin Chai

ChemADVISORY (CA): Chai, please tell us a little bit about your educational and employment background.

Chai (WC): I graduated from the University of South Alabama with a BS degree in Chemical Engineering in 2006 and started my first job with ChemADVISOR after my graduation. I currently am pursuing an MS degree in Chemical Engineering by taking part time evening classes at the University of South Alabama.

CA: How long have you been with ChemADVISOR?

WC: Three years and two months.

CA: What do your daily duties at ChemADVISOR involve?

WC: My title here at ChemADVISOR is Malaysian Regulatory Compliance Specialist. As part of the LOLI Regulatory Database team, my job is to maintain the accuracy of regulatory data of various Asia-Pacific countries, including Malaysia, Indonesia, Cambodia, India, Nepal, Taiwan and Thailand. As necessary, I also translate regulatory information from the Malay or Chinese language.

CA: What aspect of your job do you find most challenging?

WC: Keeping current with changing regulations of various countries and ensuring its accuracy is the most challenging part of my job. This is especially difficult when official regulatory information is not available online.

CA: What aspect of your job do you find most rewarding or enjoyable?

WC: I enjoy the job nature of completing the project as a member of a team, but yet it allows me to focus and work individually on tasks requiring details such as auditing.

CA: What do you feel is the single most important aspect of your job?

WC: Besides obtaining accurate information, I think conveying the message correctly to our customers is very important, especially when translation is involved in the process.

CA: What training do you feel would improve your ability to do your job on a daily basis?

WC: Training classes offered by ChemADVISOR are very useful for me to understand different regulatory systems in various countries. Furthermore, I appreciate that ChemADVISOR encourages advanced university studies as it improves critical thinking and knowledge to the subject matter.

CA: If you could be employed in any other career what would you do?

WC: I believe the job as a reporter is adventurous. Reporters are always challenged by new and unexpected experiences.

CA: What career would you never want to try?

WC: I love music a lot, but I would never want to be a musician or a composer. In addition to effort, talent plays a very important role to the success of a musician.

CA: Chai, what do you like to do when you are away from the office?

WC: I am not an excellent cook, but I love cooking if I have some spare time, enough to prepare a meal, but too short for travelling.

OSHA Releases Proposed Rulemaking

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Some examples of 'unclassified hazards' would be combustible dusts or cryogenic materials. OSHA is allowing the inclusion of unclassified hazards on hazard communication documents and is proposing the addition of a new health hazard endpoint for Simple Asphyxiants. This endpoint is not currently covered by Revision 3 of the Purple Book.

Other standards such as the Flammable and Combustible Liquids Standard (29 CFR 1910.106), the Process Safety Management Standard (29 CFR 1910.119) and selected substance specific health standards (29 CFR 1910.1001-1052) will be revised to conform to the proposed new criteria as well as revised for associated hazard communication elements.

One good example of a term whose criteria needs amended is Combustible liquid. OSHA currently defines Combustible liquid as a liquid with a flash point between 100° to 200° F. Since 'Combustible liquid' does not exist within the Purple Book as a unique hazard endpoint, it is being proposed to be replaced with specific flash point criteria to maintain equivalent protection. The hazard statement for Category 4, Flammable liquid is 'combustible liquid'. As a point of reference, the criteria for GHS Flammable liquid category 3 has a flash point between and inclusive of 23° C to 60° C (73.4° F to 140° F); the criteria for GHS Flammable liquid category 4 has a flash point above 60° C to and inclusive of 93o C (140° F to 199.4° F).

OSHA is proposing an obvious but necessary change to ensure world-wide consistency when referring to hazard communication documents. The phrase 'Material Safety Data Sheet' and the acronym 'MSDS' will be replaced by the phrase 'Safety Data Sheet' and the acronym 'SDS' respectively.

As was expected, OSHA is allowing the use of a 16 section format for SDSs but will not enforce information requirements for Sections 12 through 16 as coverage in these sections exceeds the scope of OSHA's mandate.

The existing stay on enforcement of label changes within 90 days is being proposed to be lifted.

It is unclear as to when a final rulemaking will be published but OSHA is proposing a transition period of 2 years for training employees and 3 years for manufacturers, importers and distributors to comply with all provisions of the final rule.

The full text of this 271 page document can be found at: http://edocket.access.gpo.gov/2009/pdf/E9-22483.pdf

As is consistent with any proposed changes to existing rules, only the revised or new text appears in this document. To better view the scope of the intended revisions, please visit www.osha.gov and look under Hazard Communication in the subject index to view the changes in the context of the entire HCS.

ECHA Publishes 2 CLP Guidance Documents

By Caroline Miller, CIH, CSP

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) was published in the December 31, 2008 issue of the European Official Journal (see http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:EN:PDF) and came into force on January 20, 2009. With the first deadline of the CLP a little more than a year away (December 1, 2010), *Introductory Guidance on the CLP Regulation and Guidance on the Application of the CLP Criteria* have been published on the European Chemicals Agency (ECHA) website. The guidance documents provide comprehensive guidance that have been developed by the European Commission to support companies manufacturing or supplying chemicals, in particular SMEs, to comply with their obligations under the CLP Regulation.

The Introductory Guidance on the CLP Regulation presents basic features of the CLP Regulation. This includes information on complying with the CLP notification deadline. It also provides information in relation to the classification-based provisions of the Regulation (EC) 1907/2006 (REACH) Regulation. The Introductory Guidance document is broken up into five subject areas:

- Getting started
- Hazard classification
- Hazard communication
- Follow-up to classification
- REACH and EU downstream legislation

The Introductory Guidance document is meant for those who already have an understanding of classification, either the Dangerous Substance Directive 67/548/EEC (DSD) and the Dangerous Preparations Directive 1999/45/EC (DPD) or the United Nations Globally Harmonised System of Classification and Labelling of Chemicals (UN GHS). To assist in the transition from DSD and DPD, the guideline provides similarities and differences and key terms compared in the DSD/DPD and CLP. The guidance then goes on to summarize who should classify and how to classify. At each step, the relationship to REACH regulations is explained. In the Hazard communication section, the requirements for labelling and safety data sheets (SDSs) are summarized. The Follow-up section outlines the additional requirements notifying identification, classification and labelling of substances to ECHA, as well as what to do if there is new hazard information, request for an alternative chemical name, or proposal for harmonised classification and labelling. The last section summarizes the downstream legislation that may be triggered by the classification of the substance or mixture.

The Introductory Guidance on the CLP Regulation can be found at:
http://guidance.echa.europa.eu/docs/guidance_document/clp_introductory_en.pdf?vers=24_08_09

The Guidance on the Application of the CLP Criteria explains the general principles of classification and labelling and provides detailed guidance on how to classify and label substances and mixtures (physical, health and environmental hazards). The Application Guidance is broken down into five parts:

- Part 1: General Principles for Classification and Labelling
- Part 2: Physical Hazards
- Part 3: Health Hazards
- Part 4: Environmental Hazards
- Part 5: Labelling

In Part 1, introductory information is presented including who is responsible for classification and what data is needed for classification. The interface between self-classification, the list of harmonised classification, and the classification and labelling inventory is explained. Information to aid in classification is included in Part 1, such as bioavailability considerations, read across and quantitative structure activity relationships ((Q)SARs), and specific concentration limits and M-factors. The introduction also includes information on how to classify mixtures. In addition, the application of the Annex VII translation tables is explained.

Parts 2, 3, and 4 cover the CLP classification criteria. Details are provided for each of the hazard classes, with specific examples on how to apply test criteria. Where appropriate, information on setting specific concentration limits is presented. Examples on how to classify and label substances and mixtures are given for each hazard class. Part 5 includes examples on labelling.

There are five annexes included:

- Annex I: Aquatic Toxicity
- Annex II: Rapid Degradation
- Annex III: Bioaccumulation
- Annex IV: Metals and Inorganic Metal Compounds
- Annex V: Selection of Precautionary Statements

The Guidance on the Application of the CLP Criteria can be found at:
http://guidance.echa.europa.eu/docs/guidance_document/clp_en.pdf?vers=20_08_09

Reference

http://echa.europa.eu/doc/press/na_09_15_clp_guidance_20090828.pdf

REACH Exposure Scenario Building

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Basically an exposure scenario (ES) is a collection of information describing the conditions under which the risks associated with the identified use(s) of a substance can be controlled. The exposure scenario includes operational conditions (OCs) as well as risk management measures (RMMs). The registrant needs to define a series of exposure scenarios to cover all uses for the different customers.

Based on the use, an exposure scenario should describe the relevant factors which determine the exposure. Exposure scenarios which will be communicated down the supply chain should have a standardized format and include the following:

- a short title describing the content of the exposure scenario
- the processes and the activities covered by the exposure scenario
- the duration and frequency of the use (as relevant for industrial users, professional users, consumers and the environmental compartments)
- the concentration of the substance and the physical form of the product containing the substance
- the substance amounts used during a certain period and certain activities (as relevant for industrial users, professional users, consumers and the environmental compartments)
- other operational conditions (OCs) of use
- risk management measures for all uses at industrial locations (as relevant for industrial users and the environmental compartments)
- risk management measures for all uses outside industrial locations (as relevant for professional users and the environmental compartments)
- risk management measures for all uses related to consumers and the general public (as relevant for consumers and the environmental compartments)
- waste management measures related to the uses covered by the exposure scenario
- predicted exposure and the source of the prediction
- advises to downstream users on how to check whether or not they work within the limits as defined in the exposure scenario

The Chemical Safety Report (CSR) should provide an exposure estimation and a risk characterization for each exposure scenario. In case a manufacturer or importer cannot describe the relevant risk management measures to control the risks for his substance for a particular use, the manufacturer or importer cannot cover this use in his exposure scenario. As a consequence the downstream user may need to stop the use of that particular substance or may need to carry out a chemical safety assessment (CSA) by himself. The manufacturer or importer should advise against that use in section 16 of the safety data sheet.

Intensive communication is strongly recommended to make the whole process of exposure scenario building convenient for both sides: the substance manufacturer or importer on the one side and the downstream users and their downstream users on the other side. Also, the correspondence regarding the uses and the exposure scenario building should take place several months in advance of the first registration deadline in November 2010. Downstream users shall inform the manufacturers and importers about the existing conditions of use in their own markets. The manufacturers and importers shall define generic exposure scenarios which shall cover the different product categories or process categories in which the substance is used. Also, both sides shall find an agreement on how to communicate the risk management measures (RMMs) and operational conditions (OCs) down the supply chain. The communication can take place at the level of industry sector organizations, but also from company to company. Several industry sector organizations provide in the meantime advice to their member companies regarding exposure scenarios.

Detailed information on exposure scenario building is available in an ECHA guidance document titled 'Guidance on Exposure Scenario Building'. The guidance document itself consists of several different parts. Chapter D.2 describes the main content of an exposure scenario. It also includes a list of the most common types of risk management measures and operational conditions. Chapter D.3 provides information on a standard workflow of 14 steps; it starts with the use identification and ends with the final product, the exposure scenarios for the substance. Chapter D.4 provides guidance on the development of the contents of the exposure scenario. Chapter D.5 provides support regarding exposure estimation, especially a description of available tools to estimate exposure to industrial users, professional users, consumers and the different environmental compartments. Chapter D.6 explains the refinement of the hazard assessment if required. Chapter D.7 describes the risk characterization process. Chapter D.8 provides guidance on how to finalize the exposure scenario, in particular it explains how to integrate operational conditions and risk management measures for all relevant exposure routes and user groups. Chapter D.9 shows how to connect the exposure scenario (ES) with the chemical safety report (CSR) and the extended safety data sheet (eSDS).

The final exposure scenario describes the conditions that lead to adequately controlled risks for a particular use of a substance. The product and process categories as described in the Use Descriptor System shall be assigned to the identified uses of a substance. These categories will allow to link use patterns of a substance to pre-defined exposure scenarios and their related exposure estimations. Second, they will allow the different actors like manufactures, importers and downstream users to find a harmonized way to communicate their uses up and down the supply chain of a substance. Exposure scenarios shall be documented in the Chemical Safety Reports (CSRs) and be annexed to the safety data sheets. But exposure scenarios should also contain very practical advice for the users on how to process and handle a substance in a safe way. The development of the generic exposure scenarios is the preferred approach. Manufacturers or Importers therefore shall follow up with their industry associations in liaison with the Downstream User Associations.

References

REACH Regulation EC No 1907/2006:
http://echa.europa.eu/reach/legislation_en.asp

REACH Guidance Documents:
http://guidance.echa.europa.eu/guidance_en.htm

REACH Guidance on Exposure Scenario Building
http://guidance.echa.europa.eu/docs/guidance_document/information_requirements_part_d_en.pdf

REACH Use Descriptor System
http://guidance.echa.europa.eu/docs/guidance_document/information_requirements_r12_en.pdf

REACH Frequently Asked Questions:
http://echa.europa.eu/reach/reach_faq_en.asp

REACH Navigator:
http://guidance.echa.europa.eu/index_en.htm
http://guidance.echa.europa.eu/navigator_en.htm

View the REACH Q&A on YouTube

Australia National Standard/Policy Proposal Drafts Released

By Melissa Buckshire

The Work Safe Australia Council met in July of 2009 to discuss a new model on OHS regulations for workplace chemicals. The Council agreed to use the Draft National Standard for the Control of Workplace Hazardous Chemicals as their policy basis. The changes adopted in this draft are in support of the new regulations as well as the principles of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Work Safe Australia has commenced drafting of model regulations for workplace chemicals based on this National Standard for Control of Workplace Hazardous Chemicals- referred to as the Policy Proposal.

One major change in the standard is that chemicals will no longer need to be classified under two separate regulations (one for physical hazards and one for health hazards). In this new Policy Proposal, criteria will be used to classify substances, mixtures and articles as "hazardous chemicals," a term that includes both physical and health hazards under a single regulation.

For environmental hazards, this Policy Proposal will align with previous workplace hazardous substances and dangerous goods frameworks such that certain environmental hazards captured under dangerous goods transport regulations will be maintained. However, the classification of environmentally hazardous substances and communication via elements on labels or safety data sheets will not be mandatory.

The GHS classifications that this Policy Proposal has excluded are:

- Acute Toxicity (all routes) Category 5
- Skin corrosion/irritation Category 3
- Serious eye damage/ eye irritation Category 2B
- Aspiration Hazard Category 2
- Flammable gas Category 2
- Flammable liquid Category 4
- Acute and Chronic Hazard to the Aquatic Environment, all categories.

The Council is also developing additional regulatory material- Draft National Code of Practice for the Labelling of Workplace Hazardous Chemicals and Draft National Code of Practice for the Preparation of Safety Data Sheets. The due date for feedback or comments to the Council on these documents was September 25, 2009. To read a copy of these additional documents and the Policy Proposal, visit: http://www.safeworkaustralia.gov.au/swa/HealthSafety/HazardousSubstances/Proposed+Revisions/

References

http://www.safeworkaustralia.gov.au/swa/HealthSafety/HazardousSubstances/Proposed+Revisions/

Maine Publishes List of Chemicals of High Concern

By Danielle Hunter

The state of Maine has been a national leader in its attempt to improve the chemical safety of consumer products. Influenced by Maine's law on Toxic Chemicals in Children's Products, the Maine Department of Environmental Protection (DEP) and the Maine Center for Disease Control and Prevention (CDC) have released a list of over 1,700 chemicals that are considered to be "of high concern." This list of chemicals was published in June of 2009. The chemicals contained on the list are known to pose significant risk to human health and are often used in the manufacture of common consumer goods. Chemicals may only be included on the list if they have been identified as:

1. A carcinogen, a reproductive or developmental toxicant or an endocrine disruptor;
2. Persistent, bioaccumulative and toxic; or
3. Very persistent and very bioaccumulative

The list of Chemicals of High Concern is reviewed by the Department of Environmental Protection at least every three years. However, the department may review and revise the list of Chemicals of High Concern as needed. The list is currently to be reviewed annually and updated as appropriate in consultation with a Maine Center for Disease Control toxicologist.

A substance included on the list of Chemicals of High Concern does not restrict its use in commerce in Maine.

Next year, the DEP and CDC have said that a closer look will be given to these chemicals to see the extent of their use, the level of exposure to children, and documented presence in the human body or environment. The law required the DEP to move at least two ''priority chemicals'' forward for further evaluation and possible regulatory action. If the DEP finds that the chemical is not used in a children's product, and would not be subject to regulation under the Toxic Chemicals in Children's Products law, it may be removed from the list of Chemicals of High Concern. However, this is a voluntary action that is not being enforced by the department at this time.

The list of Chemicals of High Concern is an important step towards protecting Maine's natural environment. By publishing this list it has increased public awareness of toxic chemicals and their use in consumer products. Through this publication Maine is one step closer to achieving their long term goal of protecting the public and the environment.

The Maine List of Chemicals of High Concern can be found in a searchable format on the Maine Department of Environmental Protection's website using the following link : http://www.maine.gov/dep/oc/safechem/index.htm

References

Maine Department of Environmental Protection. June 2009. Chemicals of High Concern. 17 September 2009 <http://www.maine.gov/dep/index.shtml>.

Taiwan Plans an Inventory - Existing Chemical Substance Nomination (ECN) and New Chemical Substance Notification (NCN)

By Weisin Chai

On December 31, 2008, the Taiwan Council of Labor Affairs (CLA) of the Executive Yuan announced that the first phase of its chemical management strategy, Rules on Labeling and Hazard Communication of Hazardous and Harmful Substances for hazardous and harmful substances, entered into force. To further enhance chemical management, Taiwan is in the process of developing the second phase of its chemical management strategy which gives rise to Taiwan's plan of establishing a New Chemical Substance Inventory.

There are two programs involved in the process of developing the inventory– the Existing Chemical Substance Nomination (ECN) and the New Chemical Substance Notification (NCN).

ECN

The ECN program has been approved by the CLA through Document No. 0980049188 on July 30, 2009, and has entered the pilot phase. It is planned to be implemented entirely by December 2009. The deadline for submissions for the ECN process will end in August 2010.

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Taiwan Plans an Inventory - Existing Chemical Substance Nomination (ECN) and New Chemical Substance Notification (NCN)

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Certain substances are exempted from the ECN:

- Naturally occurring substances
- Polymers meeting the 2% rule. This refers to polymers having less than or equal to two weight percent of other monomers or reactants.
- Chemical substances contained in experimental equipment
- Non-isolatable intermediates which are undergoing chemical reactions in reactor or in manufacturing process
- Mixtures (please note that individual chemical substances in the mixture are not excluded)
- Articles
- Chemical substances under Custom's supervision
- Chemical substances used for National Defense purposes
- Incidental reaction products or impurities with no commercial value
- Wastes

Information required by the ECN includes:

(1) General information (company and contact person);
(2) Chemical Abstracts Service (CAS) number;
(3) Chemical substance name in Chinese/English. For Chinese, the chemical shall be named according to the "Principles of Chemical Nomenclature, 3rd amendment" published by the Notification of Ministry of Education no. 0920006592. The Chemical Abstract (CA) Preferred Index names are preferred for English, but the International Union for Pure and Applied Chemical names (IUPAC) are acceptable as well.
(4) Average annual tonnage of import/manufacture.

With the information collected, items (1) and (4) are protected automatically. If the submitter would like to keep the information provided for items (2) and (3) confidential, he or she has to submit an application together with suggested generic chemical names and a justification for retaining this information as business confidential. Once approved, the protection period will last for five years.

Manufacturers or importers must use the nomination tool provided, i.e., the database version with CAS number or chemical name references included (used for nomination with less amount of chemicals), or the basic version, with no references included (used for nomination from companies which have had their own chemical inventory). Other nomination methods are not acceptable.

NCN

The Taiwan government is working together with chemical manufacturers and importers to collect data for existing chemicals and will publish a National Existing Chemical Substance List (ECSL) in June 2011. This inventory will be used in the future as a basis for the development of a New Chemical Substance List (NCSL). Any chemicals not included in the ECSL shall be defined as a New Chemical Substance.

Rules regarding the NCN are drafted by CLA and shall be added to article 7, part 2, of the amendment to the Labor Safety and Health Act. Under the draft amendment, anyone who has not submitted a hazard and risk assessment report, and/or if the registration is not approved, the import, manufacture, disposal, use or selling of chemical substances not listed in the Existing Chemical Substances inventory will be prohibited. However, exemptions shall apply for substances similar to those exempted in ECN as mentioned earlier. Substances which have been restricted in other regulations and substances manufactured/imported with annual tonnage less than 0.01 ton per year would also be considered exempt.

There will be three types of notification in NCN – Notice, Simplified notification and Complete or Full notification. Manufacturers/importers of new chemical substances with a total annual manufactured/imported tonnage between 10 to 100 kg/year will only be required to submit a Notice filing. Simplified notification applies to substances and polymers with a total annual tonnage between 0.1 to 1 ton/year. Complete or full notification shall be used for those substances which do not qualify for a Simplified notification. This shall include new chemical substances which are classified as either carcinogenic, germ cell mutagenic, reproductively toxic or hazardous to the aquatic environment (chronic) category 1.

Different types of notification in NCN will require submission of different information. For the Notice filing, the submitter shall provide the applicant's identification and general information, the location of the manufacture of, using, storing or selling new chemical substances, chemical names, the CAS number of the substance if available, the description of the substance's appearance, color or the physical properties, and safe handling and storage information. Simplified notification shall include the general information of the applicant and notified substances, GHS based classification and labeling, safe-use information and polymer identification data if the substance is a polymer. Complete notification requires information such as the applicant and substance identification, GHS based classification and labeling, the manufacture, use and exposure of the substances, its physical and chemical properties, environmental fate and pathways, ecotoxicological information, toxicological information, analytical methods, safe-use information, literature references and assessment reports.

After submitting all of the required information, a Registration Certificate will be given by the competent authorities if approved. Similar to ECN, the chemical substances will have five years of protection period after the approval of NCN. This means that only those being approved can import, manufacture, dispose, use and sell the substances. Any importers or manufacturers intending to carry out the same activities shall submit a new notification themselves.

As NCN is still being developed, any suggestions are welcomed by the CLA. Further details of the ECN and NCN process could be obtained from the Chemical Substance Nomination & Notification (CSNN) CLA website at http://csnn.cla.gov.tw/content/index.aspx.

References

Existing Chemical Substance Inventory & New Chemical Substance Notification
http://csnn.cla.gov.tw/content/index.aspx

Guidelines for New Chemical Substance Notification (NCN) (2009 2nd Revised Draft):
http://www.ghs.url.tw/chemicalmatter/PDF/NCN_%E6%96%B0%E5%8C%96%E5%AD%B8%E7%89%A9%E8%B3%AA%E7%94%B3%E5%A0%B1%E6%8C%87%E5%BC%95%E5%92%8C%E6%84%8F%E8%A6%8B%E8%AA%BF%E6%9F%A5%E8%A1%A8_980414.pdf

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Canada – Update to "Challenge Substances"

By Tammy J. Murphy

In February 2007, Canada's Minister of Health and the Minister of the Environment issued a "Challenge to Industry" which is designed to develop safe management practices of "high priority" chemicals. These "high priority" substances are chemicals that meet the following criteria:

- They are persistent, bioaccumulative, and toxic and when released into the environment lead to harmful ecological consequences,
- They have no threshold for level of exposure in causing critical health effects (i.e., mutagenic carcinogens), or
- They are substances that are carcinogenic, mutagenic or toxic and that present a high probability of exposure to Canadians.

As part of the "Challenge," "batches" of substances are released on an estimated quarterly basis and published in the *Canada Gazette*. Each batch consists of 15-30 substances and is a "Challenge to Industry" to provide information to the Ministers within four to six weeks from the release (i.e., publication date). This information is used to perform risk assessments and to assist in developing risk management practices and/or deciding the fate of the named substances. Once all information is gathered and screening assessments completed, the Minister of Health and the Minister of the Environment publish their recommendations for the substances based on the screening assessments. There is a public comment period for all publications.

Batches 1 through 4 were published in 2007, Batches 5 through 7 were published in 2008 and this year, to date, Batches 8 through 11 have been published. Although the substances in Batch 12 have been identified, the release of technical information has not yet occurred. In addition to releasing multiple "batches" of substances in 2009, Canada's Minister of Health and the Minister of the Environment have also published draft and final screening assessments with corresponding risk management scopes/approaches for various batches of substances.

Batch 4, Batch 5 and Batch 7 are just three of these groups for which the Ministers have published draft and/or final decisions on the screening assessments. As examples, the Ministers may recommend "no further action" for a substance, they may propose the addition of a substance to Schedule 1 of CEPA, 1999, or they may recommend a substance be targeted for virtual elimination. Three substances are in Batch 4:

* Adenosine, N-benzoyl-5'-O-[bis(4-methoxyphenyl) phenylmethyl]-2'-deoxy- (DMTBA)
* Benzamide, 3,5-dichloro-N-(3,4-dichlorophenyl)-2-hydroxy-(3,3',4',5-tetrachlorosalicylanilide)
* Benzoic acid, 2-[(3,5-dibromo-4-hydroxyphenyl) (3,5-dibromo-4-oxo-2,5-cyclohexadien-1-ylidene) methyl]-, ethyl ester (Bromophthalein Magenta E)

Based on the final screening assessments, it has been published that the Minister of Health and the Minister of the Environment intend to take no additional action on these substances. For 2-Propenamide (acrylamide), a Batch 5 substance, the Ministers have recommended it be added to CEPA, 1999, Schedule 1, List of Toxic Substances. For the three substances in Batch 7:

* 1-Naphthalenemethanol, α,α-bis[4-(diethylamino)phenyl]-4-(ethylamino)-
* 1-Naphthalenemethanol, α,α-bis[4-(dimethylamino)phenyl]-4-(phenylamino)-
* [1, 1'-Biphenyl]-4,4'-diamine, N,N'-bis(2,4-dinitrophenyl)-3,3'-dimethoxy-

the Ministers have recommended these substances be subject to Significant New Activity notices.

Additional information may be found on the Government of Canada's Chemical Substances website:
http://www.chemicalsubstanceschimiques.gc.ca/en/

For additional background information, see the April 2007 *ChemADVISORY* article, "Canada Launches a 'Challenge to Industry.'"

Training Updates *By Jamie L. Skeel*

A New Location

Exciting plans are in the works for some of our upcoming training courses. A new location was added to the training calendar for the Globally Harmonized System (GHS) Course. February 9-10, 2010 ChemADVISOR will host this GHS course at a resort in Costa Rica.

A Special Discount

Also to help everyone comply with their DOT training requirements, we'd like to like to offer you a one-time special rate for ChemADVISOR's Department of Transportation (DOT) Hazardous Materials Regulations Course and the International Transportation Regulations Course (November16-17, 2009 and November 18-19, 2009). If you register before November 2, 2009 you will receive a 25% discount on the registration fee. You can register for one course or both. You do not need to register for both courses to receive this special rate. Registration forms can be found on the ChemADVISOR website.

A New Webinar Series

If you manufacture in Europe or ship into Europe by now you should be familiar with EU REACH (Registration, Evaluation, Authorization and Restriction of Chemical Substances - Regulation 1906/2006). However you may not be familiar with the similar legislation that other countries are implementing. ChemADVISOR would like to introduce to you the Chemical Control legislation of several countries in a series of 1 hour webinars stretched over 3 months. The webinars will be presented as follows in the schedule below. You can register for 1 webinar, a few webinars, or all 6. The cost is $125 for each webinar, or if you register for ALL 6, the cost will only be $600.

Chemical Control: It's Not Just REACH Anymore (webinar series)

- January 14, 2010 - Canada
- January 21, 2010 - China
- February 11, 2010 - Japan
- February 25, 2010 - Korea
- March 11, 2010 - Malaysia
- March 25, 2010 - United States

A Few New Courses

ChemADVISOR is constantly developing new training courses. Participants can look forward to several new courses in development for 2010. We are currently developing a new course on REACH chemical safety assessments and exposure scenarios. This course is still in its early stages, but we are very excited to be able to add it to the calendar.

Another new course being developed for 2010 is the TSCA PMN Preparation Process course. This course is intended for those who need to learn how to prepare Premanufacture Notices (PMNs), Significant New Use Notices (SNUNs), and PMN Exemption Applications.

Keep an eye out on the ChemADVISOR website for future notices on upcoming courses. Requests for more information can be sent to:

training@chemadvisor.com
http://www.chemadvisor.com

Current Intelligence Bulletin Released: A Strategy for Assigning the New NIOSH Skin Notations *By Caroline Miller, CIH, CSP*

The National Institute for Occupational Safety and Health (NIOSH) released "Current Intelligence Bulletin (CIB) 61: A Strategy for Assigning the New NIOSH Skin Notations." This CIB was developed to provide the scientific rationale and framework for a strategy for the assignment of multiple skin notations capable of distinguishing between systemic, localized, and sensitizing health effects of dermal chemical exposures. The strategy has been designed to:

(1) communicate the current state of knowledge on hazards to workers' health from dermal exposures;
(2) address the conceptual shortcomings of the current NIOSH skin notation represented by the symbol [skin];
(3) recognize the health risks associated with contact of the skin with chemicals beyond dermal absorption; and
(4) increase the transparency of the process for assigning the new NIOSH skin notations.

Currently, NIOSH uses [skin] to indicate the potential for dermal absorption on 142 chemicals listed in the NIOSH Pocket Guide to Chemical Hazards. However, the skin notations were assigned inconsistently. Under this system, [skin] was to be assigned only when a chemical has been scientifically established to be dermally absorbed and potentially contribute to system toxicity. Due to the single skin notation, it was used to warn of other serious dermal effects such as irritation, corrosion and sensitization.

The Pocket Guide is widely used by safety and health professionals, businesses, and workers to identify and safeguard against potential occupational hazards from workplace chemicals. In improving the skin notations, it can be used to identify work-related skin diseases that account for an estimated 15 percent to 20 percent of all reported occupational diseases in the U.S., with total annual costs of up to $1 billion.

The new skin notation classification scheme, which would be indicated by SK, presented within the CIB is as follows:

- SYS indicates the potential for a chemical to contribute substantially to systemic toxicity through dermal absorption.
  - o (FATAL), a subnotation of SYS, indicates that a chemical is highly or extremely toxic, and may be potentially lethal or life-threatening following skin exposures.
- DIR indicates non-immune mediated direct effect(s) of a chemical on the skin at or near the point of contact, including corrosion, primary irritation, bleaching (blanching), staining, and reduction/disruption of the skin barrier integrity.
  - o (IRR), a subnotation of DIR, indicates that a chemical is a skin irritant.
  - o (COR), a subnotation of DIR, indicates that a chemical is a corrosive.
- SEN indicates that skin exposure to a chemical may cause or contribute to the onset of allergic contact dermatitis (ACD) or other immune-mediated responses, such as airway hyper reactivity (asthma).
- SK indicates that the reviewed data identified no health hazard associated with skin exposure and did not support assignment of the SYS, DIR, or SEN notation.
- ID(SK) indicates that insufficient data were available at time of evaluation to determine the hazards associated with dermal contact to a candidate chemical substance.
- ND indicates that a chemical has not been evaluated by the improved skin notation strategy, and the health hazards associated with skin exposure are unknown.

In the new strategy, several skin notations for a chemical can be assigned when more than one skin hazard exists. For example, the notation SK: SYS – DIR (IRR) would indicate that the chemical causes systemic toxicity when dermally absorbed and is irritating to the skin. The new strategy also allows for additional skin notations to be added and the current criteria to be revised to increase the usefulness for the notations.

The new skin notations will be included within future NIOSH publications, including the NIOSH Pocket Guide to Chemical Hazards. Future versions of the NIOSH Pocket Guide to Chemical Hazards will have the skin notation assignments for each evaluated substance and an overview of the new skin notations. A separate publication called a Skin Notation Profile will provide an in-depth summary of the relevant data used to aid in determining the hazards associated with skin exposures.

The CIB can be found at http://www.cdc.gov/niosh/docs/2009-147/pdfs/2009-147.pdf.

Reference

NIOSH Update: Chemical Skin Hazard Strategy Revised by NIOSH to Provide More Useful, Detailed Notations. July 17, 2009. Retrieved September 1, 2009. http://www.cdc.gov/niosh/updates/upd-07-17-09.html

Household Product Labels Come Clean

By Brigette R. Bartko

The Household Product Labeling Act of 2009 (H.R. 3057) was introduced to the U.S. on June 25, 2009 by the New York Representative Steve Israel. This new bill would force any household cleaners, pesticides, epoxies, paints, and stains to have a "complete and accurate list of all the product's ingredients" listed on the product label. Currently, only active ingredients are listed on pesticide product labels, and some products are not required to have anything listed on their product labels. The Consumer Product Safety Commission (CPSC) would be the authority that promulgates the regulations to execute the Household Product Labeling Act. One year after this Act's acceptance, the products included in this legislation would have to include a full list of ingredients. If a company chooses not to disclose the full ingredient list, then the product would be treated as a "misbranded hazardous substance" under the Federal Hazardous Substance Act.

This new legislation has distressed the Consumer Specialty Products Association (CSPA), who represents over 200 companies that would be influenced by this Act. In response to this Act, CSPA has introduced a voluntary Consumer Product Ingredient Communication Initiative which helps consumers obtain a list of ingredients in products they use in their households. This initiative employs several methods to enable consumers to access information such as the product label, the website of the company that makes the product, or a toll-free telephone number. The program goes into effect in January 2010.

This change is needed because many consumers are starting to question what is in the products they use everyday. Most plastics now are Bisphenol-A free (BPA free) because research now shows that this chemical can cause cancer with long term exposure. Pesticides on foods are now regulated by the Environmental Protection Agency because many pesticides are harmful to humans and their environment. When Israel introduced the Act he stated "We require ingredient labeling for the food we put in our mouths, but not for the soap in which we wash our plates. The lack of labeling required for household products is ludicrous, it's dangerous, and it's due for a change."

References

Consumer Product Ingredient Communication Initiative. (September 2009). Consumer Specialty Products Association. 20 September 2009 http://www.cspa.org/public/media/info/cpici.html

Recent Developments Under the TSCA

By John J. Kowalski, CHMM

The U.S. Environmental Protection Agency (EPA) has recently taken a number of actions under the Toxic Substances Control Act (TSCA). These actions include the following:

- changing certain chemical substance identities from confidential to non-confidential on the TSCA Inventory;
- promulgating and withdrawing Significant New Use Rules (SNURs);
- announcing the receipt of the 64th Interagency Testing Committee (ITC) report; and
- announcing the receipt of a TSCA Section 21 Petition regarding lead wheel balancing weights.

Each of these actions is briefly summarized below.

On July 28, 2009, EPA published a notice in the Federal Register to announce that it was updating the TSCA Inventory to list 530 chemical substances as non-confidential that were previously listed as confidential. EPA stated in the notice that this action was necessary because the substances in question no longer qualify for listing as confidential on the Inventory. The Agency also stated that the update was effective as of July 22, 2009. However, the substances were still listed as confidential on the July 2009 release of the TSCA Inventory on CD-ROM, as purchased from the National Technical Information Service (NTIS) under Product Code PB2009500035.

On June 24, 2009, EPA published a direct final rule in the Federal Register establishing SNURs under TSCA Section 5(a)(2) for 23 chemical substances which were the subject of premanufacture notices (PMNs), including Multi-walled carbon nanotubes (PMN P-08-177) and Single-walled carbon nanotubes (PMN P-08-328). EPA stated that the effective date of this rule was August 24, 2009 unless it received written adverse or critical comments, or notice of intent to submit adverse or critical comments, before July 24, 2009. EPA further stated that if it received written adverse or critical comments, or notice of intent to submit adverse or critical comments, on one or more of these SNURs before July 24, 2009, it would withdraw the relevant sections of this direct final rule before its effective date and issue a proposed SNUR, with a 30-day period for public comment, for the chemical substance(s) on which adverse or critical comments were received.

On July 8, 2009, EPA published a final rule in the Federal Register establishing SNURs for two more chemical substances which were the subject of PMNs. The two substances are Dodecanedioic acid, 1,12-dihydrazide (CAS No. 4080-98-2; PMNs P-01-759 and P-05-555) and Thiophene, 2,5-dibromo-3-hexyl- (CAS No. 116971-11-0; PMN P-07-283). This final rule took effect on August 7, 2009.

On August 21, 2009, EPA withdrew the SNURs for Multi-walled carbon nanotubes (PMN P-08-177) and Single-walled carbon nanotubes (PMN P-08-328). The Agency published these SNURs using direct final rulemaking procedures. However, it received a notice of intent to submit adverse comments on these rules. Therefore, EPA is withdrawing these SNURs, as required under the expedited SNUR rulemaking process. The Agency also intends to publish in the Federal Register, under separate notice and comment rulemaking procedures, proposed SNURS for these two chemical substances.

On September 18, 2009, EPA published a direct final rule in the Federal Register establishing SNURs for 12 more chemical substances which were the subject of PMNs. EPA stated that the effective date of this rule would be November 17, 2009 unless it receives written adverse or critical comments, or notice of intent to submit adverse or critical comments, before October 19, 2009. EPA further stated that if it receives written adverse or critical comments, or notice of intent to submit adverse or critical comments, on one or more of these SNURs before October 19, 2009, it will withdraw the relevant sections of this direct final rule before its effective date and issue a proposed SNUR, with a 30-day period for public comment, for the chemical substance(s) on which adverse or critical comments are received.

On August 4, 2009, EPA published a notice in the Federal Register announcing the receipt of the 64th ITC report. This report detailed significant activities by the ITC during the reporting period of November 2008 to May 2009, particularly with respect to nanoscale materials. However, it made no revisions to the TSCA Section 4(e) Priority Testing List, which presently includes two alkylphenols, 12 lead compounds, 16 chemicals with insufficient dermal absorption rate data, and 207 High Production Volume Challenge Program orphan chemicals.

On July 15, 2009, EPA published a notice in the Federal Register announcing the receipt of a petition under TSCA Section 21. The petition was submitted by the Ecology Center of Ann Arbor, Michigan and the Sierra Club et al. (petitioners) on May 29, 2009. It requests that EPA establish regulations prohibiting the manufacture, processing, and distribution in commerce of lead wheel balancing weights. A petitioner may commence a civil action in a U.S. district court to compel initiation of the requested rulemaking proceeding within 60 days of a denial of their petition, or if EPA fails to grant or deny the petition within 90 days of its filing.

References

Environmental Protection Agency. "TSCA Chemical Substance Inventory Update; Changing Certain Chemical Substances Identities from Confidential to Non-Confidential" *Federal Register 74* (28 July 2009): 37224-37225.

Environmental Protection Agency. "Significant New Use Rules on Certain Chemical Substances." *Federal Register 74* (24 June 2009): 29982-29998.

Environmental Protection Agency. "Dodecanedioic acid, 1,12-dihydrazide and Thiophene, 2,5-dibromo-3-hexyl-; Significant New Use Rules" *Federal Register 74* (8 July 2009): 32460-32465.

Environmental Protection Agency. "Certain Chemical Substances; Withdrawal of Significant New Use Rules." *Federal Register 74* (21 August 2009): 42177-42178.

Environmental Protection Agency. "Significant New Use Rules on Certain Chemical Substances." *Federal Register 74* (18 September 2009): 47877-47888.

Environmental Protection Agency. "Sixty-Fourth Report of the TSCA Interagency Testing Committee to the Administrator of the Environmental Protection Agency; Receipt of Report and Request for Comments" *Federal Register 74* (4 August 2009): 38878- 38880.

Environmental Protection Agency. "Lead Wheel Balancing Weights; TSCA Section 21 Petition; Notice of Receipt and Request for Comment" *Federal Register 74* (15 July 2009): 34342- 34345.

NIOSH Releases Final Report on Control Banding

NIOSH recently released a final report on the available literature on control banding. The text to the full document can be found at: http://www.cdc.gov/niosh/docs/2009-152/pdfs/2009-152.pdf

Look for a detailed summary of this report in the upcoming January 2010 issue of the *ChemADVISORY*.

Korea Persistent Organic Pollutants (POPs) Regulation Merges with Toxic Chemical Control Act (TCCA)

By June Kang

On June 4, 2009, the Ministry of Environment (MOE) in Korea proposed amendments to the Toxic Chemical Control Act (Ministry of the Environment Public Announcement No.2009-201 of 1 June 2009). According to the proposal, the Persistent Organic Pollutants Control Act will be merged back together with the Toxic Chemical Control Act for more efficient enforcement. Through the integration of these two laws, MOE will add another 19 articles from the POPs Act to the current TCCA. POPs were regulated under the TCCA up until the POPs Control Act; an integrated law on POPs prepared for the Stockholm Convention, was enacted on April 27, 2007, and came into force on January 27, 2008.

POPs are particularly harmful to the environment because of their toxicity which can lead to heath effects including certain cancers, birth defects, endocrine disorders, dysfunctional immune and reproductive systems, greater susceptibility to disease, and even diminished intelligence; extremely slow rates of decomposition that cause POPs to remain in the ecosystem for longer periods of time and cause greater amounts of damage; bioaccumulation that causes greater accumulation levels of POPs in the fatty tissues within the living body and ecosystem through the food chain; and long range transport meaning that POPs can travel for hundreds and even thousands of kilometers by wind and through ocean currents. The Stockholm Convention administered by the United Nations Environment Program initially specified 12 classes of POPs as chemicals subject to regulation.

The initial 12 Chemicals include:

- Aldrin
- Chlordane
- DDT
- Dieldrin
- Endrin
- Heptachlor
- Mirex
- Toxaphene
- Hexachlorobenzene (HCB)
- Polychlorinated biphenyls (PCBs)
- Dioxins
- Furans

At the fourth meeting of the Conference of the Parties in Geneva, nine more chemicals were listed under the convention on May 8, 2009.

The nine additional POPs include:

- Chlordecone
- l-hexachlorocyclohexane
- α-hexachlorocyclohexane
- Hexabromobiphenyl
- Hexabromodiphenyl ether and heptabromodiphenyl ether
- Lindane (gamma-hexachlorocyclohexane)
- Pentachlorobenzene
- Perfluorooctanesulfonic acid (PFOS), its salts and perfluorooctanesulfonyl fluoride
- Tetrabromodiphenyl ether and pentabromodiphenyl ether.

With the amendments of the TCCA, MOE will improve chemical management by introducing cut-offs for PCBs – containing equipment or waste. It will be restricted to the import or export of any product that contains 2 milligrams or more of PCBs. MOE will also introduce management standards for waste treatment that enforces business owners and their facilities to comply, and will be more restrictive for the emission of POPs above the limit.

Besides merging the two Acts in the amendments, advanced notice of prohibited or restricted chemicals will be given to industry before the designation to allow businesses to find or develop alternative substances or technologies.

The amended TCCA is expected to be in effect later this year after examination and submission of the bill.

References

"Ministry of Environment introduces Pre-Notification Policy before the designation of Restricted or Prohibited Chemicals," Korea Policy Portal, 4 Jun 2009, http://korea.kr/newsWeb/pages/brief/partNews2/view.do?toDate=2009.01.12&fromDate=2008.02.29&dataId=155352518

Seo Hae-Yeop, "The main contents and vision for advance of Toxic Chemical Control Act." Ministry of Environment, 16 Sep 2009, Open Seminar on Chemical Management Policies among China, Japan and Korea, Beijing, http://www.reach24h.com/index.php?option=com_content&view=article&id=357:rcs-attends-open-seminar-on-chemical-management-policies-among-china-japan-and-korea&catid=42:news&Itemid=78

"The National Implementation Plan of the Republic of Korea under the Stockholm Convention on Persistent Organic," Secretariat of the Stockholm Convention: Geneva, Apr 2009, (http://chm.pops.int/Countries/NationalImplementation/tabid/253/language/en-US/Default.aspx), Retrieved 16 Sep 2009.

"Governments unite to step-up reduction on global DDT reliance and add nine new chemicals under international treaty," Secretariat of the Stockholm Convention: Geneva, 8 May 2009, http://chm.pops.int/Convention/Pressrelease/COP4Geneva8May2009/tabid/542/language/en-US/Default.aspx

ChemADVISOR training in Nashville on REACH
From left to right:
Susan Davis, Jamie Elliott, Marcia Quehl, Brian Harmon, Caroline Miller, Adriene Bopp, Daniel Dodor, Melissa Delaney, Brenda Duncan & Jennifer Mahoney

New Lithium Battery Requirements for Air Transport

By Kevin Lapp

In the 2009 ICAO (International Civil Aviation Organization) Technical Instructions and IATA (International Air Transport Association) Dangerous Goods Regulations, requirements for lithium batteries have been expanded from two UN numbers to four.

Before 2009

- UN3090 Lithium batteries
- UN3091 Lithium batteries contained in equipment or Lithium batteries packed with equipment

Effective 2009

- UN3090 Lithium metal batteries (including lithium alloy batteries)
- UN3480 Lithium ion batteries (including lithium polymer batteries)
- UN3091 Lithium metal batteries contained in equipment or Lithium metal batteries packed with equipment (including lithium alloy batteries)
- UN3481 Lithium ion batteries contained in equipment or Lithium ion batteries packed with equipment (including lithium polymer batteries)

The new UN numbers were established in order to better identify the type of lithium battery. Unless accepted these batteries must be shipped in quantities that comply with the quantity limits and specification packaging requirements prescribed by ICAO and IATA. The completed package must display a class 9 label along with the markings that identify the proper shipping and UN number. A shipper's declaration for dangerous goods is also required.

Exceptions

Small lithium metal and lithium ion batteries are accepted from most of the requirements in ICAO and IATA provided they comply with the all the requirements of the new Part 1 of the particular packing instructions. Part 1 replaces special provision A45. Packages that do meet all the requirements of Part 1 are not required to have a class 9 hazard label and there is no requirement for a shipper's declaration for dangerous goods. However, Part 1 now requires a new lithium battery handling label as shown below.

Lithium metal batteries shipped to, from, or through the U.S. are subject to additional limitations as specified by DOT in 49CFR. Primary lithium metal batteries and cells (UN3090)* are forbidden aboard passenger aircraft and must be labeled with the cargo aircraft only label and must be marked "FORBIDDEN FOR TRANSPORT ABOARD PASSEGER AIRCRAFT".

Primary lithium metal batteries and cells contained in or packed with equipment (UN3091)* are forbidden for transport aboard passenger aircraft unless the following conditions are met.

1. The equipment, batteries, and cells are transported in accordance with packing instructions 969 or 970 as appropriate.
2. The package contains no more than the number of lithium batteries or cells necessary to power the equipment.
3. The lithium content of each cell when fully charged is not more than 5 grams.
4. The aggregate lithium content of the anode of each battery when fully charged is not more than 25 grams.
5. The net weight of the lithium battery does not exceed 5 kg.

Primary lithium metal batteries contained or packed with equipment (UN3091)* that do not conform to the conditions outlined above must be labeled with the cargo aircraft only label and be marked "PRIMARY LITHIUM BATTERIES - FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" or "LITHIUM METAL BATTERIES - FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT".

* The U.S. DOT has not yet formally adopted the new international UN numbers and shipping names. However, in a docket published on 8/25/09 they have authorized their use within the U.S. and expect to formally adopt the changes in the future.

References

IATA guidance document on the transport of lithium batteries
http://www.iata.org/NR/rdonlyres/480246B4-C9A3-4E19-AA94-38AE5472DDF4/0/GuidanceDocumentonthetransportofLiBatt_2009V2.pdf

DOT docket -
http://edocket.access.gpo.gov/2009/pdf/E9-20343.pdf

ChemADVISOR Earns Kodak Supplier Certification

Continued from page 1

ChemADVISOR has been working with Kodak since 2005 to create the highest quality (M)SDSs and labels for the international marketplace. More recently we have been proud to offer our LOLI-SAP EHS&T Compliance Suite in support of Kodak's SAP EH&S Module.

"It has been a real credit to the teams working at both Kodak and at ChemADVISOR that this relationship has progressed the way it has," said ChemADVISOR president, Andrew Dsida. "The scope and quality of what we are providing for Kodak have expanded significantly through the years and we are hoping for and expecting this trend to continue."

About Certified Supplier Status

This certification recognizes ChemADVISOR's ability to consistently meet Kodak's performance expectations for quality and value. In addition, it shows that ChemADVISOR has demonstrated a sound and effective quality and operational management system that meets Kodak's requirements for Certification.

Tim Pierce is an IT Specialist for ChemADVISOR in Pittsburgh. He also serves as a Technical Sergeant for the 171st Air Refueling Wing. in the Air National Guard. Tim recently was called up to provide security for the recent G20 summit in Pittsburgh. We'd like to offer Tim a hearty thanks for his service.

Upcoming Events

SCHC Fall Meeting
Washington, DC
October 3-7

ESS.EXPO
San Antonio, Texas
October 4-8

ChemCon Europe
Prague, Czech Republic
March 1-5

We look forward to seeing you there!