NEWSLETTER

Global Environmental and Chemical Regulations, Policies, and Standards
October 2021

IAEG INTERNATIONAL AEROSPACE ENVIRONMENTAL GROUP
10-YEAR ANNIVERSARY

WHO IS IAEG?

The International Aerospace Environmental Group (IAEG) is a non-profit organization of global aerospace companies created to collaborate on and share innovative environmental solutions for the industry. The group works to promote the development of voluntary consensus standards and provide accessible solutions for key environmental issues.

Members of IAEG recognize that there are currently a wide variety of different laws and regulations impacting health and the environment in place worldwide. The complexity and variability of requirements and guidance has led to an increased burden for the industry and its supply chain.

IAEG work groups address such issues as chemical material declarations and reporting requirements, the development of alternative technologies and greenhouse gas reporting and management. They create a forum for diverse and often competitive businesses to come together and share information on industry-wide opportunities for the promotion and adoption of global environmental requirements. In addition, IAEG provides opportunities for wider education on environmental issues and the supply chain via its meetings agendas and bespoke seminars.

IAEG WORK GROUP 9 NEWSLETTER

The Aerospace and Defense (AD) industry is committed to developing an approach to help the AD industry evaluate emerging global environmental and chemical regulations and their impact on compliance and potential operational risk for companies and their supply chain. The objectives are to:

- Maintain a list of global regulations, policies and standards considered and to be considered, including executive summaries of those regulations.
- Develop a method to evaluate designated emerging regulation's potential impact on compliance and/or operational risk, business continuity and/or impact on supply chain.
- Develop summaries of the associated timeline for regulations (e.g., deadlines) and highlight the specific impacts.
- Develop communication materials and conduct informational webinars, as appropriate, for member companies and/or AD supply chain companies, as appropriate.

This Newsletter summarizes environmental and chemical regulations relevant to the AD industry. Contact Lisa Brown at myrna.l.brown@lmco.com or Lindsey Bean at lindsey.bean@ngc.com for any questions on this Newsletter. For general assistance on IAEG matters, contact Christer Hellstrand at chellstrand@iaeg.com or Amanda Myers at Amanda.Myers@sae.org.

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China

List of Controlled Ozone Depleting Substances (in effect)

The Chinese Ministry of Environmental Protection, Development, and Reform Commission and Ministry of Industry and Information Technology published the revised List of Controlled Ozone Depleting Substances (the List) in China (Announcement No. 44 of 2021), taking effect immediately.

The updates to the List are as follows:

- addition of new types of controlled substances – a category of 18 types of hydrofluorocarbons was added (in line with the Kigali Amendment to the Montreal Protocol), with their main uses and reduction obligations
- clarification of the "controlled substances" definition – the chemicals in the Annexes of the Protocol and all their isomers are clarified as controlled substances of the Protocol
- updating of chemical information involving Chinese names, global warming potentials, and ozone depletion potentials of some substances in the List to be consistent with the Protocol

The List serves as a basis for the control of the production, sale, use, import, and export of controlled substances in China.

Penalties for non-compliance include fines and/or imprisonment.

The List can be found here in English and in Chinese.

Notice to consult on the addition of 23 substances into the Inventory of Existing Chemical Substances (draft amendment)

The Chinese Ministry of Ecology and Environment (MEE) initiated the consultation on adding 23 substances in the Inventory of Existing Chemical Substances (IECSC). Companies proposed these substances based on either “manufactured in” or “imported into China” (before 15 October 2003), which fulfilled the supplementation criteria but missed the previous supplementation window. These substances will be regulated as existing chemical substances in China. This approach will avoid new chemical registration or notification requirements under MEE Order No. 12.

Proposals to add substances to the inventory using these criteria are now expected to become a regular occurrence. The deadline for comments was 13 October 2021.

The list of 23 substances and other information can be found here in English and in Chinese.

Pollutant Management Action Plan (draft plan)

On 11 October 2021, China's Ministry of Ecology and Environment released a Draft Pollutant Management Action Plan to solicit comments, which were accepted until 22 October 2021. The draft plan was developed to more effectively manage pollutants that pose risks to the environment and/or human health but are not managed yet or cannot be managed through existing measures.

A total of 28 substances or substance groups are identified as new pollutants in the draft plan:

- 1 endocrine disruptor
- 10 substances regulated by the Stockholm Convention on Persistent Organic Pollutants
- 10 substances controlled by the Stockholm Convention, which have previously been produced and used in China but are now banned
- 6 substances on the Hazardous Air Pollutant List and Hazardous Water Pollutant List
- antibiotics

The draft plan integrates new chemical management that imposes strict penalties on offenders by:

- banning the production, processing, use, import, and export of hexabromocyclododecane from December 26, 2021
- banning the sale of personal and home care products containing microbeads by the end of 2022
- banning the production, processing, use, import, and export of perfluorohexanesulfonic acid (PFHxS), decabromodiphenyl ether, short-chain chlorinated paraffins, pentachlorophenol and its salts and esters, hexachlorobutadiene, and dechlorane plus in phases by the end of 2025
- banning the use of nonylphenol in pesticide formulations
- restricting the production, processing, and use of perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) compounds

Carrying out special spot checks on companies involved in new chemical registration and on-the-spot inspections of the quality of registration test data are permitted according to the draft plan.

More information can be found here on the draft plan and on the draft solicitation of comments.

India

Ratification of Kigali Amendment to the Montreal Protocol on substances that deplete the ozone layer (published)

On 4 October 2021, the United Nation Secretary General published a notice that India has ratified the Kigali Amendment to the Montreal Protocol on substances that deplete the ozone layer on 27 September 2021. Used as refrigerants, solvents, fire suppressants, foam blowing agents, aerosols, and propellants, there are currently 18 hydrofluorocarbons (HFCs) listed under the Kigali Amendment.

India, as a Group 2 developing country, is set to follow a HFC phase-out schedule after implementing a freeze in 2028:

- 2032 – reduce to 90% or less of baseline consumption
- 2037 – reduce to 80% or less of baseline consumption
- 2042 – reduce to 70% or less of baseline consumption
- 2047 – reduce to 15% or less of baseline consumption

For more information refer to these frequently asked questions on the Kigali Amendment. Other information on the Kigali Amendment can be found here in French.

Consultation on draft Indian standard- monomeric methylene diphenyl diisocyanate (MDI) and polymeric MDI specification (draft amendment)

The Bureau of Indian Standard (BIS) called for comments (were due 20 October 2021) from industry stakeholders on the draft of the revised standard on specifications of methylene diphenyl diisocyanate (MDI). MDI is a family of chemical substances with structural similarities. The substances may be in the monomeric or polymeric forms. The monomeric MDI (MMDI) is used in the manufacture of sealants, adhesives, paints, and varnish coatings. The main application of polymeric MDI (PMDI) is in the manufacture of rigid foams to insulate refrigeration equipment, houses, and cars.

The standard was first published in 2020 aiming to place MDI under a mandatory quality control order. The draft revision describes the requirements and the sampling/test methods for MMDI and PMDI. The proposed specifications also include new limits for isocyanate content, acidity level, and viscosity. Some new requirements for mandatory packaging labels are also presented in the revised version of the standard.

More information can be found here.

Japan

2022 schedule for manufacturing/import notification of new chemical substances, etc. under the Chemical Substance Control Law (published)

On 16 September 2021, Japan's Ministry of Economy, Trade, and Industry (METI) published the 2022 schedule for companies to notify new chemical substances manufactured or imported at more than one tonne per year under the Chemical Substances Control Law (CSCL). The CSCL divides substances into the categories of existing and new chemicals. New chemicals must be notified and evaluated by METI, the Ministry of Labor and Welfare, and the Ministry of the Environment at least three months prior to manufacture or import.

Notifications should be made through the online "National Institute of Technology and Evaluation Chemical Substances Control Law Communication System" for evaluation. METI conducts risk assessments before and after the substances are placed on the market.

Notifications must include:

- company name and address
- the name of the responsible agent or notifier
- substance identifiers (including chemical structure and formula)

The ministry said it plans to release the 2023 schedule next September.

Penalties for non-compliance include fines up to one million yen and/or imprisonment up to three years.

More information can be found here in English and in Japanese.

Supplementary provisions of the Ordinance on the Examination and Production of Chemical Substances (published)

The Japanese Ministry of Environment's amended the Ordinance on the Examination and Production of Chemical Substances, which concerns the labelling of containers, packaging, and invoices of products, in which perfluorooctane sulfonic acid (PFOS; CAS No. 1763-23-1) and its salts are used, was published, and promulgated on 21 September 2021. This legislation aims to establish labelling measures to reduce or prevent environmental pollution by specific chemical substances – the substances included are now perfluorooctanoic acid (PFOA; CAS No. 335-67-1) and its salts as well as PFOS and its salts.

The labelling requirements for containers, packaging, and invoices of products in which PFOS or its salts, or PFOA or its salts are used include:

- specifying on the label that PFOS or its salts, or PFOA or its salts are used
- stating on the label that PFOS or its salt, or PFOA or its salt is a Class I Specified Chemical Substance
- giving the content rate of PFOS or its salt, or PFOA or its salt on the label

There are no non-compliance provisions associated with this update.

More information can be found here in Japanese.

Part of the Ministerial Ordinance that stipulates technical standards for fire extinguishers, fire extinguishing agents for fire extinguishers, and foam fire extinguishing agents (published)

The Japanese Ministry of the Environment's Ministerial Ordinance, which concerns technical standards for fire extinguishers that use perfluorooctane sulfonic acid (PFOS), was published, and promulgated on 21 September 2021. This legislation amends the scope of technical standards for liquid waste containing PFOS and its salts, or cloth or other unwanted materials to which PFOS and its salts are attached. Now, perfluorooctanoic acid (PFOA) and its salts are also included in the scope of the legislation ('PFOS and its salts' is replaced by 'PFOS and its salts, and PFOA and its salts').

There are no non-compliance provisions associated with this update.

More information can be found here in English and in Japanese.

Regarding the results of the Cabinet Order and the solicitation of opinions of the "Cabinet Order to partially revise the Law Enforcement Ordinance Concerning Understanding of Emissions of Specified Chemical Substances into the Environment and Promotion of Improvement of Management" (published)

Japan's Ministry of Economy, Trade, and Industry (METI) released a revised list of chemical substances under the Pollutant Release and Transfer Register (PRTR) Law. Based on the PRTR law, chemical companies must provide safety data sheets (SDS) as the main hazard communication document between the users of the substances.

METI added 53 substances to Class I and 34 substances to Class II chemicals list. For Class I substances, the suppliers must submit an annual report to the Ministry of Environment (MoE) and provide SDS to the downstream users. The report to the MoE must include an estimation of the amount of chemical substance released into the environment and the quantity of

the substance handled over a year. Suppliers of Class II substances do not need to comply with annual PRTR reporting obligation but providing an SDS is a mandatory requirement.

METI also introduced a new numbering system for the chemicals listed under the PRTR. This system facilitates finding the compliance requirements including the PRTR reporting obligations for chemical substances. The new numbering system will be used for the notification of chemical substances in 2024.

Penalties for non-compliance include fines.

More information can be found here in Japanese.

Philippines

Consultation on Mandatory Requirements for Mercury Added Products in Electronic Products (draft law)

The Philippines' Department of Trade and Industry has issued the Draft Department Administrative Order (DAO) on the New Technical Regulation Concerning the Mandatory Product Certification of Mercury Added Products for public consultation. The draft DAO highlights the mandatory labelling and certification requirements. The Philippines embraces this opportunity to implement the Minamata Convention on Mercury as it relates to the products.

According to the draft DAO, products that do not comply with the restrictions and labelling and certification requirements would not be licensed. These products would also be banned from sale and other possible penalties might be applicable. All manufacturers of these products are required to apply for the Philippine Standard Certification Mark License and importers are required to apply for the Import Commodity Clearance.

Comments were due to the Bureau of Philippine Standards by 7 December 2021.

For more information you can refer to the draft regulation and to the list of mercury products included in the regulation.

The New Technical Regulation Concerning the Mandatory Product Certification of Mercury added products (draft law)

On 12 October 2021, the Philippine's Department of Trade and Industry published a draft Department Administrative Order to limit the mercury content in electrical and electronic products, and the mandatory labelling and certification requirements. This was done to implement Philippine's responsibilities under the Minamata Convention on Mercury after ratification on 8 July 2020.

The draft order requires the manufacturers of mercury containing products to apply for the Philippine standard (PS) certification mark and for importers to obtain import commodity clearance (ICC). Product labels must include markings referencing the relevant national standards, the PS or ICC marking, the mercury content (in mg), and the general labelling requirements under the Consumer Act of the Philippines. The draft order sets mercury content limits for several products, including batteries, switches and relays with very high accuracy capacitance, high frequency radio frequency switches, and multiple types of fluorescent lamps.

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The penalties for products not complying with the requirements include lack of licensing, ban from sale, and subject to removal from the market.

Comments were due on 7 December 2021.

More information can be found here.

South Korea

Results of hazard assessment of chemical substances (in force)

The National Institute of Environmental Science has announced the results for the hazard examination in accordance with Article 21 of the Act on Registration and Evaluation of Chemical Substances (K-REACH) to disclose the results of hazard review and Article 28 of the Enforcement Regulations of the same Act. K-REACH regulates the designation of hazardous chemical substances through registration and evaluation. Following the hazard examination, the Ministry of Environment can classify substances into the following four categories: toxic substance, authorization substance, restricted substance, or prohibited substance.

The results of the hazard examination for 90 new chemical substances can be found here.

Regulations on regulated quantities of toxic substances, restricted substances, prohibited substances, and permitted substances (draft amendment)

The South Korean Ministry of Environment has published a draft amendment to the Regulations on regulated quantities of toxic substances, restricted substances, prohibited substances, and permitted substances. This regulation is made in accordance with the Enforcement Regulations of the Chemical Control Act. The draft amendment includes the addition of 23 new substances (No. 2021-1-1057~2021-1-1079) that would now be classified as toxic substances in Appendix 1 (amendments seen in blue text), and their upper and lower prescribed quantities. The amendment also updates CAS numbers for the following two substances that were previously designated as toxic:

- oleic acid compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (CAS No. 40027-38-1)
- acetonitrile; methyl cyanide (CAS No. 75-05-8)

Comments were due on 28 October 2021.

More information can be found in the draft amendment and in the administrative notice.

Taiwan

Amendment to the Greenhouse Gas Reduction and Management Law (draft amendment)

On 21 October 2021, the Taiwan Environmental Protection Agency published a draft amendment to the Greenhouse Gas Reduction and Management Law. The Law contains provisions for the management of greenhouse gas reduction in line

with international standards to achieve a net zero greenhouse gas emission target in 2050. The major revisions are noted below:

- long-term goals for net-zero emissions
- increasing the power of the governing agency
- addition of the performance standards with which manufacturing processes, equipment, or appliance should comply
- penalties for violating the requirement to meet performance standards

Interested parties are invited to provide comments until the deadline of 20 December 2021.

More information can be found here in English and in Chinese.

European Union

Call for evidence to support the preparation of a restriction proposal on medium chain chlorinated paraffins (draft amendment)

Following the request from the European Commission, the European Chemicals Agency (ECHA) is preparing a restriction dossier on the manufacture, use (industrial, professional, consumer), and placing on the market of medium chain chlorinated paraffins (MCCP) in substances, mixtures, and articles. MCCP is used in adhesives and sealants, in polyvinylchloride (PVC), in rubber, in metalworking fluids, in paints and coatings, in textiles and fabrics, and in paper. In view of these concerns and to reduce the releases and exposures of MCCP into the environment, ECHA is considering proposing a ban as the default EU-wide risk management option. The call for evidence is to support the preparation of a restriction proposal on MCCP. The information gathered will be used to assess the risks from the use of MCCP and the socio-economic impacts of any restrictions proposed to address the risks. Comments were due on 7 November 2021.

More information can be found in the registry of restriction intentions until outcome.

ECHA opens consultation period on harmonized classification and labelling of sodium 3-(allyloxy)-2-hydroxypropanesulphonate (draft amendment)

The European Chemicals Agency (ECHA) opened a consultation period to invite comments on the hazard classes of sodium 3-(allyloxy)-2-hydroxypropanesulphonate (CAS No. 52556-42-0; EC No. 258-004-5) used in manufacturing of chemicals, plastics, paint, surface treatments; in corrosion inhibitors and anti-scaling agents as well as in adhesives, paints, coatings, resin products, and water treatment products.

Comments were due on 3 December 2021.

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More information can be found in the registry of CLG intentions until outcome.

Third European Union Environmental Implementation Review (draft amendment)

The third European Union (EU) Environmental Implementation Review (EIR), which aims to improve the implementation of EU environmental law and policy in EU Member States, was published on 20 September 2021 and is expected to be adopted in 2022 (comments were due on 18 October 2021). The first and second EU EIRs were adopted in February 2017 and April 2019, respectively.

The enhancement of the implementation of EU environmental legislation will be achieved by thorough analysis of the implementation of these legislations in EU Member States, identification of any implementation gaps, and consultation and collaboration to find solutions for any issues.

The third EU EIR will have the following:

- 27 country reports (Staff Working Documents) – this will outline the compliance (including good practices, points of excellence and any challenges faced) of each Member State with the obligations under the EU environmental legislation
- Communication (policy paper) – this will provide policy proposals and guidance to Member States (priority actions)

More information can be found here.

European Union Regulation 649/2012 regarding the rules on international trade of hazardous chemicals (draft amendment)

The European Commission has invited comments for their draft amendment to the European Union (EU) Regulation 649/2012 (published on 19 October 2021), which concerns the rules on the international trade (export and import) of hazardous chemicals. The draft amendment aims to prevent unwanted imports and ensure safety information (e.g., hazards, risks, and safe handling) is provided for hazardous chemicals that are exported.

The draft amendment makes the following changes to EU Regulation 649/2012:

- Annex I (substances subject to export restrictions) – adding some pesticides that are banned in the EU
- Annex V (substances that cannot be exported) – adding some pollutants and mercury products

Comments were due by 16 November 2021.

More information can be found here.

Poland

Poland ratifies Minamata Convention on Mercury (published)

On 5 October 2021, the United Nation Secretary General published a notice that Poland has ratified the Minamata Convention on Mercury (the Convention) on 30 September 2021. The Convention is an international treaty designed to protect human health and environment from the harmful effects associated with anthropogenic emissions and releases of

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mercury and its compounds. The Convention addresses mercury throughout its whole life cycle, from mining through to its management as waste. The Convention applies to mercury, mercury compounds, and products or product components that contain intentionally added mercury or a mercury compound (mercury-added product).

More information on the Convention can be found here in French.

Romania

Order No. 1,461 / 2021 on restrictions on the use of certain hazardous substances in electrical and electronic equipment (published)

The 6 September 2021 Romanian Ministry of Environment, Water and Forest's Order 2021 amends the previous Romanian Order No. 1,601 of 27 June 2013 ("Order 2013") on electrical and electronic equipment (EEE) restrictions and implements the European Commission Delegated Directive (EU) 2021/647 of 15 January 2021 on the use of certain lead and hexavalent chromium compounds in electrical and electronic initiators of explosives.

Annex No. 1 of Orders 2013 and 2021 provides a list of substances (for various uses), which have derogation from the EEE restrictions under the Government Decision No. 3222 / 2013 on restrictions on the use of certain hazardous substances in EEE.

Order 2021 amends Order 2013 by adding Point 45 to Annex No. 1 (applies to lead uses specified in Category 11, and expires on 20 April 2026), which includes the following substances:

- lead diazide (CAS No. 13424-46-9), lead styphnate (CAS No. 15245-44-0), lead dipicramate (CAS No. unavailable), lead tetroxide (CAS No. 1314-41-6), and lead dioxide (CAS No. 1309-60-0) in electrical and electronic initiators of explosives for civil (professional) use
- barium chromate (CAS No. 10294-40-3) in long time pyrotechnic delay charges of electric initiators of explosives for civil (professional) use

Annex No. 1 contains a list of uses exempted from the restrictions in the regulation.

There are no non-compliance measures associated with this update.

More information can be found here in English and in Romanian.

Switzerland

Draft Amendment to Federal CO_2 Emission Reduction Act (draft amendment)

The Swiss Federal Council published a draft amendment to the Federal CO_2 Emission Reduction Act (CO_2 Act) on 4 October 2021. The CO_2 Act aims to reduce greenhouse gas (GHG) emissions, particularly CO_2 emissions, which result from the use of fossil fuels (thermal and motor fuels) as energy sources. By 2030, Switzerland must reduce GHG emissions by at least 50% of the 1990 level. This is in accordance with the Paris Climate Agreement, which Switzerland ratified on 6 October 2017.

On 13 June 2021, a referendum on the previous revision of the CO_2 Act was carried out. The Swiss electorate rejected this revision. The draft amendment addresses the issues highlighted by the voters such as high CO_2 tax. In addition, the

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requirement to reduce the GHG emissions by 21.5% (compared to 1990) has been extended to 2024 (Article 3 of the Draft Amendment). An average of 19.5% GHG emissions reduction (compared to 1990) must be achieved for the period of 2021 to 2024. If this cannot be achieved, the Federal Council shall submit an investment program for climate protection to the Parliament.

The draft amendment may be subject to a referendum. If a referendum does not take place, the draft amendment will enter into force on 1 January 2022. Otherwise, the Federal Council may alter the in-force date.

More information can be found here in English and in French.

United Kingdom

UK REACH: grandfathered registrations notified substances list (published)

The United Kingdom (UK) Department for Environment, Food, and Rural Affairs (DEFRA) has published a "UK REACH: grandfathered registration notified substances list," which contains the names and CAS/EC numbers for substances taken from notifications made under Article 127B(4)(a) of UK REACH.

This article required registrants of a former EU REACH registration "grandfathered" into UK REACH to notify the Health and Safety Executive (HSE) of basic information about their registration ("initial transitional data"). The list includes data provided through 1 July 2021 and can be downloaded from the link provided below. However, note that DEFRA does not guarantee the accuracy of the information, nor does it claim this list to be a complete and verified list of all substances with registrations that were transferred into UK REACH.

Substances will not appear on the list if:

- no initial transitional data has been submitted
- the initial transitional data is confidential
- the substance is only imported by a new registrant or a former downstream user or distributor

Penalties for non-compliance with UK-REACH include fines and/or imprisonment.

More information can be found here.

Plastic packaging tax (published)

The United Kingdom (UK) has introduced "Plastic Packaging Tax", effective from 1 April 2022, to encourage the use of recycled plastic rather than new plastic within packaging. The aim of the tax is to provide a clear economic incentive for businesses to use recycled plastic. The tax will be applicable to plastic packaging manufactured in or imported into the UK that contain less than 30% recycled plastics. Imported plastic packaging will be liable to the tax as well, even if the packaging is unfilled or filled with goods (e.g., plastic bottles with drinks).

Applicable stakeholders include:

- UK manufacturers of plastic packaging
- importers of plastic packaging

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- business customers of manufacturers and importers of plastic packaging
- consumers who buy plastic packaging or goods in plastic packaging

The rate of the tax would be £200 per metric tonne of plastic packaging. It is expected to impact approximately 20,000 manufacturers and importers of plastic packaging. However, exemptions are also applicable for manufacturers and importers of less than 10 tonnes of plastic packaging per year. Businesses will need to keep records and register for the tax even if all the manufactured or imported packaging contains more than 30% recycled plastic.

Penalties for non-compliance include civil and criminal penalties for failing to comply with the tax. This includes penalties for failure to register, failure to file returns, and failure to pay the tax.

More information can be found in this guidance overview. Additional details can be found here.

Restriction of the use of certain hazardous substances in electrical and electronic equipment Regulations (draft amendment)

On 24 September 2021, the United Kingdom published a draft amendment on restrictions of hazardous substances (RoHS) in electrical and electronic equipment. This will amend the RoHS Regulations 2012 and apply to England, Wales, and Scotland. The following amendments are made:

- Article 2(2) of Draft Amendment – extension of the use of four restricted substances to medical devices, and monitoring and control instruments in Schedule A1:
  - bis(2-ethylhexyl) phthalate (DEHP; CAS No. 117-81-7)
  - butyl benzyl phthalate (BBP; CAS No. 85-68-7)
  - dibutyl phthalate (DBP; CAS No. 84-74-2)
  - disobutyl phthalate (DIBP; CAS No. 84-69-5)
- Article 2(3)(b) of Draft Amendment – addition of Entry No. 96 to Table 1 of Schedule A2 (applies to lead uses specified in Category 11, and expires on 20 April 2026), which includes the following substances:
  - lead diazide (CAS No. 13424-46-9), lead styphnate (CAS No. 15245-44-0), lead dipicramate (CAS No. unavailable), lead tetroxide (CAS No. 1314-41-6), and lead dioxide (CAS No. 1309-60-0) in electrical and electronic initiators of explosives for civil (professional) use
  - barium chromate (CAS No. 10294-40-3) in long time pyrotechnic delay charges of electric initiators of explosives for civil (professional) use

Schedule A2 specifies the applications that are exempt from the restrictions given in Regulation 3(1) of the RoHS Regulation 2012.

Comments were due on 23 November 2021.

More information can be found here.

UK REACH Testing Proposal 005 (draft amendment)

The United Kingdom (UK) Health and Safety Executive (HSE) published a testing proposal to gather relevant hazard information for the substance (E)-N-{6-[(E)-({2-[2-(heptan-3-yl)-1,3-oxazolidin-3-yl]ethoxy}(hydroxy)methylidene)

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amino]hexyl}{2-[2-(heptan-3-yl)-1,3-oxazolidin-3-yl]ethoxy}carboximidic acid (CAS No. 140921-24-0, EC No. 925-259-5). Per the European Chemicals Agency poison center, the substance is used in adhesives.

Targeted hazard endpoints are:

- repeated dose 90-day oral toxicity study in rodents (OECD 408)
- prenatal developmental toxicity study in rodents (OECD 414)
- long-term toxicity to fish (OECD 210)

During the consultation, which ended on 6 December 2021, interested parties could provide comments, studies, and scientifically valid information that address the relevant substance and targeted hazard endpoint(s). All information and comments should be provided via the online platform.

More information can be found in this overview.

United States

EPA extends the submission deadline for the health and safety data reporting on 20 high-priority substances and 30 organohalogen flame retardants (in force)

The US Environmental Protection Agency (EPA) published a Final Rule on 29 June 2021 requiring manufacturers, including importers, of 50 specified chemical substances to report certain lists and copies of unpublished health and safety studies to EPA. The affected substances were the 20 designated by EPA as high-priority substances and the 30 organohalogen flame retardants being evaluated for risks by the Consumer Product Safety Commission under the Federal Hazardous Substances Act.

EPA extended the reporting deadline until 1 December 2021 for the 20 high-priority substances and 25 January 2022 for the 30 organohalogen flame retardants. This requirement is applicable for companies manufacturing or importing any of the 50 substances.

There are no non-compliance provisions associated with this update.

More information can be found here.

Phasedown of hydrofluorocarbons: Establishing the allowance allocation and trading program under the American Innovation and Manufacturing Act (published)

On 5 October 2021, the United States Environmental Protection Agency (EPA) published a Final Rule that sets out the methodology for phasing down hydrofluorocarbons (HFCs) over the next two years. The Final Rule implements parts of the

American Innovation and Manufacturing (AIM) Act and incorporates EPA's provisions that were given in the Proposed Rule (published 19 May 2021). It also implements a request from industry groups to seek a larger time frame for setting baseline HFC allowances.

The Final Rule sets out the baseline HFC production and consumption levels and caps emissions at 90% of those levels until the end of 2023. Future regulations will implement further HFC reductions up to 2036; an 85% reduction in the production and consumption of 18 types of HFCs by 2036 is required.

EPA will also issue "application-specific allowances" for the following six essential uses specified under the AIM Act:

- metered dose inhalers
- self-defense sprays, like pepper or bear spray
- structural composite preformed polyurethane foam used in marine and trailer applications
- semiconductors
- mission-critical military end uses, such as developing and maintaining military vessels or equipment
- on-board aerospace fire suppression

An electronic tracking system has also been established to ensure compliance with the phase down requirements. This will track the movement of HFCs through commerce.

Penalties for non-compliance include banning a company and its owner(s) receiving future allowances from the EPA.

More information can be found here.

PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024 (published)

On 18 October 2021, the United States Environmental Protection Agency (EPA) issued a strategic roadmap for addressing per- and polyfluorinated substances (PFAS). The roadmap sets out several initiatives including imposing new testing and reporting requirements, strengthening the Toxic Substances Control Act (TSCA) review of new PFAS, and tightening restrictions on existing ones. The roadmap sets out a number of initiatives including:

- setting timelines that have enforceable drinking water limits under the Safe Drinking Water Act
- designating of hazardous substance under Comprehensive Environmental Response, Compensation, and Liability Act to strengthen the ability to hold dischargers financially accountable
- setting timelines for action (data collection or rulemaking) on Effluent Guideline Limitations under the Clean Water Act for nine industrial categories
- having a review of past actions on PFAS taken under the TSCA to address PFAS that are insufficiently protective
- increasing monitoring, data collection and research of PFAS so that EPA can identify what and when actions are needed
- providing a final toxicity assessment for GenX, which can be used to develop health advisories – GenX is an ammonium salt of hexafluoropropylene oxide dimer acid, which is a PFAS; it is commonly used in food packaging, paints, cleaning products, non-stick coatings, outdoor fabrics, and firefighting foam
- continuing efforts to build the technical foundation needed on PFAS air emissions for future actions under the Clean Air Act

No penalties for non-compliance have been established.

More information can be found here.

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The Environmental Protection Agency releases updated 2020 Toxics Release Inventory data (published)

On 21 October 2021, the United States Environmental Protection Agency (EPA) released updated 2020 Toxics Release Inventory (TRI) data. TRI is a reporting scheme that requires facilities to report on their environmental substance release. The 2020 TRI data consist of chemical releases, chemical waste management, and pollution prevention activities that took place during 2020. The dataset builds on the preliminary data released in July 2021. It also includes the 172 per-and polyfluoroalkyl substances added to TRI by the 2020 National Defense Authorization Act.

No penalties for non-compliance have been established.

More information can be found in this announcement from EPA. Information on TRI data and tools can be found here.

Updates to confidential status of chemicals on the Toxic Substances Control Act Inventory (announced)

On 15 October 2021, the United States Environmental Protection Agency (EPA) announced the addition of 377 substances to the next update of the Toxic Substances Control Act (TSCA) Inventory, which is expected in the winter. The TSCA inventory contains 42,000 chemicals listed as active in US commerce, and 8,000 of those chemicals are classified as confidential.

In April 2021, EPA announced a list of 390 substances whose confidentiality status would be reviewed. Of those, the chemical identities of 377 substances were deemed non-confidential by one or more manufacturers during the 2012, 2016, and/or 2020 TSCA Chemical Data Reporting periods.

There are no non-compliance provisions associated with this update.

More information can be found in these updates to the confidential status and this list of chemicals.

Significant new use rules on certain chemical substances (21-2.B) (published)

The United States Environmental Protection Agency (EPA) published significant new use rules (SNURs) for the SNUR Batch 21-2.B under the Toxic Substances Control Act (TSCA). The manufacturers/processors/importers of these substances must notify EPA through submitting a Significant New Use Notice (SNUN) at least 90 days before manufacturing/processing/ importing any of these substances for the significant new use. The manufacture or processing for the significant new use shall not commence until EPA makes an appropriate determination on the notice and has taken risk management actions as a result of the decision.

SNUR Batch 21-2.B consists of the following substances:

- heptanal, 6-hydroxy-2,6-dimethyl- (CAS No. 62439-42-3)
- glycine, reaction products with sodium O-iso-Pr carbonodithioate, sodium salts (CAS No. 2205080-23-3)
- aliphatic urethane methacrylate (generic) (No CAS available)

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Penalties for non-compliance include imprisonment up to 15 years and/or a fine of up to $250,000; a convicted organization may be subject to a fine of up to $1,000,000.

More information can be found here.

FY 2022 – FY 2026 EPA Strategic Plan (draft amendment)

The United States Environmental Protection Agency (EPA) has announced its goals for the Toxic Substances Control Act (TSCA) for the next four years in a draft strategic plan. The agency plans to meet the following goals by 30 September 2026:

- to accomplish at least 8 high priority substance risk evaluations (compared to the 2020 baseline of one); the prioritization process is expected to start by late 2022
- to review 90% of risk mitigation requirements for new chemical substances (compared to the 2021 baseline of none)
- to renew 40% of expiring lead-based paint renovation, repair, and painting firm certifications within 30 days (compared to the 2021 baseline of 36%)

EPA requested comments on the draft plan from the public and interested stakeholders by 12 November 2021 through the Federal eRulemaking Portal. The agency anticipates submitting the final plan to Congress in February 2022.

More information can be found in the draft EPA Strategic Plan and in the EPA announcement.

Addition of 12 chemicals to the Toxics Release Inventory (proposed rule)

On 18 October 2021, the United States Environmental Protection Agency (EPA) published a Proposed Rule to add 12 chemicals to the list of toxic chemicals, which are subject to Toxics Release Inventory (TRI) reporting requirements. From available data, EPA believes that these chemicals have moderately high to high human health toxicity and/or are highly toxic to aquatic organisms.

The 12 chemicals proposed for addition to the list of toxic chemicals are:

- dibutyltin dichloride (CAS No. 683-18-1)
- 1,3-dichloro-2-propanol (CAS No. 96-23-1)
- formamide (CAS No. 75-12-7)
- 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylcyclopenta[g]-2-benzopyran (HHCB; CAS No. 1222-05-5)
- N-hydroxyethylethylenediamine (CAS No. 111-41-1)
- nitrilotriacetic acid trisodium salt (CAS No. 5064-31-3)
- p-(1,1,3,3-tetramethylbutyl)phenol (CAS No. 140-66-9)
- 1,2,3-Trichlorobenzene (CAS No. 87-61-6)
- triglycidyl isocyanurate (CAS No. 2451-62-9)
- tris(2-chloroethyl) phosphate (CAS No. 115-96-8)
- tris(1,3-dichloro-2-propyl) phosphate (CAS No. 13674-87-8)
- tris(dimethylphenol) phosphate (CAS No. 25155-23-1)

EPA is proposing for HHCB to be classified as a persistent, bioaccumulative, and toxic chemical and designated as a chemical of special concern with a 100-pound reporting threshold.

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The comment deadline to EPA is 17 December 2021.

More information can be found in the Federal Register and in this EPA announcement.

Extension of public comment period on the draft Integrated Risk Information System (IRIS) toxicological review of perfluorobutanoic acid (PFBA) and related compound ammonium PFBA (draft amendment)

On 20 October 2021, the United States Environmental Protection Agency (EPA) extended the public comment period for the draft amendment on the "Availability of the Draft IRIS Toxicological Review of PFBA and Related Compound Ammonium PFBA." The deadline for comments was extended to 8 November 2021.

The draft amendment concerns reference doses for perfluorobutanoic acid (PFBA; CAS No. 375-22-4), which was published in the Integrated Risk Information System (IRIS) draft assessment. However, this only considers the hazard of the chemicals and not the exposure potentials. The reference dose for lifetime exposure and the sub-chronic exposure are 0.001 and 0.007 milligram per kilogram per day, respectively, but the agency has medium confidence in these results. Exposure is possible via inhalation, ingestion, and dermal contact with PFBA-containing products.

PFBA is a short chain per- and polyfluoroalkyl substance (PFAS) that may be generated as a degradation product of other PFAS used in stain-resistant fabrics, carpets, and packaging materials.

More information can be found here.

Further compliance date extension of the regulation of persistent, bioaccumulative, and toxic chemicals under the Toxic Substances Control Act Section 6(h); PIP (3:1) (proposed rule)

On 21 October 2021, the United States Environmental Protection Agency (EPA) published a Proposed Rule (Pre-Publication Federal Register Notice) to further extend the compliance dates for phenol, isopropylated phosphate (3:1) (PIP (3:1)) from 8 March 2022 to 31 October 2024. This will ensure supply chains are not interrupted for key consumer and commercial goods. The Proposed Rule applies to the processing and distribution in commerce of certain PIP (3:1)-containing articles, and PIP (3:1) used to make those articles. The recordkeeping requirements for manufacturers, processors, and distributors of PIP (3:1)-containing articles are also included in the compliance date extension. PIP (3:1) is used as a flame retardant in consumer products, as a plasticizer, and as a lubricant and hydraulic fluid.

EPA will submit the Proposed Rule in the Federal Register. This will be followed by a 60-day comment period.

On 6 January 2021, EPA published a final rule for prohibition under the Toxic Substances Control Act Section 6(h) for PIP (3:1) with an initial compliance date of 5 February 2021. On 8 March 2021, EPA issued a 180-day "No Action Assurance" regarding PIP (3:1) as a result of complaints made by industry. This was followed by a Final Rule (published: September 2021), which further extended the PIP (3:1) compliance date to 8 March 2022.

More information can be found here.

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United States Environmental Protection Agency Climate Adaptation Action Plan (draft plan)

On 7 October 2021, the United States Environmental Protection Agency (EPA) published a Climate Adaptation Plan (deadline for comments was 6 November 2021), which aims to tackle climate change and its impacts. This updates the 2014 Climate Adaptation Plan (published: June 2014) and addresses President Biden's Executive Order 14008 (published: 27 January 2021), which outlines plans to avoid catastrophic impacts that may arise from climate change.

Executive Order 14008 provides three objectives to combat issues resulting from climate change:

- Objective 1: Reduce emissions that cause climate change
- Objective 2: Accelerate resilience and adaptation to climate change impacts
- Objective 3: Advance international and subnational climate efforts

The Climate Adaptation Plan will support Objective 2 of Executive Order 14008 through five priority actions (specified in the Climate Adaptation Plan):

- integrate climate adaptation into EPA programs, policies, rulemaking processes, and enforcement activities
- consult and partner with a wide range of people (e.g., in various tribes, states, territories, local governments, environmental justice organizations, community groups, businesses, and other federal agencies) to strengthen adaptive capacity and increase the resilience of the nation
- implement measures to protect EPA's workforce, facilities, critical infrastructure, supply chains, and procurement processes from the risks posed by climate change
- measure and evaluate performance
- identify and address climate adaptation science needs

EPA will take the aforementioned actions over the next four years and will have a particular focus on advancing environmental justice.

More information can be found in the Climate Adaptation Plan and in this news release.

Information collection request: National Emission Standard for Hazardous Air Pollutants for Vinyl Chloride (notice)

The United States Environmental Protection Agency (EPA) has submitted an information collection request (ICR), the National Emission Standard for Hazardous Air Pollutants (NESHAP) for vinyl chloride, to the Office of Management and Budget (OMB) for review and approval. This is a proposed extension of the ICR, which is currently approved through 31 December 2021. The NESHAP for vinyl chloride (EPA ICR Number 0186.16, OMB Control Number 2060-0071) falls under the ICR. Comments were due to the OMB by 15 November 2021.

Vinyl chloride is a colorless compound that is a significant industrial chemical. In the United States, it is mostly used to make polyvinyl chloride (PVC), which is a material used to manufacture a variety of plastic and vinyl products. However, vinyl chloride is known to cause liver cancer, brain cancer, and some blood cancers, and has been associated with breast cancer. Exposure to high levels in the air can be fatal.

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The purpose of the NESHAP is to minimize vinyl chloride emissions from process and fugitive emission sources in ethylene dichloride, vinyl chloride, and polyvinyl chloride production categories (to the level attainable with best available control technology). EPA has the authority to regulate vinyl chloride since it is implicated as the causal agent of angiosarcoma and other serious disorders, both carcinogenic and non-carcinogenic.

More information can be found here.

Significant new use rules on certain chemical substances (21-1.F) (draft amendment)

The United States Environmental Protection Agency (EPA) published proposed significant new use rules (SNURs) for the SNUR Batch 21-1.F under the Toxic Substances Control Act (TSCA). SNUR Batch 21-1.F consists of 31 substances. The manufacturers/processors/importers of these substances must notify EPA by submitting a Significant New Use Notice (SNUN) at least 90 days before manufacturing/processing/importing any of these substances for the significant new use. The manufacture or processing for the significant new use shall not commence until EPA makes an appropriate determination on the notice and has taken risk management actions because of the decision. Comment period closed on 12 November 2021.

The list of chemicals and additional information can be found here.

Announcement of the Carcinogen Identification Committee meeting scheduled for 6 December 2021 and notice of availability of Hazard Identification Materials for Perfluorooctane Sulfonic Acid and its salts and transformation and degradation precursors (announcement)

According to the United States Environmental Protection Agency (EPA), the domestic manufacture and import of perfluorooctane sulfonic acid (PFOS) was largely phased out nearly 20 years ago but there are some limited ongoing uses of the substance. An evidence document on the carcinogenicity of perfluorooctane sulfonic acid (PFOS) and its salts has been released by California's Office of Environmental Health Hazard Assessment (OEHHA) to determine whether to add a Proposition 65 cancer toxicity listing for the substance.

According to the document, some evidence of mutagenicity and suggestive evidence of chromosomal effects and DNA damage induced by PFOS has been collected. However, studies on the carcinogenicity of PFOS in humans are "mixed". The evidence document was released prior to the Carcinogen Identification Committee meeting (to be held on 6 December 2021), to determine whether PFOS causes cancer. Note that PFOS are already included as a Prop 65 reproductive toxicant.

According to OEHHA, the 3M Company was the only entity to comment on the agency's original call in March for information on PFOS's potential carcinogenicity. 3M quoted that, "insufficient evidence of carcinogenicity exists in studies to warrant listing PFOS as causing cancer under Proposition 65."

Comments on the OEHHA document were accepted until 8 November 2021.

More information can be found in the California OEHHA announcement.

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National Volatile Organic Compound Emission Standards for Aerosol Coatings (draft amendment)

The National Volatile Organic Compound (VOC) Emission Standards for Aerosol Coatings is a national reactivity-based regulation for aerosol spray paints. These proposed amendments are in response to petitions submitted by the American Coatings Association requesting that the rule be updated to resolve inconsistencies and reduce burdens and costs on the aerosol coatings industry. In this proposed action, the United States Environmental Protection Agency (EPA) is:

- adding new compounds and reactivity factors
- revising the default reactivity factor
- updating the coating category emission limits
- revising the threshold for VOCs covered by the rule
- adding electronic reporting provisions consistent with recent rulemakings
- making other minor clarifying edits

The EPA proposal would also add six new specialty coating categories and corresponding limits. These are:

- electrical/electronic/conformal coatings, with a category limit set equal to 2.00 O3/g VOC
- flexible coatings, with a limit of 1.60 O3/g
- mould release coatings, with a limit of 1.10 O3/g
- rust converter, with a limit equal to 1.10 O3/g
- two component coating, with a limit equal to 1.20 O3/g
- uniform finish coating, with a limit of 1.30 O3/g

Comments were due on 16 November 2021.

More information can be found in the Federal Register. Additional information can be found here.

Oceania

Australia

Chemical evaluation roadmap and rolling action plan (published)

On 17 September, the Australian Industrial Chemicals Introduction Scheme (AICIS) published their key targets for evaluation and their proposed roadmap to achieve them. The roadmap is intended for 2024 and beyond, and the main goal is to accelerate the risk assessment of industrial chemicals. This will be done by identifying and prioritizing chemicals for evaluation, producing targeted and evidence-based evaluations and recommendations to risk managers, and providing high quality information and risk management advice for the safe use of industrial chemicals.

The roadmap targets for evaluation of at least 20% of the chemicals on the inventory for which no risk assessment is available. These chemicals include inactive chemicals, chemicals unlikely to need further regulation to manage risks, and higher concern chemicals.

The AICIS also released a rolling action plan for prioritizing chemicals for evaluation. The selection is based on the outcome of an Evaluation Selection Analysis process which identifies the chemical candidates for evaluation. As a result of this plan, they will publish:

- a list of evaluations in progress, currently open for public consultation or recently completed for a single or a group of chemicals
- a downloadable spreadsheet of chemicals that are covered by an evaluation in progress, currently open for public consultation, or recently completed

There are no non-compliance provisions associated with this update.

More information can be found in the Evaluations Roadmap and in the Rolling Action Plan that lists the current and recently completed chemical evaluations.

Australia publishes amendments to Rules 2021 under the Minamata Convention on Mercury (published)

Australia has amended the recycling and waste reduction rules for mercury-added products under Articles 4(1) and 4(5) of the Minamata Convention on Mercury. After the Minamata Convention enters into force in Australia, it will have the effect of prohibiting the import, export, or manufacture of the mercury-added products listed in Part 1 of Annex A to the Minamata Convention, where the incorporation is for industrial purposes or agricultural or veterinary purposes. Exemptions specified in Article 6 (registered for Australia) of the Convention apply to the import of mercury-added products.

On 24 September 2021, Australia amended the Industrial Chemicals Act 2019 (IC Act) to implement Australia's obligations under Articles 3(6) and 3(8) of the Minamata Convention on Mercury. The IC Act is amended to prohibit the import and/or export of mercury that is an industrial chemical, meaning elemental mercury (CAS No. 7439-97-6), including mixtures of mercury with a mercury concentration of at least 95% by weight, which is used for an industrial use (i.e., excludes unintentional trace amounts, naturally occurring mercury, and research uses). The amendment also details the application process for the approval to import or export an industrial chemical that is mercury. The requirements for the application follow Articles 3(6) and 3(8) of the Minamata Convention on Mercury.

These amendments will enter into force once Australia has ratified the Minamata Convention. Currently, Australia has signed the Convention and is finishing their domestic treaty-making process, a necessary step before they can ratify the Convention.

The final Regulation Impact Statement on the ratification was published in March 2021 and concluded that ratifying the Minamata Convention would fill gaps within the existing domestic regulatory framework and deliver significant benefits for human health and the environment, both domestically and internationally. It is expected that Australia will fully ratify the Minamata Convention shortly.

Penalties for non-compliance include fines.

More information can be found in the Recycling and Waste Reduction Rules 2021. Additional information can be found in the Minamata Convention on Mercury.

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Call for information on chemicals unlikely to need further human health risk management controls (announced)

The Australian Industrial Chemicals Introduction Scheme (AICIS) under the Department of Health published a call for information on chemicals that are unlikely to need further human health risk management controls. The AICIS calls on industry to provide information on these substances that have been identified as not being manufactured, imported, or used in the country for commercial purposes. These substances are listed under the Australian Inventory of Industrial Chemicals and are being evaluated as part of Australia's industrial chemicals assessment plans. By 2024, AICIS plans to evaluate 20% of the >39,000 substances currently listed on the inventory. Under the inventory, these substances will be given the "inactive" designation. However, if industry were to provide the requested information on the use of the substances, then AICIS will consider further evaluation.

Participation in this call for information is voluntary. Interested parties can provide comments by 17 December 2021.

More information can be found in the call for information announcement and in this evaluation statement.

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