

The Z2DATA logo is displayed in white text on a dark rectangular background. The 'Z' is stylized with a double horizontal bar.

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12 steps to your own Obsolescence Management Plan (OMP)

Step 5.5 Legislation Persistent Organic Pollutants (POPs)

Author

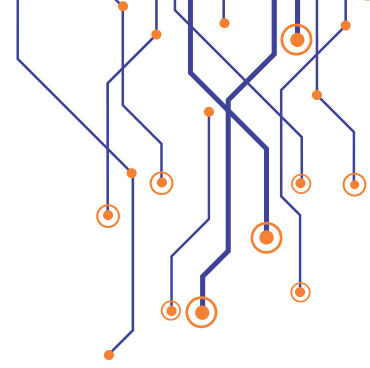
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Persistent Organic Pollutants (POPs) are toxic chemicals that persist in the environment, bioaccumulate in living organisms, and pose serious risks to human health and ecosystems. The regulation of POPs is governed by the Stockholm Convention on Persistent Organic Pollutants, which aims to eliminate or restrict the production, use, and release of these substances. The European Union has implemented this through Regulation (EU) 2019/1021 on POPs, imposing strict controls on the manufacturing, import, export, and disposal of materials containing these hazardous substances. Compliance with POPs regulations is essential for businesses handling chemicals, electronics, textiles, and other materials that may contain restricted substances. This guide provides an overview of key regulatory requirements, a step-by-step compliance process, and best practices for managing risks associated with POPs.

1. Key Regulations Impacting Compliance

POPs regulations primarily focus on restricting hazardous chemicals that remain in the environment for long periods. Some of the most significant substances covered under these regulations include polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFAS), brominated flame retardants (BFRs), and dioxins and furans. These substances are used in industrial applications such as flame retardants, pesticides, and electrical components, but their environmental persistence makes them highly regulated. Companies must ensure that any products or waste containing POPs comply with restrictions on production, usage, and disposal.

1.1 Stockholm Convention on POPs

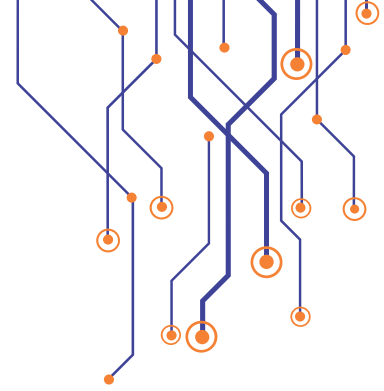
The **Stockholm Convention** is a global treaty that aims to reduce and eliminate the release of persistent organic pollutants. It establishes international agreements to phase out or restrict POPs and mandates participating countries to implement regulatory frameworks.

1.2 EU Regulation (EU) 2019/1021 on POPs

The **EU POPs Regulation** enforces the obligations of the Stockholm Convention by setting strict concentration limits on certain substances, banning the use of specific POPs, and regulating the disposal of contaminated materials. Compliance with this regulation requires companies to track chemical compositions, avoid restricted substances, and manage waste disposal in accordance with legal standards.

1.3 Per- and Polyfluoroalkyl Substances (PFAS) Restrictions

PFAS, commonly used in coatings and industrial applications, are increasingly restricted due to their persistence and toxicity. The EU is progressively phasing out several PFAS chemicals under the POPs framework, requiring businesses to transition to safer alternatives



2. Step-by-Step Compliance Process

2.1 Step 1: Identify Relevant POPs Regulations

Companies must determine which specific POPs regulations apply to their products or materials. This includes reviewing the Stockholm Convention, EU POPs regulations, and national legislation that may impose additional requirements.

2.2 Step 2: Assess Chemical Composition in Products

Businesses should conduct an assessment of their materials and components to identify any restricted POPs. This can be done through supplier declarations, laboratory testing, and regulatory compliance databases.

2.3 Step 3: Monitor Regulatory Updates

POPs regulations evolve as new substances are identified and added to restriction lists. Companies should establish a system for tracking regulatory changes to remain compliant and avoid unexpected disruptions.

2.4 Step 4: Engage with Suppliers and Stakeholders

To ensure compliance, companies must work closely with suppliers to obtain full material disclosures and confirm that products do not contain restricted POPs. Supplier agreements should include clauses requiring adherence to POPs regulations.

2.5 Step 5: Implement Safer Alternatives and Design for Compliance

Where restricted substances are identified, businesses should explore alternative materials and redesign products to avoid non-compliance. Sustainable sourcing and eco-friendly product design can help mitigate regulatory risks.

2.6 Step 6: Manage Disposal and Waste Properly

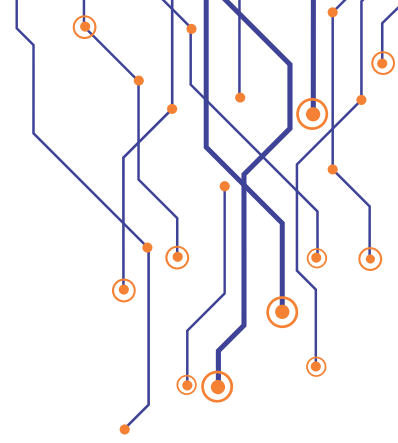
Since POPs are highly persistent, their disposal is heavily regulated. Companies must follow hazardous waste management protocols, ensuring that POP-containing materials are treated and disposed of in compliance with environmental safety guidelines.

2.7 Step 7: Document and Report Compliance

Maintaining accurate compliance records is essential for regulatory audits. Businesses should document all material disclosures, supplier certifications, and regulatory filings to demonstrate adherence to POPs requirements.

2.8 Step 8: Conduct Regular Compliance Reviews

To sustain compliance, companies should integrate periodic reviews into their regulatory management processes. Audits and compliance checks help identify potential risks and ensure continuous adherence to POPs regulations.



3. Penalties for Non-Compliance

Failure to comply with POPs regulations can lead to serious consequences, including product bans, market restrictions, financial penalties, and legal liabilities. Regulatory authorities impose fines for the sale and distribution of non-compliant products, and companies may face supply chain disruptions if restricted substances are identified in their materials. Additionally, businesses risk reputational damage, loss of consumer trust, and potential environmental liabilities if they fail to properly manage POPs.

4. Best Practices for Integrating POPs Compliance into Business Operations

Embed Compliance into Product Development

Ensuring regulatory compliance starts at the design stage. Companies should prioritize the use of non-toxic, sustainable materials to avoid POP-related issues in manufacturing.

Establish a Proactive Monitoring System

Because POPs regulations are frequently updated, businesses should implement monitoring tools that track global regulatory developments and provide early warnings about new restrictions.

Strengthen Supplier Collaboration

Close cooperation with suppliers is critical to ensuring that material disclosures are accurate and that restricted substances are not present in products. Regular supplier audits and compliance agreements can help prevent regulatory risks.

Maintain Thorough Documentation

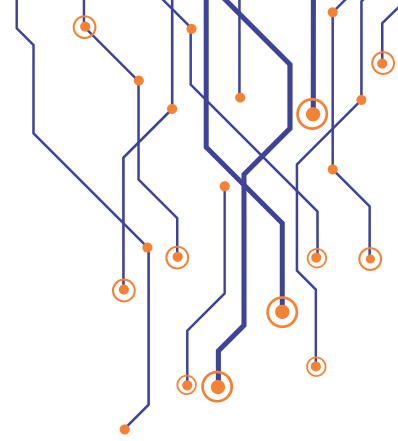
Keeping comprehensive compliance records, including supplier certifications and material test results, ensures transparency and preparedness for regulatory inspections.

Integrate POPs Compliance into Risk Management

Companies should factor POPs regulations into their overall risk management strategies, identifying potential compliance risks early and developing contingency plans for affected materials.

5. Handling Non-Compliance

If a product or material is found to contain restricted POPs, businesses must take immediate action to mitigate risks. This may include engaging with suppliers to source alternative materials, evaluating the impact of non-compliance on product safety and performance, and initiating redesign efforts if necessary. Companies should document all corrective actions taken and communicate transparently with stakeholders about compliance measures. Proper disposal of non-compliant materials in accordance with hazardous waste regulations is also essential.



Conclusion

The regulation of Persistent Organic Pollutants (POPs) is a crucial component of global environmental protection. Companies must proactively manage compliance by identifying restricted substances, engaging with suppliers, monitoring regulatory changes, and ensuring proper waste disposal. By integrating POPs compliance into product design, supply chain management, and corporate sustainability initiatives, businesses can minimize risks, maintain market access, and contribute to environmental responsibility. A structured compliance strategy helps organizations navigate evolving regulations while ensuring long-term business resilience.

Document Revision			
Revision	Detail	Name	Date
1	Initial Release	J Wombwell	01-May-25

Disclaimer

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