EU REACH Regulation  
**Questions and Answers**

ALL Q&A IN THIS DOCUMENT ARE CLEARED FOR PUBLIC RESPONSE. THIS DOCUMENT IS TO BE USED TO RESPOND TO QUESTIONS FROM CUSTOMERS, SUPPLIERS, AND THE NEWS MEDIA – IT IS NOT INTENDED FOR USE AS A HANDOUT, AND COPIES SHOULD NOT BE RELEASED OUTSIDE BOEING.

THIS DOCUMENT WILL BE UPDATED AS WE HAVE ADDITIONAL INFORMATION.

Note: This Question & Answer (Q&A) document provides information regarding Boeing’s response to the European Union’s (EU) REACH (Registration, evaluation, authorization and restriction of chemicals) regulation. The REACH regulation is complex – this Q&A document is not intended to instruct customers, suppliers or other third-parties whether or not REACH applies to them or what their specific compliance obligations, if any, may be. Customers, suppliers, and/or other third-parties are advised to seek appropriate legal or business counsel to determine REACH applicability, scope and compliance obligations, if any. No warranty is made or given regarding the accuracy, completeness or suitability of the information contained herein, and neither Boeing nor its subsidiaries, affiliates, joint ventures, officers, directors, agents or employees shall be liable for any reliance on this Q&A document by any Boeing customer or supplier or by any other third-party under any theory of law.

Nothing herein should be construed as a commitment or agreement to perform or refrain from any action or undertaking on behalf of any customer, supplier or third party. This Q&A document does not modify or amend any past, present or future contract or other agreement with any Boeing customers or suppliers nor does it or shall it create any contractual relationship with any third party.

---

**Table of Contents (click on Title to Navigate to Section)**

- REACH Overview
- General Regulatory Questions
- REACH and Boeing
- Supplier Questions
- Customer Airline Questions
- Contact Information

---

**REACH OVERVIEW**  
(Return to Table of Contents)

**Q1:** What is REACH?

**A:** In June 2007, the European Union (EU) regulation known as REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) entered into force. REACH applies to EU entities, including Boeing’s EU suppliers and EU customers that import,
use, or manufacture in the EU certain chemical substances. REACH is highly complex and there is ambiguity regarding its scope and requirements. However, REACH will have a broad impact on the chemical industry and will likely impact chemical products used for aerospace applications.

The major regulatory requirements of REACH relevant to Boeing are shown below. Compliance with the REACH regulation may require Boeing’s EU suppliers, processors and customers to coordinate with their respective supply chains.

- **Registration of substances (effective June 1, 2008)**
  Subject to certain thresholds, EU entities who manufacture or import substances on their own or in preparations and EU entities who produce or import articles (e.g., aircraft components) that contain substances intended for release must register those substances with the European Chemicals Agency (ECHA).

- **Pre-registration of substances (June 1 – December 1, 2008)**
  The registration requirement above may be delayed for certain substances that qualify as “phase-in” substances. To benefit from the delayed registration schedule for phase-in substances, EU entities must pre-register those substances between June 1, 2008 and December 1, 2008.

- **Notification of substances in articles (effective June 1, 2011)**
  Subject to certain thresholds, EU entities who produce or import articles must notify the ECHA if those articles contain Substances of Very High Concern (SVHCs) above certain concentrations. Notifications for SVHCs are due six months after inclusion of those substances on ECHA’s candidate SVHC list (the first list of candidate SVHCs, linked here, was published by ECHA on October 28, 2008).

- **Communication of safe-use information (effective June 1, 2007)**
  EU entities who produce, import, or distribute articles containing SVHCs above certain concentrations must provide users with sufficient information to allow safe use of the article. At a minimum, this requires identification of SVHCs in the article. ECHA’s first candidate SVHC list, linked here, was published on October 28, 2008.

- **Authorization to use SVHCs listed in Annex XIV (effective June 1, 2008)**
  EU entities must apply for authorization to place on the market for a use or to use themselves any SVHCs listed in Annex XIV of REACH. A priority list of SVHCs for inclusion in Annex XIV is due by June 1, 2009, with promulgation of Annex XIV some time thereafter. Many conditions must be satisfied for authorization to be granted.

### GENERAL REGULATORY QUESTIONS

**Q2:** *Where does REACH apply?*

**A:** REACH is a European Community Regulation that directly applies in all Member States of the European Union. See EU website for EU Member States, linked here. Iceland, Liechtenstein and Norway will also apply REACH after it has been incorporated into the agreement of the European Economic Area. Substances imported in the European Community from Switzerland (a non-EU country) are treated under REACH in the same way as substances imported from any other non-EU country.

**Q3:** *What are the “thresholds” mentioned above?*

**A:** The EU’s REACH website, linked here, has more information. The full text of the REACH regulation is linked here.
Q4: **Who is responsible for compliance?**  
A: EU entities are responsible for compliance.

Q5: **Will REACH change the existing chemical restrictions in the EU?**  
A: Yes, REACH will incorporate most existing restrictions, potentially add additional restrictions on current chemicals, and likely add more chemicals to be restricted. See the EU's REACH website, linked [here](#), for more details.

Q6: **Do we expect other countries to impose similar requirements? Or more strict?**  
A: Boeing is monitoring the situation.

Q7: **What could happen if Boeing customers in the EU fail to comply with REACH requirements that may apply to Boeing articles they import?**  
A: Failure to comply with the registration, notification, communication, or authorization requirements could lead to civil and/or criminal enforcement action by EU authorities against those parties responsible for registration, notification, communication, or authorization. A Boeing customer's failure to register (if required) a substance contained in a Boeing article (e.g., aircraft, spare parts) and intended for release could preclude the customer from importing the Boeing article into the EU until the customer has submitted a registration for that substance.

REACH AND BOEING (Return to Table of Contents)

Q8: **What is Boeing’s strategy for complying with REACH?**  
A: REACH compliance requirements apply to European Union entities. Although Boeing is not subject to these compliance requirements (aside from subsidiary operations), there is considerable impact to its suppliers and customers, as described above. Accordingly, Boeing is working on several initiatives to avoid supply chain disruptions and provide support to customers. These initiatives include communication efforts, identification of SVHCs and other at-risk materials in commercial and defense products, and continued research and development of environmentally-preferred materials and processes.

Q9: **Can military products be ‘exempted’?**  
A: Individual member states may grant substance-specific exemptions for national security reasons.

Q10: **Which Substances of Very High Concern (SVHCs) are on Boeing products?**  
A: In efforts to help its EU suppliers and customers comply with REACH requirements, Boeing is in the process of investigating the presence of listed candidate SVHCs in commercial aircraft and defense products (and in specification and maintenance materials). This investigation is not yet complete.

Q11: **Doesn’t Boeing have a “duty to communicate information on substances in articles”?**  
A: REACH compliance requirements apply to European Union entities. Boeing’s EU suppliers and customers may need to provide safe-use information for articles (e.g., aircraft, spare parts) containing SVHCs to users or consumers of those articles. Where
applicable, Boeing is preparing to help suppliers and customers comply with these communication requirements.

Q12: **Will Boeing eliminate all the chemicals on the candidate SVHC list from its products?**

A: The candidate SVHC list does not require elimination of chemical substances from any products. The EU agency will gather data on the chemicals’ use, health and environmental impacts and availability/feasibility of alternatives before determining if candidate SVHC list chemicals should be subjected to authorization. If specific chemicals used on Boeing products become subject to authorization, Boeing will work with its suppliers and customers as appropriate to identify compliant alternatives.

Q13: **Which SVHCs will be placed on Annex XIV and will Boeing seek authorization for their continued use?**

A: It is unknown which SVHCs will be placed on Annex XIV. If specific chemicals used on Boeing products become subject to authorization, Boeing will work with its suppliers and customers as appropriate to identify alternatives for use in the EU. If alternatives are not available, authorizations to allow the continued use of those substances (by the EU importer, user or distributor) may be pursued, although the authorizations may not be granted, or may be limited in scope and/or duration.

Q14: **How is the aerospace industry responding?**

A: See the AeroSpace and Defence (ASD) Industries Association of Europe website, linked here.

Q15: **What is an Only Representative, and will Boeing be designating one?**

A: Manufacturers who export products to the EU may appoint a natural or legal person established in the European Community (an Only Representative) to fulfill the obligations on importers under REACH. Boeing will not be designating an Only Representative.

**SUPPLIER QUESTIONS** (Return to Table of Contents)

Q16: **What is Boeing telling its suppliers?**

A: Boeing sent out an Enterprise communication reminding suppliers of their contractual obligation to comply with laws, their need to inform Boeing Procurement Agents of potential chemical reformulations, and the possibility that they may later be asked for chemical composition information on supplied materials and parts. Any updated communication can be found on the REACH page of Boeing’s external Environmental Support website.

Q17: **How many Boeing suppliers are or may be affected by REACH?**

A: Boeing has several hundred European suppliers and processors who may be impacted by REACH. The extent of the impact is unknown at this time. Non-EU suppliers may also be impacted to a lesser degree.

Q18: **Will suppliers be required to complete AS9535 “Substance Declaration Standard” forms or otherwise declare the chemical composition of materials, parts, or assemblies supplied to Boeing?**

A: At this time, Boeing does not plan to require that suppliers submit full declaration via AS9535 or other material-declaration standards. Disclosure of SVHC content will soon be required of targeted (or all) suppliers.
Q19: **Will Boeing suppliers be required to eliminate SVHCs in supplier materials, parts, and assemblies?**
A: REACH does not initially require elimination of SVHCs. SVHCs that later become listed in Annex XIV will require authorization to be used in the EU. In that event, or if SVHCs (or preparations containing SVHCs) are no longer available on the market, Boeing will work with suppliers to develop compliant solutions.

Q20: **Should Boeing suppliers be looking to remove SVHCs from supplied materials, parts, and assemblies?**
A: Suppliers need to continue working to contract requirements, including process and material specifications, drawings, and other requirements imposed upon them. As contractually required, suppliers of specification materials should notify their Boeing Procurement Agent if they plan to reformulate materials. Requalification of materials can be a costly and time-consuming process. Suppliers in the EU must also comply with all applicable regulatory requirements which may include downstream user requirements (see ASD guidance, linked here) under REACH.

Q21: **How are Boeing’s sub-tier “D1-4426” approved processors impacted by REACH?**
A: Qualified processors in the EU are subject to the REACH regulation and may be impacted as importers, downstream users, and/or manufacturers.

Q22: **Will REACH affect movement of parts and materials between suppliers?**
A: Parts imported into the EU, manufactured in the EU, or otherwise placed on the market within the EU are all subject to REACH. In particular, parts supplied to any professional or industrial users within the EU are subject to the Communication of safe-use information requirements if the part supplied contains SVHC(s) above a certain threshold concentration.

Q23: **Boeing is a supplier to our company – who do we contact for REACH inquiries?**
A: Boeing has several sites around the world that supply parts to other companies. If your company buys parts from a Boeing site, and you need to inquire about the composition of those parts and/or the REACH-readiness of that site, please direct those inquiries to the appropriate contact for supplier issues.

CUSTOMER QUESTIONS  
(Return to Table of Contents)

Q24: **What is Boeing doing to support its customers?**
A: We have established an ongoing dialogue with our European customers to better understand their situation and support their potential compliance needs.

Q25: **Would the communication (of safe-use information) requirement come back to Boeing?**
A: Customers may ask for data to support their compliance requirements.

Q26: **Will Boeing need to report the SVHC content of delivered products to customers?**
A: If requested, Boeing would provide reasonably available information.

Q27: **Will Boeing be updating the Maintenance Manuals to reflect REACH information?**
A: Boeing is evaluating how REACH will impact the Maintenance Manuals. Boeing understands that operators are concerned about the continued availability of maintenance materials. At this time Boeing is planning to identify materials in the Maintenance Manuals that contain SVHCs based on the best available information.

Q28: If asked by customers, will Boeing provide information about the composition of Buyer Furnished Equipment (BFE)? What about Customer variations?
A: Boeing will focus on providing composition data for delivered products, as necessary.

CONTACT INFORMATION (Return to Table of Contents)
Q29: Who do I go to for additional information?
A: BCA supplier issues: paul.r.hogben@boeing.com
   BCA customer airline and Commercial Aviation Services (CAS) issues: barbara.j.thompson@boeing.com
   Other BCA/internal issues: robin.g.bennett@boeing.com
   Integrated Defense Systems (IDS) supplier contract issues: john.t.lauterjung@boeing.com
   IDS technical and other issues: david.l.shanks@boeing.com

May 7, 2009
Communication contact: Jennifer Cram – jennifer.k.cram@boeing.com