Welcome

Webinar: Chromium(VI) restriction preparation: what you need to know about the second call for evidence

6 June 2024

Nayoni Chowdhury
European Chemicals Agency
What you can expect today

→ Outline scope and timing of on-going ‘chromium(VI)’ restriction preparation
→ Summarise first call for evidence
→ Explain content of second call for evidence and how it will be used
→ Help you decide if and what information you should submit in the second call for evidence
→ Get answers to your questions on the scope and content of the second call for evidence
→ Not a debate about the need for a restriction, nor on the transition from authorisation to restriction
Q&A

→ Join Q&A at: slido.com
  Event code: crvi

→ Send questions throughout the event until 13:00 (EEST, GMT +3)

→ Only questions within scope: i.e. how and what type of data you can submit during the second call for evidence

Questions after the webinar? echa.europa.eu/contact
Material available

→ Video recording
→ Presentations

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<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
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<tr>
<td>11:00</td>
<td>Welcome</td>
<td>Nayoni Chowdhury, ECHA</td>
</tr>
<tr>
<td>11:05</td>
<td>Updated mandate and scope of the restriction preparation</td>
<td>Sandrine Lefevre-Brévant, ECHA</td>
</tr>
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<td>11:20</td>
<td>Outcome of the first call for evidence</td>
<td>Christoph Rheinberger, ECHA</td>
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<td>11:35</td>
<td>Overview of the second call for evidence</td>
<td>Väinö Nurmi, ECHA</td>
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<td>11:50</td>
<td>Conclusions</td>
<td>Nayoni Chowdhury, ECHA</td>
</tr>
<tr>
<td>11:55-13:00</td>
<td>Q&amp;A open for remaining questions</td>
<td>All presenters and panellists</td>
</tr>
</tbody>
</table>

All times are EEST (GMT+3)
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Updated mandate and scope of the restriction preparation

Webinar: Chromium(VI) restriction preparation: what you need to know about the second call for evidence
6 June 2024

Sandrine Lefèvre-Brévar
Team Leader, Restriction Preparation
Risk Management Directorate
Restrictions under REACH

→ Restriction is a tool for protecting human health and the environment from the risks posed by chemicals

→ Restrictions usually limit or ban the manufacture, placing on the market or use of a substance

→ A restriction may also set out specific conditions such as technical measures, limits, labelling requirements, etc.

→ ECHA prepares a restriction proposal following a request from the European Commission
Why a restriction proposal for Cr(VI)?

→ Number of Cr(VI) applications for authorisation exceeds predictions at the time of inclusion in REACH Annex XIV

→ Approach envisaged for regulating Cr(VI) substances (authorisation) no longer appropriate to ensure:

- Human health protection
- Substitution
- Proper functioning of internal market
- Adequate use of resources

Hence a restriction proposal is being prepared
What happened so far?

- **Commission mandate** to prepare a restriction proposal focusing on chromium trioxide (CT) and chromic acid (CA) in Sept. 2023.
- Preliminary analysis and specific considerations raised to Commission in March 2024.
- Amendment of Commission mandate to extend scope and preparation timeline in April 2024.
Commission request to prepare restriction

→ **Commission request** (September 2023 and April 2024):
  • ECHA to prepare a restriction proposal on certain Cr(VI) substances

**Risk assessment**

**Analysis of alternatives and potential for regrettable substitution**

**Assess socio-economic impacts and effectiveness of several restriction options**

**Take stock of authorisation learnings**

Commission requests published:

*ECHA's current activities on restrictions*
Scope of restriction preparation

Substances:

→ Cr(VI) substances in Annex XIV: entries 16 to 22 and 28 to 31
→ Other substances with regrettable substitution potential: e.g. barium chromate

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC No</th>
</tr>
</thead>
<tbody>
<tr>
<td>AXIV - 16 Chromium trioxide</td>
<td>215-607-8</td>
</tr>
<tr>
<td>AXIV - 17 Chromic acid</td>
<td>231-801-5</td>
</tr>
<tr>
<td>AXIV - 17 Dichromic acid</td>
<td>236-881-5</td>
</tr>
<tr>
<td>AXIV - 17 Acids generated from chromium trioxide and their oligomers</td>
<td>--</td>
</tr>
<tr>
<td>AXIV - 18 Sodium dichromate</td>
<td>234-190-3</td>
</tr>
<tr>
<td>AXIV - 19 Potassium dichromate</td>
<td>231-906-6</td>
</tr>
<tr>
<td>AXIV - 20 Ammonium dichromate</td>
<td>232-143-1</td>
</tr>
<tr>
<td>AXIV - 21 Potassium chromate</td>
<td>232-140-5</td>
</tr>
<tr>
<td>AXIV - 22 Sodium chromate</td>
<td>231-889-5</td>
</tr>
<tr>
<td>AXIV - 28 Dichromium tris(chromate)</td>
<td>246-356-2</td>
</tr>
<tr>
<td>AXIV - 29 Strontium chromate</td>
<td>232-142-6</td>
</tr>
<tr>
<td>AXIV - 30 Potassium hydroxyoctaoxodizincatedichromate(1-)</td>
<td>234-329-8</td>
</tr>
<tr>
<td>AXIV - 31 Pentazinc chromate octahydroxide</td>
<td>256-418-0</td>
</tr>
<tr>
<td>- Barium chromate</td>
<td>233-660-5</td>
</tr>
</tbody>
</table>
Scope of restriction preparation

Uses and sectors:

→ Uses of Cr(VI) substances listed in Annex XIV

→ Note: uses for which applications for authorisation have not been granted will be considered as phased out

Uses overview

| UC1 | Manufacture and formulation of mixtures |
| UC2 | Electroplating on plastic substrate  |
| UC3 | Electroplating on metal substrate   |
| UC4 | Slurry coating                       |
| UC5 | Other surface treatments             |
| UC6 | Functional additives and process aids |

- Transportation and defence
  - General engineering
  - Industrial applications
  - Household equipment
  - Packaging ...
Restriction proposal preparation

**General approach and timing:**

→ **Taking stock** of previous as well as most recent application for authorisation and downstream user notifications

→ **Extensive data gathering**

→ **Plausible assumptions** made if specific data lacking

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**Sept. 2023**
Request to prepare restriction proposal to ECHA

**June. 2024**
2nd call for evidence

**April 2024**
Request to extend restriction scope to ECHA

**April 2025**
Submission of restriction proposal

**ECHA committee’s evaluation**

**End 2026**
ECHA committee’s opinions sent to EU Commission

**Commission decision** on final restriction scope and substances delisting from Annex XIV
Take home messages

1. Broad scope of restriction preparation. Not only about chrome plating.

2. Restriction proposal scope does not pre-empt scope of final restriction.

3. Restriction proposal submission: April 2025.
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Outcome of the first call for evidence

Webinar: Chromium(VI) restriction preparation: what you need to know about the second call for evidence

6 June 2024

Dr Christoph Rheinberger
Team Leader, Socio-Economic Analysis
Risk Management Directorate
Overall participation (n=647)
Compliance and best response (n=559)

- **Complies**
  - 5 ug/m³: 92%
  - 1 ug/m³: 71%
  - 0.5 ug/m³: 44%
  - 0.1 ug/m³: 19%
  - 0.01 ug/m³: 9%

- **Intends to invest**
  - 5 ug/m³: 1%
  - 1 ug/m³: 3%
  - 0.5 ug/m³: 6%
  - 0.1 ug/m³: 8%
  - 0.01 ug/m³: 20%

- **Intends to substitute**
  - 5 ug/m³: 1%
  - 1 ug/m³: 22%
  - 0.5 ug/m³: 37%
  - 0.1 ug/m³: 41%
  - 0.01 ug/m³: 59%

- **Intends to close**
  - 5 ug/m³: 6%
  - 1 ug/m³: 4%
  - 0.5 ug/m³: 14%
  - 0.1 ug/m³: 31%
  - 0.01 ug/m³: 11%
Compliance cost \((n=559)\)
Emissions to air (n=339)

- Frequency:
  - 1.00E-7 | 5g: 28.3%
  - 1.00E-6 | 50g: 62.2%
  - 1.0E-5 | 500g: 90.6%
  - 1.00E-4 | 5 kg
  - >1.00E-04 | >5kg

- Cumulative %:
  - 1.00E-7 | 5g: 28.3%
  - 1.00E-6 | 50g: 90.6%
Emissions to water (n=168)
Worker exposure (various responses)
## Substance coverage (n=562)

<table>
<thead>
<tr>
<th>Substance</th>
<th>n</th>
<th>Downstream user notifications</th>
<th>Percentage covered</th>
<th>Tonnage reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromium trioxide and its acids</td>
<td>488+38</td>
<td>1 782</td>
<td>29%</td>
<td>8 708</td>
</tr>
<tr>
<td>Sodium dichromate</td>
<td>37</td>
<td>194</td>
<td>19%</td>
<td>14 096</td>
</tr>
<tr>
<td>Potassium dichromate</td>
<td>18</td>
<td>115</td>
<td>16%</td>
<td>725</td>
</tr>
<tr>
<td>Potassium chromate</td>
<td>3</td>
<td>1</td>
<td>33%</td>
<td>1.2</td>
</tr>
<tr>
<td>Sodium chromate</td>
<td>3</td>
<td>12</td>
<td>25%</td>
<td>0.1</td>
</tr>
<tr>
<td>Dichromium tris(chromate)</td>
<td>16</td>
<td>304</td>
<td>5%</td>
<td>1.7</td>
</tr>
<tr>
<td>Strontium chromate</td>
<td>26</td>
<td>626</td>
<td>4%</td>
<td>16.6</td>
</tr>
<tr>
<td>Potassium hydroxyoctaoxodizincatedichromate(1-)</td>
<td>9</td>
<td>246</td>
<td>4%</td>
<td>1.3</td>
</tr>
<tr>
<td>Pentazinc chromate octahydroxide</td>
<td>7</td>
<td>91</td>
<td>8%</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total (incl. multi uses)</strong></td>
<td>645</td>
<td>3 371</td>
<td></td>
<td>23 551</td>
</tr>
</tbody>
</table>
## Use category coverage (n=666)

<table>
<thead>
<tr>
<th>Use categories</th>
<th>n</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulation</td>
<td>26</td>
<td>Moderate coverage</td>
</tr>
<tr>
<td>Electroplating on plastics</td>
<td>34</td>
<td>More answers needed</td>
</tr>
<tr>
<td>Standard electroplating (metals)</td>
<td>423</td>
<td>Very good sectoral coverage</td>
</tr>
<tr>
<td>Site-critical electroplating</td>
<td>24</td>
<td>More answers desirable</td>
</tr>
<tr>
<td>Painting, spraying, brushing, slurry coating</td>
<td>49</td>
<td>More answers needed</td>
</tr>
<tr>
<td>ETP/ECCS</td>
<td>7</td>
<td>Good sectoral coverage</td>
</tr>
<tr>
<td>Speciality Surface treatment</td>
<td>86</td>
<td>More answers needed</td>
</tr>
<tr>
<td>Functional additive</td>
<td>14</td>
<td>More answers desirable</td>
</tr>
</tbody>
</table>
Summary

→ Very good feedback from hard chrome platers

→ Not enough feedback from the aerospace and defence sector

→ Users of Cr(VI) in aerospace, defence and general transportation sector to provide individual information

→ No information from manufacturers of Cr(VI) salts
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Overview of the second call for evidence

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Dr Väinö Nurmi
Economist
Risk Management Directorate
Structure of 2\textsuperscript{nd} call for evidence

Two separate surveys:
- For companies using Cr(VI) compounds
- For alternative providers/companies who substituted to alternatives
Survey for companies using Cr(VI) substances
Survey for companies using Cr(VI) substances

→ Purpose: close gaps from first call for evidence

→ Survey will be similar to first call:
  • Some fine-tuning, i.e. more drop-down menus
  • Do not participate if you responded to first call for evidence

→ Who should answer?
  • Companies who did not respond to first call
  • Users of Cr(VI) in transportation, aerospace and defence sectors
  • Users of Cr(VI) other than chromium trioxide and chromium acids
  • Users of barium chromate
Survey content

→ Survey seeks information mainly on:
  • Current (and historical) exposure
  • Current releases
  • Cost and effectiveness (both realised and hypothetical) of risk management measures to achieve stricter limit values
  • Most likely reaction in case compliance with a limit value not possible
Example question

We would like to know how your company would respond if one of the following binding scientific limit values for occupational exposure to Cr(VI) was implemented: 5 µg/m³, 1 µg/m³, 0.5 µg/m³, 0.1 µg/m³ and 0.01 µg/m³. Note that these are 8h time weighted averages (TWA). This means that if a specific task leading to Cr(VI) exposure is done for 1 hour per workday and no other exposure occurs, the permissible concentrations would be 40 µg/m³, 8 µg/m³, 4 µg/m³, 0.8 µg/m³ and 0.08 µg/m³.

Suppose the binding scientific limit values for occupational exposure to Cr(VI) the limit value was set at 0.5 Cr(VI) µg/m³, how would your company respond:

- [ ] We already comply with this limit value, no action needed
- [ ] We could implement risk management measures that would allow us to comply with this limit value
- [x] We are not certain that we could implement risk management measures that would allow us to comply with this limit value
- [ ] We are certain that we could not implement risk management measures that would allow us to comply with this limit value
Instructions for answering

→ When asked for a figure, check unit and only report figure (no units, no further explanation)

→ Separate field for comments, do not include comment in the same field with the figure

→ Current exposure – if you have several measurements, report mean of measurements

→ When responding, select one use category per answer, and report figures for that specific category

→ If you operate in multiple use categories, fill-in survey for each use category. E.g.: if you operate in 3 use categories, fill-in and respond 3 times
Information for slurry coating

One specific area of interest relates to slurry coating, i.e. Cr(VI)-based painting, spraying, brushing, pen applications, mainly undertaken in aerospace and defence.

→ From first call for evidence: relatively low number of responses (n=49), and high variance in reported compliance costs of reaching different scientific limit values

→ Our hypothesis: many cost estimates refer to (improved) personal protective equipment, while some refer to complete automation of operation

→ When responding, elaborate on the type of the intended improvements in risk management measures
Survey on alternatives
Survey background

→ Some companies indicated that for a given scientific limit value, best-response would be substitution

→ ECHA would like to know more on possibility/cost of substitution

→ Who should answer the survey?
  • Alternative(s) providers
  • Companies who have substituted Cr(VI)
Substitution/alternatives: uses of Cr(VI)

- Alternative providers and companies that have substituted/are almost ready in terms of substituting will have possibility to submit more information
  - Type of alternative
  - Use categories for which alternative would/could work
  - Typical investment costs (per line, plant, worker, etc.)?
  - Comparison of operational costs of alternative vs Cr(VI) technology (in relative terms)
Second call for evidence

Practicalities

Two specific surveys in parallel

5 June – 15 August

Available at: echa.europa.eu/calls-for-comments-and-evidence

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Conclusions

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Nayoni Chowdhury
European Chemicals Agency
Conclusions

Second call for evidence on-going until 15 August: Have your say

More information is needed from users of Cr(VI) in the aerospace, defence and general transportation sector, and from European manufacturers of Cr(VI) salts

Restriction proposal submission in April 2025

We keep receiving and processing applications for authorisation for Cr(VI) substances
Follow developments

→ ECHA’s current activities on restrictions: echa.europa.eu/current-activities-on-restrictions
→ Calls for evidence: echa.europa.eu/previous-calls-for-comments-and-evidence
→ Registry of restriction intention: echa.europa.eu/registry-of-restriction-intentions
→ Commission’s FAQ: ec.europa.eu/docsroom/documents/56174
Q&A

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   or with the QR code

→ Panellists reply until 13:00
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