

### 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

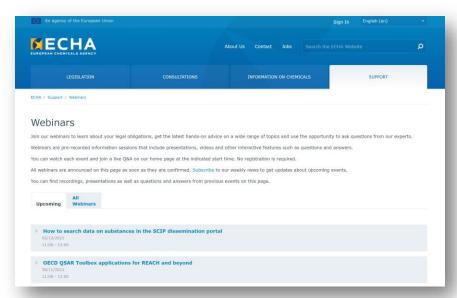
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#### Material available

- → Video recording
- → Presentations



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## Programme



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

**ECHA** 

# Thank you

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6 June 2024

Updated mandate and scope of the restriction preparation

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

Sandrine Lefèvre-Brévart 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?

Sept. 2023

**Commission mandate** to prepare a restriction proposal focusing on chromium trioxide (CT) and chromic acid (CA)

Dec. 2023 -Feb. 2024 1st call for evidence

March 2024

**Preliminary analysis** and specific considerations raised to Commission

April 2024

**Amendment of Commission mandate** to extend scope and preparation timeline



#### 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 socioeconomic 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

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



#### 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		

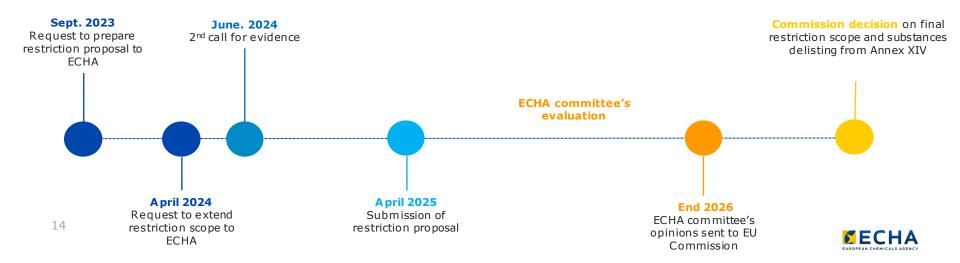
- Transportation and defence
- General engineering
- Industrial applications
- Household equipment
- Packaging ...



#### 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



#### Take home messages



Broad scope of restriction preparation. Not only about chrome plating



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



Restriction proposal submission: April 2025



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# Outcome of the first call for evidence

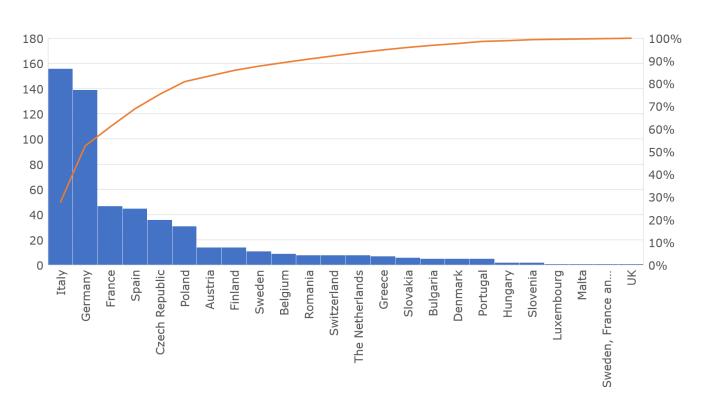
Webinar: Chromium(VI) restriction preparation: what you need to know about the second call for evidence

6 June 2024

Dr Christoph Rheinberger Team Leader, Socio-Economic Analysis Risk Management Directorate

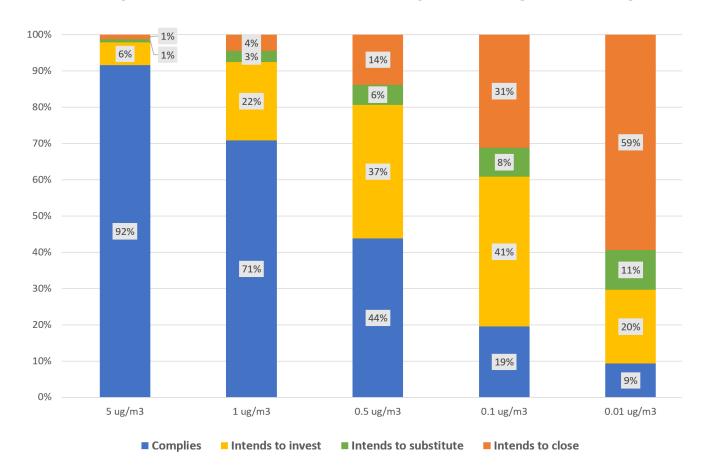


#### Overall participation (n=647)



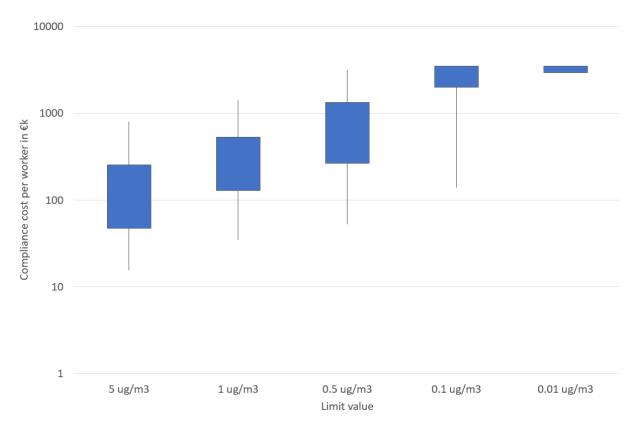


#### Compliance and best response (n=559)



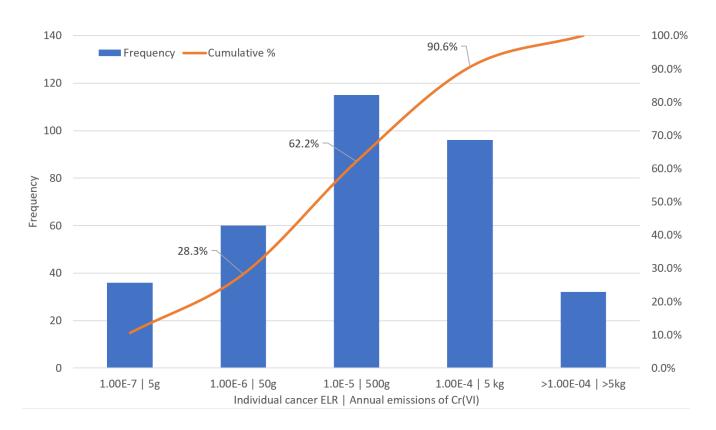


## Compliance cost (n=559)



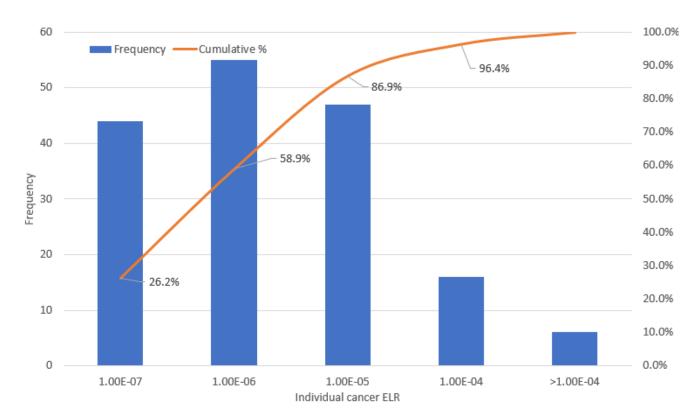


#### Emissions to air (n=339)



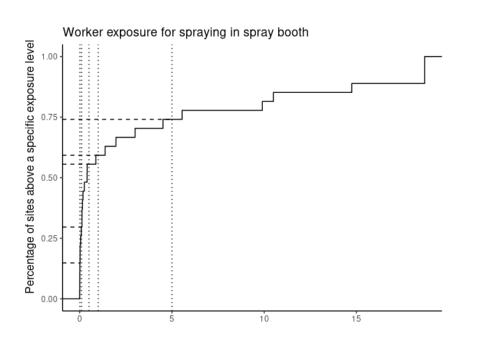


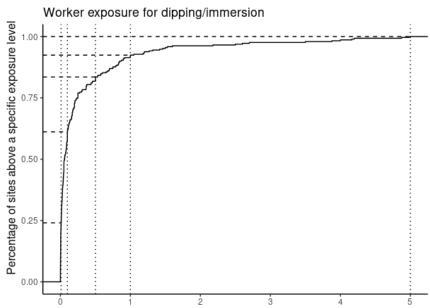
### Emissions to water (n=168)





### Worker exposure (various responses)





## Substance coverage (n=562)

Substance	n	Downstream user notifications	Percentage covered	Tonnage reported
Chromium trioxide and its acids	488+38	1 782	29%	8 708
Sodium dichromate	37	194	19%	14 096
Potassium dichromate	18	115	16%	725
Potassium chromate	3	1	33%	1.2
Sodium chromate	3	12	25%	0.1
Dichromium tris(chromate)	16	304	5%	1.7
Strontium chromate	26	626	4%	16.6
Potassium hydroxyocta- oxodizincatedichromate(1-)	9	246	4%	1.3
Pentazinc chromate octahydroxide	7	91	8%	0.3
Total (incl. multi uses)	645	3 371		23 551



## Use category coverage (n=666)

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

#### 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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6 June 2024

Dr Väinö Nurmi Economist Risk Management Directorate



#### Structure of 2<sup>nd</sup> 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 effectiviness (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:  $5 \mu g/m^3$ ,  $1 \mu g/m^3$ ,  $0.5 \mu g/m^3$ ,  $0.1 \mu g/m^3$  and  $0.01 \mu g/m^3$ . 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  $40 \mu g/m^3$ ,  $8 \mu g/m^3$ ,  $0.8 \mu g/m^3$  and  $0.08 \mu g/m^3$ 

Suppose the binding scientific limit values for occupational exposure to Cr(VI) the limit value was set at **0.5 Cr(VI) ug/m**<sup>3</sup>, how would your company respond:

- We already comply with this limit value, no action needed
- $\bigcirc$  We  $\underline{\mathsf{could}}$  implement risk management measures that would allow us to comply with this limit value
- 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

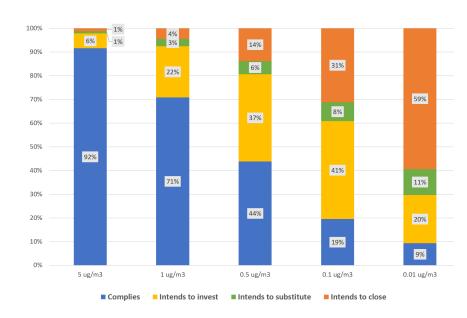
#### Survey background

- → 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:

<a href="mailto:echa.europa.eu/c">
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## Conclusions

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6 June 2024

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

- → Join Q&A at: slido.com Event code: \*crvi or with the QR code
- → Panellists reply until 13:00 Helsinki time (EEST, GMT+3)

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