

### Welcome

Consultation on the restriction proposal of lead in outdoor shooting and fishing

15 April 2021

Mark Blainey European Chemicals Agency





### With you today

**Mark Blainey** 

Head of Unit: Risk Management I



**Christiaan Logtmeijer** 

Socio-economic analyst



**Peter Simpson** 

Restriction process coordinator





### What you can expect from today

- Learn about the REACH restriction process
- Learn about the details of the proposed restriction on the use of lead in outdoor shooting and in fishing sinkers and lures
- Learn about the consultation and how you can submit information
- Help you decide if and what information to submit
- Get answers to your questions





### **Today's programme**

Timing	Title	Speaker
11:00	Introduction to the information session and to the REACH restriction process	Mark Blainey
11:10	Details of the proposed restriction	Christiaan Logtmeijer
11:30	How to participate in the consultation	Peter Simpson
11:50	Concluding remarks and next steps	Mark Blainey
12:00-13:00	Question and answer session	n remains open



### Send your questions using Slido

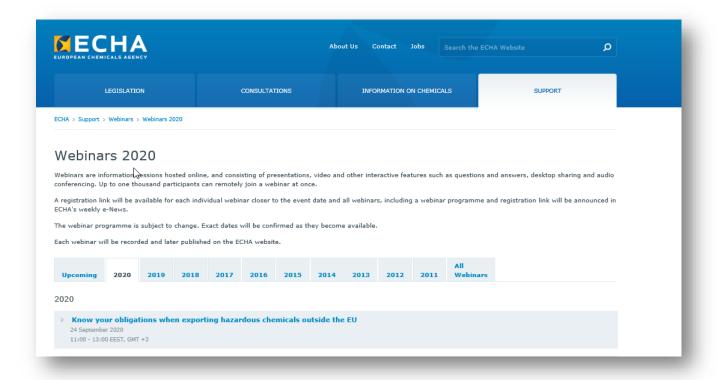
- Go to Slido.com and type in the event code #lead or pause the video now and scan the QR code below with your phone
- Question not answered?
   Contact us: <u>echa.europa.eu/contact</u>





### **Material published**

Video recording, presentations and Q&A <a href="mailto:echa.europa.eu/support/training-material/webinars">echa.europa.eu/support/training-material/webinars</a>





## Introduction to REACH restriction

Consultation on the restriction proposal of lead in outdoor shooting and fishing

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Mark Blainey







#### **REACH restriction**

- Protects our health and the environment from the risks posed by chemicals
  - Address a risk that is not adequately controlled
  - Where action is required at Union level
  - Safety net for other REACH and EU processes
- Usually limit or ban manufacture, placing on the market or use of a substance (also in a mixture/article)
- Can also set out specific conditions such as technical measures or labelling requirements
- Dossier Submitter can be a Member State or ECHA





## Restriction proposal Annex XV report

- Restriction dossier includes:
  - Information on hazards, exposures and risk
  - Justification for action at EU-wide level
  - Available information on alternatives
- Assessment has to show that a restriction is the most appropriate risk management measure to address identified risk
- Annex XV report may also include socio-economic impact analysis
- Inform final decision makers of information for their decision (with opinions)





### **Restriction process**



I Phase

Preparation and submission of a restriction proposal

- Starting the restriction process
- Notification of intention to submit a restriction proposal
- Registry of Intentions
- Preparing the restriction dossier
- Submission and conformity check



II-A Phase

Consultations

- Consultation on the Annex XV report
- Consultation on the SEAC draft opinion



II-B Phase

Opinion development

- Advice from the Forum
- RAC's opinion
- SEAC's opinion



III Phase

Decision and follow-up

- Commission decision on restriction
- Complying with restriction
- Enforcing the restriction

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### **Restriction process**



II-A Phase

Consultations

- Consultation on the Annex XV report
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II-B Phase

Opinion development

- Advice from the Forum
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## **Evaluation**After submission

- Risk Assessment Committee (RAC)
- Socio-Economic Analysis Committee (SEAC)
- 'Effectiveness' of a proposed restriction. A restriction must be:
  - Targeted to effects or exposures resulting in the risk
  - Capable of reducing these risks within a reasonable time period (proportionate to the risk)
- Socio-economic analysis
  - Net benefits (human heath and environment)
  - Net costs (manufacturers, importers, consumers)





#### **Timeline after submission**

- Restriction dossier publicly available after submission:
  - Not to be used for the consultation
- Opinion-making process (typically 14 months)
  - Conformity check
  - Consultation (six months until 24 September 2021)
  - Evaluation of proposal by 2 Committees set out in an 'opinion'
  - Consultation on SEAC draft opinion
- Opinions published and sent to the European
   Commission for decision with the Member States
- Comments submitted in consultation (and responses) are also published



## **Steps of evaluation in RAC and SEAC**

	Committee plenary meeting (timing)	Committee for Risk Assessment (RAC)	Committee for Socio- Economic Analysis (SEAC)
1.	(2.5 months after consultation starts)	Verify proposed scope. Conclude on hazard and hold preliminary discussion on exposure and risk	Verify proposed scope. Conclude on costs of proposed restriction. Hold preliminary discussions on benefits
2.	(5.5 months after consultation starts)	Conclude on exposure and risk. Hold preliminary discussion on derogations	Conclude on benefits and hold preliminary discussions on proportionality and derogations
3.	(8.5 months after consultation starts)	Finalise derogations. Finalise opinion and justification text before adopting final opinion	Conclude on proportionality and derogations. Finalise opinion and justification text. Agree draft opinion
4.		Not relevant	Conclude on issues raised during SEAC draft opinion consultation. <b>Adopt final opinion</b>



### Proposed restriction

Consultation on the restriction proposal of lead in outdoor shooting and fishing

15 April 2021

Christiaan Logtmeijer European Chemicals Agency





### **Outline**

- 60
- Why this proposal

Scope and risks identified

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Restriction proposal

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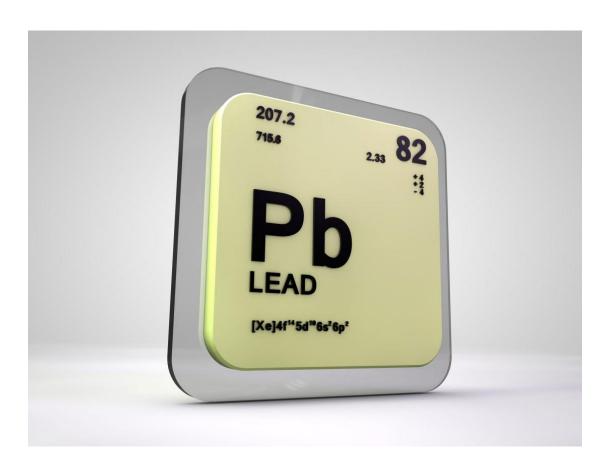
Highlights for each sector

**/** 

Conclusions



### Why this proposal





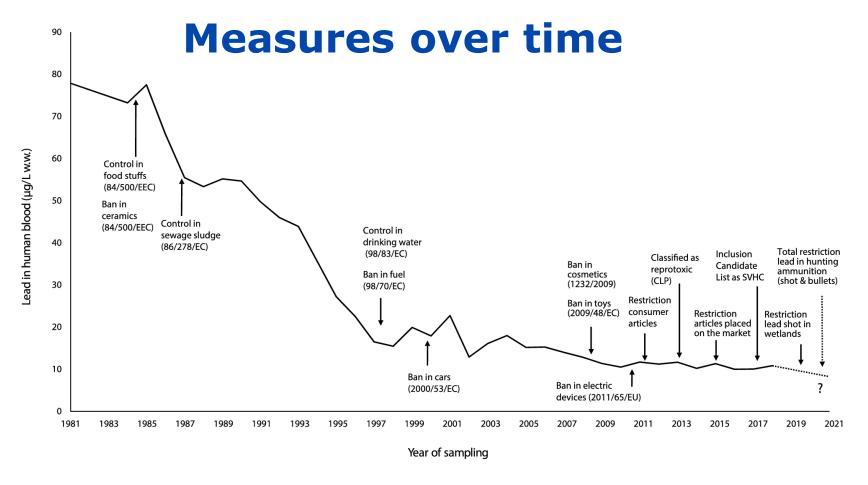
### Why this proposal

- EU/ECHA concern is toxicity of lead
- Lead has been phased out in petrol, paints, ceramics, electric devices etc.
- Lead is restricted under REACH for the following uses:
  - Jewellery
  - Consumer articles
  - Gunshot in and over wetlands
- The proposal does not seek to stop hunting, shooting or fishing but to protect people and the environment

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18





Overview of European risk management measures on the use of lead in relation to lead levels ( $\mu$ g/L wet weight) in whole blood from male and female students from Munster, Germany (n: 3614; n per year 65 to 129). Note: the arrows indicate the year of enforcement, but do not mean that there is a causal relation between the legislative acts and the decrease of the blood lead levels (Treu et al, 2020)

# **Scope and risks identified**









In scope	Out of scope
Outdoor activities e.g. hunting, shooting (for sports and other purposes), fishing	Indoor activities
<b>Projectiles</b> e.g. gunshot, air pellets, bullets	Other ammunition parts Primers, propellants, cartridge casing
Civilian use	Military use, police/law enforcement, security protection, forensic etc Full list in the restriction proposal (=Annex XV report)
<ul><li>Fishing sinkers and lures</li><li>All weights/dimensions</li><li>From the shops/web and 'home-casted'</li></ul>	



### **Overview on uses**

Use	Use description	Release [tpa in 2020]
1	Hunting with gunshot	14 000
2a	Hunting with bullets - small calibre	24
2b	Hunting with bullets - large calibre	122
3	Sports shooting with gunshot	35 000
4	Sports shooting with bullets	42 000
5	Shooting with air rifle	
6	Other shooting activities	
7	Lead in fishing sinkers and lures	3 000
8	Lead in fishing nets, ropes and lines	3 000
	All uses:	97 000



#### **Risks to environment**



- Birds and other species:
  - via primary ingestion: lead shot, lead sinkers and lures (≤50 g) and contaminated soil
  - via secondary ingestion: lead fragments in prey or carrion; contaminated silage/grass
  - 135 million birds at risk every year; risk for other species unknown
- Water and soil:
  - Pollution of water and soil from the deposition of lead ammunition in the soil of shooting ranges



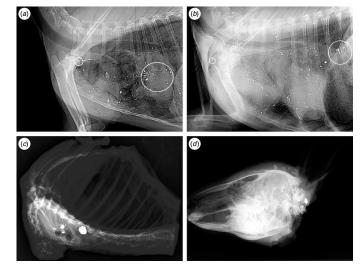
### **Human toxicity**

- Well-known effects of lead (mimics calcium) even at low exposure
  - Adults
    - chronic kidney disease,
    - increased blood pressure
  - Young children
    - Damage to the brain and nervous system, learning and behavioural problems; measured as reduced IQ points
    - Exposure to lead during the critical phase of the nervous system development:
      - o lead transfer from the mother to the foetus (in utero)
      - lead transfer via breast milk
      - high lead intake during growth (high demand for calcium)





#### Risk to human health



- Hunter, shooter, fisher:
  - Exposure from shooting and/or handling lead
  - Exposure from home-casting e.g. fishing tackle
- Humans via the environment:
  - Consumption of game meat / risk for children: IQ point loss demonstrated based on EFSA data on game meat consumption and measured concentration of lead in game meat.
  - Intake of water and food contaminated by lead from shooting ranges

## **Restriction proposal**







## Main elements of the restriction proposal



Ban on 'placing on the market' or 'use' (with transition periods)

Uses with widespread lead releases to the environment and where alternatives are available.



**Derogated uses (uses allowed to continue)** 

Some continued use of lead ammunition allowed if risks are minimised, such as mandatory use of bullet traps (> 90 % recovery)



**Mandatory information to consumers** (either at the point of sale or through labelling) **for derogated uses and during transition period** Improve consumer awareness



Mandatory 'reporting' by the EU Member States for use of gunshot

if derogation for sports shooting with gunshot is preferred to a ban



### **Hunting (bullets)**



- Alternatives available for most forms of hunting:
  - Large calibre: wide variety of bullet weights and types available for bullets larger than 5.6 mm, i.e. .222/.223 calibre – suitable and effective
    - → ban on use (transition period (TP) 18 months)
  - Small calibre: alternatives available but currently limited availability and not widely tested (e.g. .22 LR)
    - → ban on use (TP 5 years)
- For some forms of hunting lead difficult to replace:
  - → more information needed from consultation

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28



### **Sports shooting (bullets)**



29

- Alternatives not yet available/approved; insufficient precision
- Use of lead bullets for sports shooting allowed, but only under strict conditions:
  - ✓ Use takes place at a designated location for sports shooting;
    and
  - ✓ Shooting takes place under strict conditions with more than 90% of lead bullets recovered (bullet traps); and
  - ✓ Agricultural use banned



### **Hunting (gunshot)**

- Already restricted to a large extent under the proposal on the use of lead shot over wetlands
  - Commission Regulation (EU) 2021/57 of 25 January 2021
- Suitable alternative(s) available: steel, bismuth, tungsten
- → ban on placing on market and use (TP 5 years)



# Sports shooting (gunshot)



Source: Subcontractors Association of the Metroplex https://www.sam-dfw.org/

- Suitable alternatives available: steel
- Similar restrictions in place in the some EU Member States
- → PREFERRED: Ban on placing on market and use (TP 5 years)
- However, Olympic rules (ISSF) require lead shot for skeet and trap
- → Optional derogation under strict conditions (TP 5 years)





# Sports shooting (gunshot) - optional derogation

- Continued use under strict conditions:
  - ✓ Use at location approved by national authorities under strict conditions: regular collection of lead; more than 90% recovered; and
  - ✓ Surface water is contained, monitored and, where necessary, treated; and
  - ✓ Agricultural use banned; and
  - ✓ Lead gunshot for sports shooting sold by permitted retailers; and
  - ✓ Individual athletes get permission from national authorities to use lead shot
  - ✓ Labelling obligation
  - ✓ Reporting from Member States to EU Commission



### **Fishing**





- Ban on placing on the market and using home-made and purchased sinkers and lures
- Transition periods of 0, 3 or 5 years depending on the type/weight (≤ or >50 g) of the sinker/lure and practice
- Information to consumers at the point of sale to raise awareness.







## Proposed restriction – information at the point of sale

- Retailers of gunshot, other projectiles, fishing sinkers and lures containing lead 0.3 % w/w or more
- Following information is clearly and visibly given to consumers and professionals:
  - Contains lead
  - Lead is very toxic to the environment and birds
  - Lead may damage fertility or the unborn child
  - The use of lead in [insert use] will be banned in the EU from [date]
  - Lead-free alternatives are available



### **Impacts and costs**

Sector	Emission reduction over 20 year	Total costs [NPV 20-year]	Cost- effectiveness [€/kg avoided releases]
Hunting with gunshot – ban	210 000 tonnes	€956 million	4.63 €/kg
Hunting with small calibres bullets – ban	360 tonnes	€544 million	1 513 €/kg
Hunting with large calibres bullets - ban	2 257 tonnes	€227 million	101 €/kg
Sports shooting with gunshot - ban (preferred option)	525 000 tonnes	€249 million	0.48 €/kg
[Sports shooting with gunshot - derogation under strict conditions (NOT preferred)]	[498 750 tonnes]	[€7 366 million upper bound¹]	[14.8 €/kg]
Sports shooting with small calibre bullets - derogation under strict conditions	283 500 tonnes	€280 million	0.50 - 0.99 €/kg
Sports shooting with large calibre bullets - derogation under strict conditions	349 650 tonnes	€319 million	0.46 - 0.91 €/kg
Fishing - ban	48 300 tonnes	€9 300 million	193 €/kg
Total for the preferred option	~ 1 500 000 tonnes	~€12 000 million	8 €/kg

 $<sup>^1</sup>$ Total costs are calculated based on the assumption that all ranges will implement risk management measures to achieve > 90 % recovery to allow the continued use of lead gunshot







- ✓ Human lead exposure prevented from home-casting fishing sinkers and eating contaminated game meat, food and drinking water
- ✓ Environmental lead exposure in wildlife habitats minimised to limit risks of primary or secondary poisoning of animals
- ✓ Deaths and long-term effects of birds and other species prevented:
   e.g. mortality of about 1.2 million birds a year avoided (monetised
   €114 million) from direct ingestion of lead gunshot
- ✓ EU Birds Directive, AEWA, CMS Raptors MOU\* commitments fulfilled
- ✓ Positive impact on wildlife, ecosystems and associated leisure activities
- ✓ Alternatives have overall a better environmental footprint than lead

<sup>\*</sup>European Union: MOU Signatory since 2011: <a href="https://www.cms.int/raptors/en/legalinstrument/birds-prey-raptors">https://www.cms.int/raptors/en/legalinstrument/birds-prey-raptors</a>

## **Conclusion**





### **Conclusion**

- Risks at EU level identified (human health and environment)
- Alternatives are suitable and available for several uses
- If no suitable alternative(s) are available or other social impact, continued use is allowed if risks are minimised
- Transition periods allow sectors to adapt

The proposal does not seek to stop hunting, shooting or fishing but protect human health and the environment.

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# How to participate in the consultation

Consultation on the restriction proposal of lead in outdoor shooting and fishing

15 April 2021

Peter Simpson

European Chemicals Agency







### What to submit?

- Any information you consider relevant
- Information on topics that RAC, SEAC or ECHA as the dossier submitter have identified
  - Called 'specific information requests'
    - Hunting
    - Sports shooting
    - Fishing
    - Horizontal 'non-specific' issues
  - Comments made without supporting evidence are unlikely to influence the proposal
  - You can claim information as confidential

## Hunting

Questions 1 - 3







# **Question 1**Alternatives to lead for rim-fire calibres

- There is contradictory information on the accuracy of lead-free ammunition for rim-fire calibres (such as .17 HMR, .22 LR, etc) for hunting.
- a) Please provide information on the accuracy of current lead-free ammunition for these calibres in the form of tests, field reports, or similar
- b) Please provide information on potential future development of lead-free alternatives in these calibres





## **Question 2**

# Alternatives to lead for certain types of hunting

# a) For small game hunting with full metal jacket bullets (e.g. Nordic bird hunting)

- i. under what circumstances full metal jacket bullets are permitted in EEA countries for hunting and
- ii. the availability and technical performance of lead-free alternatives for this type of hunting

#### b) For population management of seals

- i. under what circumstances does this type of hunting takes place in EEA countries
- ii. the availability and technical performance of lead-free alternatives for this type of hunting





# **Question 3**Small and large calibres

- The calibre-size threshold used to differentiate between large calibres (18 month transition period) and small calibres (5 year transition period) is 5.6 mm. It is based on calibres allowed for hunting roe deer in different European hunting legislation.
- The smallest tested alternatives are in the calibre range of .222 and .223 (5.55 mm).
- a) Does the proposed cut off between small and large calibres adequately reflect the differences in the suitability and availability of alternatives?

# **Sports shooting**

Questions 4 - 9







# **Question 4**Use of shooting ranges for agriculture

a) Information on the use of shooting ranges/areas for agricultural purposes, including production of crops or horticultural products for human or animal consumption (e.g. during periods when shooting is not practised).

> If possible, please provide quantitative information, such as the number of shooting ranges and areas (used either permanently or temporarily) in a country or region (with a focus on the EEA) that are used for agricultural purposes.

b) Information on concentration limits for lead in soil used for agricultural purposes in certain countries or regions (with a focus on the EEA)?





## **Question 5**

# Measures to limit releases of lead to the environment – trap/skeet ranges

- a) What number/proportion of trap or skeet ranges (in your country/region/EEA) have risk management measures (RMMs) that allow the regular (at least annually) recovery of more than 90% of the spent lead shot? How many stands are usually available at such a range?
- b) Describe the RMMs that are used to achieve 90% recovery and provide information on their costs
- c) Describe measures required for the monitoring and treatment of surface (run-off) water and their costs





## **Question 6**

# Measures to limit releases of lead to the environment – outdoor rifle/pistol ranges

- a) What number/proportion of outdoor rifle/pistol ranges (in your country/region/EEA) have bullet traps in place? Are other RMMs used in combination with bullet traps?
- b) If bullet traps are not used, which other RMMs are in place to limit releases of lead to the environment





# **Question 7**Measures to limit exposure of shooters (users)

- a) Provide information on the recommendations and measures that are implemented at outdoor shooting ranges to limit lead exposure to shooters?
- b) Are there recommendations on the blood lead monitoring of sports shooters?
- c) Do you have any data on the lead exposure of sports shooters?





# **Question 8**Remediation of shooting ranges/areas

- a) Is remediation of shooting ranges and areas at the end of their operational life foreseen by national legislation in your country/region (focus on EEA)?
- b) If this is foreseen, who is responsible for financing and carrying out the remediation?
- c) How are risks managed at the end of the operational life of a shooting range is no remediation takes place (e.g. contaminated site drainage)





# Question 9 Substitution of lead ammunition in outdoor sports shooting

- a) For **gunshot**, are there proposals (in Europe or elsewhere) to phase out the use of lead ammunition in international sports shooting? How long would be needed to implement this?
- b) For **bullets**, the performance (accuracy) of lead-free alternatives are reported to not be acceptable. Please provide further information on their performance (e.g. in the form of tests) or information on the development of lead-free alternatives with acceptable performance in the future.

# **Fishing**

Questions 10 - 11







# Question 10 Home-casting of lead fishing sinkers and lures

- The Dossier Submitter assumes that home-casting is a popular activity among fishers and that if a restriction only applied to the 'placing on the market' of lead containing fishing tackle, but not to its 'use', homecasting would become more popular.
- a) Provide information to allow ECHA's Committees to evaluate these assumptions, such as information on the proportion of fishers making their own lead fishing sinkers and lures or information on the proportion of home-cast lead fishing sinkers and lures compared to purchased ones.





# **Question 11**Alternatives to lead in fishing tackle

- a) Please provide information on the availability of leadfree alternatives for the different types of lead fishing tackle
  - a) sinkers and lures  $\leq 50 \text{ g}$
  - b) sinkers and lures > 50 g,
  - c) lead wires.

## **Horizontal issues**

Questions 12 - 14







# **Question 12**Impacts of the proposed restriction

- The Annex XV report proposes:
  - a concentration limit of 1% w/w
- Different transition periods for:
  - hunting (gunshot / small calibre bullets / large calibre bullets),
  - sports shooting (gunshot / bullets)
  - fishing tackle (lead wires and 'intentional release weights' / sinkers and lures ≤ 50 g / sinkers and lures > 50 g).
- Provide information on the **impacts** of the proposed restriction and consider how these impacts would vary dependent on the concentration limit and the duration of the proposed transition periods.
  - costs and benefits to society, including industry and SMEs





# **Question 13**Monitoring of environmental exposure

 a) Please provide information on any organisations in Europe regularly monitoring the impacts related to the exposure of wildlife to lead ammunition and lead fishing tackle





# **Question 14**Voluntary military training

- The Annex XV report describes the practice of 'voluntary military training' that is reported to take place in some EEA countries.
- a) Please provide further information on this practice including a justification for why lead ammunition is required and why a specific derogation for this activity is needed beyond the existing proposed scope and derogations.





## What happens to your comments?

- Published on our website (monthly intervals).
- Scrutinised by Dossier Submitter (ECHA), RAC and SEAC and – if contain relevant and substantiated information they will be addressed in either the Background Document and/or in the RAC/SEAC opinion
- The Dossier Submitter and RAC and/or SEAC provide a response to all comments
  - Responses published on the ECHA website at the end of the process



#### **ECHA** website

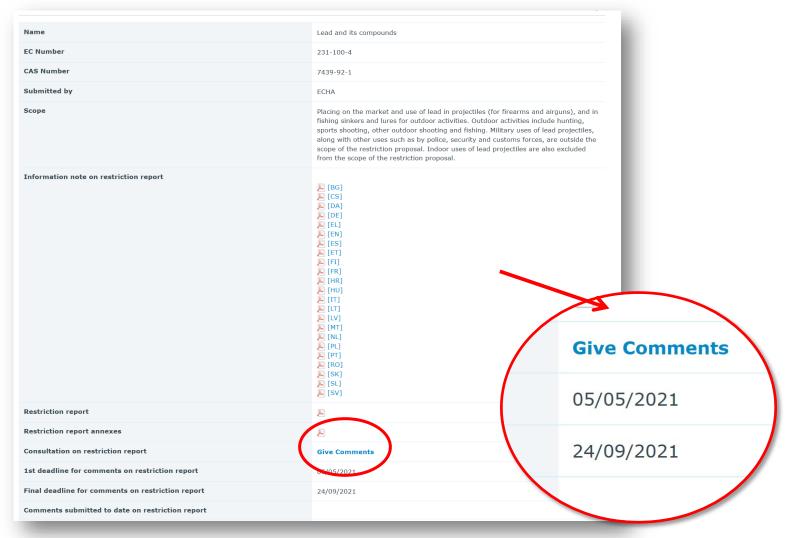
ECHA > Consultations > Submitted restriction under consideration echa.europa.eu/restrictions-under-consideration

#### Submitted restrictions under consideration

Name 🗘	EC Number ©	CAS Number ©	1st deadline for comments on restriction report	Final deadline for comments on restriction report	Deadline for comments on SEAC draft opinion	
Lead and its compounds	231-100-4	7439-92-1	05/05/2021	24/09/2021		Details



### **Substance details**





## Filling in the form

- SECTION I. Personal information
- **1** SECTION II. Organisation
- SECTION III. Non-confidential comments
- General comments

(General comments can be on any aspect of the Annex XV restriction proposal, including issues related to socio-economic analysis)

Specific information requests

(These are several specific questions for which we would like to have your input where possible)

- SECTION IV. Non-confidential attachment
- **1** SECTION V. Confidential Attachment

Responses can be entered directly into the form or through section IV or V as attachments



### **Submission of comments**

- It is **not possible to save your submission** and come back to it. Prepare your comments in an attachment or saved in another format in advance
- Once finished, press submit and your comments will be sent to us.
   You will receive a submission number via e-mail. Refer to it in any communication with us on this topic
- It is not possible to retrieve your submission. You can take a screen shot, or printed copy for your reference

Once you are ready

Submit to ECHA



## Concluding remarks

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15 April 2021

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European Chemicals Agency





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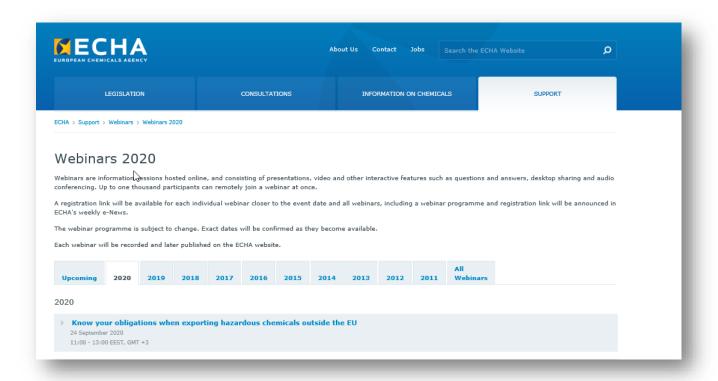
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65



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