

European Environmental Bureau comments on the Annex XV Restriction Report – Lead in outdoor shooting and fishing

24/09/21

The European Environmental Bureau supports the restriction of lead in outdoor shooting and fishing and supports the conclusions of the dossier submitter:

1. Hunting:

“the use of lead in gunshot, bullets, and projectiles poses a risk to wildlife such as birds and to human health that is not adequately controlled, and needs to be addressed at the EU level.”

2. Sports shooting:

“the use of lead in gunshot and bullets in outdoor sports shooting poses a risk to the environment (soil, surface water and under certain circumstances also ground water), wildlife such as birds, livestock, and human health that is not adequately controlled, and needs to be addressed at the EU level.”

3. Fishing

“The proposed restriction, and in particular the phase out of the placing on the market and the use of lead fishing sinkers and lures is the most effective way to reduce at EU level the lead poisoning of birds and exposure of adults and children to home-casting fumes and vapours.”

The restriction is possible due to availability and suitability of alternatives, which are economically feasible and effective.

The restriction is practical, enforceable and monitorable.

The restriction of lead ammunition and fishing for outdoor use is necessary to:

- Prevent risks to human health from inhalation of lead fumes and dusts during shooting activities
- Prevent risks to humans from home casting of lead objects
- Prevent risks to consumers of meat containing lead ammunition, in particular the over 1 million children at risk of developmental neurotoxicity.
- Prevent large scale deaths and ill-health across a broad range of European wildlife from both ammunition and fishing sinkers including threatened species.
- Prevent contamination of soils and vegetation where lead ammunition is deposited.
- Prevent contamination of waterways from leaching and surface water run-off, and risks to groundwater in some settings.
- Prevent risk to livestock from ingestion of lead shot or exposures to lead-contaminated soils, vegetation and water in particular from shooting ranges.

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- To contribute towards the objectives of and the full compliance with the Birds and Habitats Directive.

Derogations

The proposed derogation for sports shooting is concerning. The dossier makes clear that the highest levels of lead deposition occur in and around shooting ranges where strong evidence exists for contamination of topsoils and surrounding areas by ammunition, and its fragments and dust. Surface water contamination has been described well, in addition to site-specific risks to groundwater.

A 90% annual recovery rate from shooting sites is proposed. The dossier makes clear that the number of sites and their location is not known, and that they exist in a range of forms from managed sites to more temporary areas – probably located in nature. Current deposition of 77,000 tonnes annually means that 90% may be recovered but 10% i.e. nearly 8,000 tonnes of lead may be legally released into the environment every year. Over the 20 year period that the dossier uses as a framework, derogation would still allow ~160,000 tonnes of lead to be legally released.

Between annual lead recovery activities, lead remains in the environment where it is available to the following receptors: wildlife, soils and surface water and in some circumstances, groundwater.

If a derogation is to be granted, we expressly ask how environmental monitoring will be conducted to ensure >90% of lead is recovered from the site? How will environmental monitoring be conducted between recovery exercises? Will there be an assessment of the site for its risks to groundwater? Will new sites be expressly assessed for environmental risks? Will sensitive habitats be protected from possibilities of development of sports shooting sites? What are the processes of enforcement?

A derogation would allow sports, hobbies and national pride to take precedence over health protection. Currently the rules governing sports shooting are putting at risk human and environmental health.

Derogations on use of lead ammunition risk allowing continued health impacts and creating complex enforceability issues which will reduce the efficacy of the hunting restriction.

For sports shooters, existing rules are expressly encouraging hobbyists and national and international competitive sports people to expose themselves to harm. There is a need for the bodies responsible for setting rules for sports shooting to be made explicitly aware of not only the environmental risks that their activities create but the risks to the people involved in shooting. Can we request that the European Commission, and other organisations such as the WHO and EFSA, engage with these sporting bodies, in particular the International Olympic Committee, which already has an IOC Sustainability Strategy¹, to both highlight risks to the environment but also risks to shooters including athletes. Once they are made aware of the risks e.g. Laidlaw et al (2017), in particular to female sports shooters of reproductive age (due to long term storage of lead and mobilisation during pregnancy), there is an onus on them to act. It is noted that women are frequently under-represented in studies of lead exposure at shooting ranges (e.g. Naiker et al 2018).

Should any derogations be granted it is imperative to set a deadline for action on rule changes.

¹ <https://olympics.com/ioc/sustainability>

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Hazard assessment

1. The hazard assessment for humans is, in general, well-presented and reviewed. There are some areas of uncertainty concerning exposures within the home from home casting of lead items. An area of concern is data for lead levels in game meat provided by EFSA in Table 1-43 of the Annex XV dossier. Levels for some types of game animal are notably below previously reported levels which suggest non-shot provenance? The species in question are game animals which are widely farmed. We suggest exploring this with EFSA.
2. The hazard assessment for livestock is narrow in its scope (only focussing on cattle) and does not report the studies that find exposure risks for other domestic animals such as chickens and non-cattle ruminants. The risk pathways include direct consumption of lead shot from the environment or consumption of soils, or vegetation contaminated directly by lead particles and dust, or incorporated in foliage from contaminated soils.
3. The hazard assessment for the environment should, as undertaken for humans, expressly recognise the extensive sub-lethal effects for wildlife. There should be a clear recognition of widespread contaminated wildlife populations and the population level effects of lead for some species. Hazard assessment for non-bird taxa such as mammals and fish are not well explored despite evidence from the literature (Bennett et al 2007, Labare et al 2004, Solie Heier et al 2009, Lewis et al 2001).

Risk characterisation

Within the dossier there is a repeated assertion of 'European hunters generally follow "best practice", as advised by several wildlife authorities, when handling game meat.' Do we have any evidence of this? If there is scepticism about risks from human consumption of lead in the hunting community, is it likely that meat that was expressly hunted to eat is thrown away and not put into pâtés, casseroles, other food products, nor fed to dogs or other companion animals in the home? Caution should be used rather than stating this as fact when there is no evidence to support it.

No levels of lead in groundwater should be considered acceptable in line with the EU Water Framework Directive (WFD) 2027 objectives. The EEA report on status of EU waters (EEA 2018), based on WFD reporting, states that lead is a reason for failure of good chemical status in groundwater in eight Member States with an upward trend. Therefore, any further input to groundwater of lead should be considered as of high risk.

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Costs and benefits

This analysis is problematic due to difficulties in verifying apparent costs to producers and users of the lead items in question, and associated industries. Additionally economic quantification of the benefits of the proposal are seriously hampered by the narrow 'market value' only approach taken by ECHA. We agree with the dossier submitter that even though the "reduction in risk to endangered species and human health have not been monetised, they cannot be ignored".

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Justification for an EU-wide restriction measure

The two most important reasons for an EU-wide measure are the first two noted in the dossier i.e.

1. To ensure a harmonised high level of protection of the environment and human health to address the identified risks
2. To address the lack of EU wide commitment to fulfil the Birds Directive commitment towards the protection of birds and their habitats'

We note there are other legal frameworks for environmental protection also. A restriction on market and use of the lead items of concern within the EU also accords with the EU Green Deal aim of "Zero pollution" to protect Europe's citizens and ecosystems. A successful restriction on the lead products in focus contributes to the Commission' zero-pollution action plan to prevent pollution of air, water and soil.

References

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