## Questions and Answers on the Lead Ammunition Petition to the EPA

What is the action requested? The Environmental Protection Agency has been asked for nationwide regulation of toxic lead bullets and lead shotgun pellets used for hunting and shooting sports under the Toxic Substances Control Act, which regulates dangerous chemicals in the United States.

**Who filed it?** The petition was filed by more than 100 nonprofit organizations in 35 states, representing conservationists, birders, hunters, zoologists, scientists, American Indians, wildlife rehabilitators and veterinarians.

What is the problem with lead? Lead is an extremely toxic substance that is dangerous to people and wildlife, even at very low levels. Lead exposure can cause a range of health effects, from acute poisoning and death to long-term problems such as damage to reproduction, growth and neurological development. The government has wisely mandated removal of lead from water pipes, gasoline, paint, cooking utensils and even wheel weights. Spent lead from hunting and fishing activities poses a widespread danger to wildlife.

What are the human health risks? Humans who accidentally ingest lead shot pellets or lead bullet fragments in meat of game shot with lead ammunition risk lead poisoning, which is especially dangerous for children. Lead bullets fragment in shot game, and minute particles of toxic lead can spread throughout the meat that humans eat. Radiograph studies of animals shot with lead ammunition show that numerous imperceptible, dust-sized particles of lead can infect meat up to a foot and a half away from the bullet wound, causing a greater health risk to humans who consume lead-shot game than previously thought. State health agencies have had to recall venison donated to feed the hungry because of lead contamination from lead bullet fragments. Nearly 10 million hunters, their families and low-income beneficiaries of venison donations may be at risk.

What wildlife is at risk? At least 75 bird species have been poisoned by lead ammunition, including bald eagles, golden eagles and endangered California condors. There may be population-level effects from lead poisoning on sensitive species such as condors, cranes, eagles and swans. Many scavengers are poisoned after consuming the carcasses of animals shot with lead ammunition.

Weren't some of those birds already protected from lead? A federal requirement in 1991 banned lead shot for hunting waterfowl — including ducks, geese and swans — but similar protections to get the lead out of terrestrial habitats have been sporadic and only at a local level. There are no federal regulations on lead ammunition that prevent scavengers from exposure to toxic lead fragments. Spent lead shotgun pellets continue to be frequently ingested by swans, cranes, ducks, geese, loons and other waterfowl.

Wasn't there a previous petition to ban lead ammunition? Yes, in 2010 groups petitioned the EPA to ban lead hunting bullets, shotgun pellets and fishing tackle. The EPA refused to review the petition, claiming it lacked authority to regulate toxic lead bullets and shot under the Toxic Substances Control Act. Petitioning organizations sued the EPA over the improper petition denial, but the lawsuit was dismissed on a procedural point in September 2011. The EPA never evaluated lead ammunition risks to wildlife and human health, and the court never ruled on the merits of the petition or lawsuit.

Does the EPA have the authority to enact the kind of ban the groups are seeking? Yes. The Toxic Substances Control Act gives the EPA broad authority to regulate chemical substances that "present an unreasonable risk of injury to health or the environment." Congressional documents and the language of the Act explicitly contradict the EPA's claim that it lacks authority to regulate lead ammunition. The House report on the history and intent of the Act states it "does not exclude from regulation under the bill chemical components of ammunition which could be hazardous because of their chemical properties." The EPA has already declared that lead is a toxic substance and taken steps to remove it from other products and uses. The lead in bullets clearly falls within the definition of a "chemical substance." The EPA is permitted to regulate the toxic components of ammunition, but is not allowed to regulate firearms or the manufacture and sale of ammunition.

Do we know that lead from hunting ammunition is the source of lead harming wildlife? Yes. The science linking lead ammunition to lead poisoning in numerous wildlife species is clear and extensive, with hundreds of peer-reviewed scientific articles on the subject. Other potential sources of lead exposure have been thoroughly examined and disproven. In 2007, 44 prominent scientists joined to state their support for the "robust chain of evidence" linking lead ammunition to lead exposure in California condors. A 2008 Blue Ribbon Panel convened by the American Ornithologists' Union reached the same conclusion, and forensic evidence since then has solidified the link. Other scavengers face similar exposure, and studies continue to show lead poisoning from lead ammunition in a wide range of birds and even mammals.

If the evidence is so clear on this issue, why is there opposition to it? Unfortunately, naysayers will remain for whom no amount of scientific evidence will be sufficient, who will continue to dispute good science and propose other possible sources of lead that have been disproven. One misleading argument by the National Rifle Association has been that regulating lead is a backdoor method to ban guns (which it is not), when in fact it is an effort supported by responsible hunters to get toxic lead out of the environment.

Aren't voluntary measures and hunter education enough? Hunters who already shoot nontoxic ammunition should be given credit for helping to reduce lead poisoning of wildlife, but voluntary efforts and local bans on lead have major limitations: Lead ammunition remains readily available and is still cheaper than nonlead alternatives; even low amounts of noncompliance have been shown to cause major harm; and different requirements between hunting zones and states complicate enforcement and compliance.

Won't this impede hunting and fishing and hurt local economies? No. The costs of ammunition are typically a tiny fraction of the total that hunters spend on their sport. States that have already banned lead shotgun ammunition for hunters have successfully made the transition to nontoxic products and continue to have active hunting communities. A full line of nontoxic replacement products is available. Regulatory action will spur increased demand and availability, and as subsequent production costs fall, nontoxic ammunition will likely become less expensive.

**Will this action inhibit my ability to hunt?** No. You will hunt the way you always have, but with nontoxic ammunition. You will be able to purchase guns and ammunition from

the same places and in the same way, and use them in the same manner. You will have the same access to your traditional hunting and experience no change in your ability to hunt.

Are effective, nontoxic bullets and shot available? Yes, and ammunition in .22 rimfire is now even available. In two recent post-hunt surveys in Arizona, 90 percent of hunters approved of the use of copper bullets, and 88 percent of successful hunters who used nonlead ammunition said it performed as well as or better than lead bullets.

The California Department of Fish and Game has certified nontoxic ammunition from 28 different manufacturers for hunting big-game and nongame species in the range of the California condor: http://www.dfg.ca.gov/wildlife/hunting/condor/certifiedammo.html

The Arizona Game and Fish Department publishes a list of nonlead rifle ammunition available for big-game hunters, including more than 100 bullets in various calibers produced by 14 ammunition manufacturers, as well as seven manufacturers that provide custom-loaded nonlead rifle ammunition: http://www.azqfd.gov/pdfs/w c/condors/NonLeadAmmo.pdf

The U.S. Fish and Wildlife Service has approved 12 nontoxic shot types for hunting waterfowl: http://www.fws.gov/migratorybirds/CurrentBirdIssues/nontoxic.htm

What about bullets for shooting ranges, the police and military, and for personal handguns? The petition supports exceptions for police and military uses, and the EPA has the ability to craft regulation that exempt these uses, as well as allow continued use of lead pistol ammunition for home defense and nonhunting activities. Lead at indoor and outdoor shooting ranges is already regulated by the Occupational Safety and Health Administration and state agencies. The petition addresses lead in hunting and shooting sports that affect wildlife.