

Policy Track Range Management for Administrators

Environmental Laws as They Apply to Shooting Ranges

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Introduction

*It probably is fair to say that our country's environmental laws were not enacted with shooting ranges in mind. Nonetheless, the number of lawsuits challenging the operation of outdoor shooting ranges has increased significantly in recent years. Consequently, ranges are receiving increased attention not only from environmental citizen's groups, but also from federal and state environmental agencies. This article examines the laws and legal theories that have been used by opponents of shooting ranges and includes a discussion of the recent case of *Stone v. Naperville Park District*, involving a trap range in the suburbs of Chicago, Illinois.*

Surveys by the National Shooting Sports Foundation (NSSF), National Sporting Goods Association and others indicate that more than 24 million Americans participate annually in some type of outdoor shooting target practice in the United States. Of this number, it is estimated that 7.5 million engage in trap and skeet shooting, and about 16.5 million participate in rifle or handgun shooting at approximately 7,500 outdoor shooting ranges. The typical participant takes part in these sports 13 times per year, with nearly 2 million taking part more than 20 times per year.

The type of ammunition used in shooting practice varies from solid ammunition used in handguns and rifles to shot employed in skeet and trap shooting. The impact area also differs. Where solid projectiles (bullets) are used, this area typically is limited to a narrow target area that employs a raised metal or earthen berm to stop the projectiles. At skeet and trap ranges, on the other hand, the impact area typically is a wide, broad area.

With virtually no exceptions, metallic lead shot is used at all outdoor shooting ranges. The use of lead shot for hunting migratory waterfowl has been prohibited in the United States since 1991. Traditionally, lead has been the material of choice for users of ranges, because of ease of reloading, economics and lead's superior firing characteristics, including dispersion pattern, trajectory and target impact, particularly for trap and skeet shooting.

The principal exposure pathways for lead at outdoor shooting ranges are: 1) airborne dust particles generated at the firing line and (at solid-shot ranges) at the target area; 2) waterborne

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particles in storm runoff; 3) solution in stormwater runoff; and 4) solution in groundwater. When lead is exposed to air and/or water, it breaks down by weathering into lead oxides, carbonates and other soluble compounds. The solubility of lead in water is dependent upon the pH of the water, with lower pH (greater acidity) resulting in increased solubility. The uptake and migration of lead-bearing water, both dissolved and undissolved, also is a function of particle size, exposure time, precipitation rates, flow velocity and soil density.

Due to its chemical properties, metallic lead generally is considered to be highly immobile in the environment. Numerous studies of former industrial lead processing sites with high surficial lead levels have confirmed that, even where acidic soils are present, soluble lead tends to remain in the upper 10 centimeters of the surface.

Aside from the historic concern about workplace lead exposure, the principal focus of the more recent popular concern over lead exposure in the United States population has been through the ingestion or inhalation of lead from degraded lead paint and organic lead compounds present in soils (caused by leaded gasoline), typically in urban settings and high-traffic areas; more recently, attention also has focused on dissolved lead in drinking water systems that employ lead-bearing fittings or solder.

Public concern over lead exposure at outdoor shooting ranges arose much more recently and has been far more limited, perhaps because of the remoteness of most outdoor shooting ranges and the fact that human exposure to lead at outdoor ranges does not appear to be a problem. Studies of environmental lead exposure at outdoor shooting ranges, therefore, are few. Although the off-site migration of lead in any case is almost totally a function of site-specific conditions, it is comforting to know that metallic lead generally is immobile in the environment.

The Resource Conservation and Recovery Act

One legal theory that is used in almost every case regarding outdoor ranges is the Resource Conservation and Recovery Act (RCRA). This statute imposes requirements that affect the treatment, storage and disposal of solid wastes. What is and what is not a solid waste is governed by specific definitions which appear in both the statute and the U.S. Environmental Protection Agency's (U.S. EPA) RCRA regulations. There also is nothing that is intuitively obvious about these terms; for example, the solid waste definition includes liquid wastes as well.

Defining a hazardous waste is a complex issue, and U.S. EPA addresses the issue in two ways. First, a waste can be deemed hazardous if it displays certain levels of ignitability, corrosivity, reactivity or toxicity. This group of hazardous wastes is called characteristic wastes. The second group of wastes is those which U.S. EPA specifically studied and placed on a list. This group is called listed hazardous wastes.

RCRA was adopted in 1976 to create a uniform cradle-to-grave system of tracking wastes, from the point of generation, to the interim storage of the waste while awaiting transport, to the transport of the waste for disposal and through final disposal of the waste at a regulated waste disposal facility. Although the statute addresses almost all types of solid wastes, it focuses mostly on so-called hazardous wastes. An important point to remember is that hazardous wastes are a subset of solid wastes, therefore, if a material is not a solid waste, it cannot be a hazardous waste.

Lead at shooting ranges generally is found in three forms: unused ammunition; spent bullets, shot and lead sweepings collected from the range grounds for disposal; and spent lead shot lying on the ground or in the water within the shot-fall zone and near the firing line. Lead, being toxic, can be a hazardous waste because of its toxicity characteristic. Pure lead waste clearly is hazardous, but when lead is mixed with other media (soils, for example) a test must be performed on the mixture to determine whether the lead content is such that the mixture is considered hazardous. This test is known as the Toxicity Characteristic Leaching Procedure (TCLP) test.

Opponents of shooting ranges generally advance two theories under RCRA: 1) spent shot and targets at a range are discarded and, therefore, become solid waste regulated under RCRA. If this were true, a range would have to get a RCRA permit and comply with very onerous and expensive operating requirements. No range likely would be able to stay in business if it needed an RCRA permit. The good news is that U.S. EPA has always said, in court and otherwise, that since spent shot and targets are not being truly discarded, but are rather deposited into the environment as a normal consequence of the intended use of these items, they are not subject to RCRA permitting requirements. When faced with this issue, courts have relied on EPA's interpretation and always ruled that ranges are not required to get permits; and 2) spent shot and targets fall within a second and broader definition of solid waste so that a range is subject to liability under RCRA if the waste (i.e., spent shot and targets) presents an imminent and substantial endangerment to human health or the environment. EPA has supported this interpretation, which was adopted by the court in the *Long Island Soundkeeper Fund v. Remington Arms* case. If a party is successful in pursuing this type of claim, the court could order a range to perform a cleanup to address the contamination.

One final point about RCRA—some ranges engage in shot reclamation or recycling practices. There probably are at least 15 contractors known to have equipment capable of recovering lead from soil. The equipment used for shot recovery, however, is designed for operation on relatively flat, dry surfaces, and there is no known practical method for recovering lead shot from forested, hilly or swampy areas. When lead shot is recovered by range owners and operators, it is either sold or given to companies which recycle lead into other products or reuse it in shot manufacture. Additionally, some ranges make the recovered shot available to individual users who have reloading equipment.

Normally under RCRA, once a substance is removed from the ground, it becomes a solid waste subject to all RCRA regulations. However, lead shot and ammunition, if recycled or reused, is considered a scrap metal and enjoys an exemption from RCRA regulation. Thus, ranges can recover the spent shot at a range, recycle or reuse it, and not run afoul of the hazardous waste regulations.

The Clean Water Act

The Clean Water Act (CWA) makes it unlawful to discharge any pollutant into a navigable water without first obtaining a National Pollutant Discharge Elimination System (NPDES) permit. A discharge of pollutant is defined as any addition of any pollutant to navigable waters from any point source. Navigable waters is defined as the waters of the United States, a term which is interpreted very broadly, even to include a drainage ditch. A point source generally is any discernable, confined and discrete conveyance, the most common example of which is the factory discharge pipe. Like navigable waters, the term point source also is interpreted very broadly.

So is a range a point source? Until recently, NPDES permits were not required for ranges because regulatory authorities had not considered ranges subject to Clean Water Act permitting requirements. U.S. EPA also has long acknowledged that hunters shooting over water are not point sources within the meaning of the Clean Water Act. If hunters were found to be point sources, they would be required to obtain NPDES permits.

However, U.S. EPA now has taken the (apparently inconsistent) position that a range, with its mechanical target launchers and shooting platforms, constitutes a point source. (One might ask the following: How can a group of individuals shooting skeet be a point source if hunters, either alone or in groups, are not point sources?) The few courts faced with this issue have adopted EPA's position and ruled that ranges are point sources and, therefore, need NPDES permits. If a permit is required, the applicant generally will have to demonstrate that the discharges are not contaminating the receiving water and not posing a threat to human health or wildlife.

Superfund

Another law of concern, but much less than RCRA or the Clean Water Act, is the Superfund law, also known as the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This statute creates liability for environmental cleanup in present owners of property (irrespective of their innocence) and all former owners/operators who, during their time of ownership, caused or allowed release of a hazardous substance into the environment. Under CERCLA, lead and several of the constituents found in clay targets qualify as hazardous substances. Although citizens cannot bring suits to enforce this statute, U.S. EPA is empowered to force the cleanup of contaminated sites, and even private parties (typically, subsequent owners) may sue to force responsible parties to bear cleanup costs.

Aside from empowering the government to force parties to either conduct or pay for environmental cleanups, CERCLA also authorizes the government to recover for *natural resource damages* resulting from the contamination. Such damages could include monies for reduction in the numbers of flora and fauna (including migratory birds and other animals) in the affected areas.

Normally, CERCLA lawsuits arise when someone buys a piece of property, discovers it is contaminated and sues the parties that caused the contamination. This has happened at an abandoned range, but we know of no CERCLA action that has been brought against an operating range. When a range has been abandoned, the property owner may have a legitimate CERCLA claim to recover the costs of cleaning up the property. CERCLA actions likely will be limited to these situations, however, and not used to force the cleanup of operational ranges because such cleanup generally is unnecessary. An operational range usually presents few environmental concerns, and any such concerns can be addressed through proper stewardship.

Sound and Nuisance Claims

Shooting ranges also have been sued under the doctrine of nuisance. A nuisance generally is defined as something that substantially interferes with another's use of his property. To constitute a nuisance, the offending activity need not be unlawful.

There are several kinds of recognized nuisance claims. For example, a nuisance could interfere with a neighbor's land, such as pollution or diversion of stormwater that results in flooded property. A nuisance also may consist of an interference with the neighbor's use and enjoyment of his property caused by unpleasant odors or excessive sound. When faced with a nuisance suit, a court will examine several issues, including which party was there first, i.e., did the complaining party come to the nuisance.

Most nuisance cases against ranges have been brought because of the sound caused by the range. If a court found that a range constituted a nuisance, the owner or operator of the range could be liable to neighboring property owners for the loss in value of their property. A court also could order a range to shut down.

Because sound issues arise often (where some ranges used to be far from any residential area, they now find that the once-open areas around them have been developed, and sometimes densely developed), many states have passed laws that exempt ranges from nuisance suits based on sound if the range was in operation as of a certain date.

The Naperville Park District Case

In 1948, the Naperville Sportsman's Club began trap shooting activities at a range in Naperville, Illinois, a now fast-growing suburb of Chicago. The property currently is leased to the Naperville Park District by the City of Naperville. In March 1998, a disgruntled neighbor filed suit against the Club, the City of Naperville and the Naperville Park District alleging violations of the Clean Water Act because of discharges of lead shot and targets into a channel connecting two ponds without an NPDES permit. The complaint also alleged that the shooting activities result in the unpermitted storage and disposal of hazardous waste in violation of RCRA. The complaint further alleged violations of the RCRA open dumping provisions.

The range had been the subject of several environmental studies beginning in 1989. All studies indicated that the lead shot in the fenced-in shotfall zone was not migrating and had not affected the groundwater. After suit was filed, the Illinois EPA (IL EPA) issued a No Further Remediation Letter to the Park District and Club signifying that the areas outside of the shotfall zone do not present any threat to persons or the environment.

In April 1998, the U.S. EPA inspected the range and, in July 1998, issued a report stating that the range required an NPDES permit because the ponds and wetland constituted a water of the United States. The waters in question consist of two man-made ponds connected by a man-made channel. Part of the channel lies within the shotfall zone of the range. The Park District voted immediately to cease shooting and, in August 1998, submitted an application to the IL EPA seeking an NPDES permit to cover the trap shooting activities. In May 1999, the IL EPA issued a draft permit that would allow shooting to resume and require the Park District to monitor water quality at the Park.

In defending against the suit, we first filed a motion to dismiss the RCRA permitting count, the RCRA open dumping count and portions of the Clean Water Act claim. In September 1998, the court granted the motion to dismiss in its entirety, ruling that: 1) a shooting range does not need an RCRA operating permit because spent shot does not constitute RCRA hazardous waste, relying on U.S. EPA's long-standing position; 2) the plaintiff's open dumping claims failed because

he failed to provide proper notice of those claims; and 3) the plaintiff could not enforce state water quality standards in a federal citizen suit.

The plaintiff then filed a motion for summary judgment, arguing that the court should find that the range has been in violation of CWA for conducting its activities without an NPDES permit. The plaintiff also sought payment of his attorney's fees, the imposition of civil penalties and a court order requiring a cleanup of the range area. In February 1999, the court granted the motion in part, finding the Park District in violation of CWA for shooting into a water of the United States without an NPDES permit. The court retained jurisdiction over the penalties, fees and cleanup issues.

One of the main issues in the case was whether the plaintiff had standing to bring his complaint. Standing is a legal doctrine that says a person may not sue unless that person has suffered a legally recognized injury that will be redressed by the result he is seeking in court. We argued that the neighbor did not have standing because there was no evidence that the lead had migrated from the shotfall zone and, therefore, the neighbor was not affected by the environmental conditions at the range. The court ruled that he did have standing because of his concern over possible contamination caused by the deposits of lead shot. While that ruling was suspect at the time it was handed down, a recent U.S. Supreme Court case seems to say that a person's subjective concern about the environment may be enough to provide standing.

Throughout 1999, the parties discussed settlement, and in October 1999, an agreement was reached. Under the terms of the settlement, the City of Naperville and the Park District agreed to pay the plaintiff a portion of his attorney's fees and, should shooting at the Park ever be discontinued and the shotfall area put to a use involving public access, also agreed to perform an environmental cleanup under the Illinois Voluntary Cleanup Program. The settlement avoided further litigation regarding attorney's fees, possible civil penalties, and whether and when a cleanup should be done. The case now has been dismissed.

The NPDES permit application remains pending. In October 1999, IL EPA held a public hearing on the draft permit at the Naperville City Hall. Approximately 225 members of the public attended, and the overwhelming majority spoke in favor of IL EPA issuing the permit. IL EPA now is preparing the required Responsiveness Summary, which will itemize the various comments and their responses.

We have asked IL EPA to issue a dual permit—one that allows a switch to steel shot and also the erection of a barrier to catch lead shot. A decision on the permit is expected soon.

Defending Against Challenges to Outdoor Ranges

Legal challenges to outdoor ranges likely will increase as time goes on. The most effective strategy is to evaluate your range for potential problems. By taking steps to address potential problems, you can lessen or even reduce completely the chance that either a governmental agency or neighbor will come knocking with an environmental issue. The National Rifle Association and National Shooting Sports Foundation have a wealth of information regarding the environmental aspects involved in constructing and operating outdoor ranges. A few of these are:

- *Lead Recovery. If possible, periodically and regularly collect and recycle spent shot at your range. While this may not be possible at some ranges because of terrain, it is a good way to reduce potential liability. Some ranges also make money from the recycled lead.*
- *Community Relations. Providing free range use to youth groups accompanied by adults or sponsoring youth events are good ways to promote the shooting sports and foster good community relations. Inviting government officials, police and members of community groups to use or join the range also may be advised.*
- *Sound. Hours of operation can be scheduled to allow shooting only during times that are least likely to be objectionable. Siting and engineering approaches also should be considered. Strategically placed vegetation is an example of one way to reduce sound.*
- *Soil. Adjust the pH in your soil by adding lime or phosphate to keep it in the neutral range. Lead tends to become more mobile at a pH below 6.5 or above 8.5.*
- *Stormwater Runoff. Under certain conditions, water flowing across a range could dissolve lead and transport lead particles into streams, ponds, lakes and other areas. Vegetation slows the flow of water across the surface. Stormwater also can be diverted from areas containing lead through the use of vegetated swales and berms.*
- *Legal Counsel. If a problem arises, retain competent legal counsel to defend the action. Even before an issue arises, ranges may want to retain counsel to examine the range and assess potential problems.*
- *Environmental Consultants. Retaining a qualified environmental consultant may be necessary to conduct environmental sampling and determine whether the range truly presents a problem to human health and the environment.*

Conclusion

Although environmental issues relating to the shooting sports are not entirely new, the recent focus by the federal government and public interest groups on the human health effects resulting from exposure to lead already has spawned numerous situations dealing with environmental contamination claimed to be caused by shooting ranges. In at least two of these cases, the shooting ranges ceased all activities, and for a number of reasons, these closures likely will be permanent.

Public attention may be focused on your shooting range through various avenues. The most common avenue is through the filing of a citizen's complaint with local government or federal agencies, such as the U.S. EPA, U.S. Fish and Wildlife Service, or Occupational Safety and Health Administration, or by the filing of a complaint in court. If an issue arises at your range, address the issue, do not ignore it. It won't go away on its own. Get advice from competent legal counsel and, if needed, an environmental consultant.