



# **Environmental Issues Associated with Outdoor Shooting Ranges**

## **INTERNAL GUIDANCE EFFECTIVE JANUARY 20, 2015**

*This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.*

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### **BACKGROUND**

The Department of Natural Resources has a lengthy history of promoting safe hunting and shooting practices and recognizes the important role that shooting ranges play in providing training and hunter education programs. Sport shooting ranges fill an important role in this effort by providing facilities where people can practice safe shooting skills as well as participate in a popular outdoor activity. Wisconsin has an estimated 600+ active sport shooting ranges.

The Department is also responsible for protecting and enhancing our ecosystems. There are growing concerns about the environmental effects of lead that is used in a variety of outdoor recreational activities. Lead levels resulting from these activities may be concentrated, such as within the shot fall area of sport shooting ranges, or widely dispersed throughout the landscape as a result of recreational activities.

In areas of concentrated shooting, lead has to be managed appropriately to minimize its impact on the environment and wildlife and failure to do so creates potential legal risks and liability for range operators. This guidance focuses on response to environmental issues at these shooting ranges. The Department has formed a Lead Work Group to address the impacts of lead more broadly discharged to the environment through recreational activities. The intent of this document is to identify the laws impacting sport shooting ranges and provide guidance on prioritizing and addressing adverse environmental impacts that may be found at some facilities. The Department strongly encourages ranges to adopt Best Management Practices.

### **LEGAL AUTHORITIES**

The Department does not have express statutory authority to directly regulate sport shooting ranges but there are federal and state environmental laws that may apply to discharges to the environment from ranges or environmental contamination from lead that falls on land or water as a result of shooting activities, including:

- The federal Clean Water Act and Wis. Stat. § 283, which regulates discharges of pollutants to waters of the state;
- The federal Resource Conservation and Recovery Act (RCRA) and Wis. Stat. § 291, which regulates the management of hazardous wastes; Wis. Stat. § 289
- The federal Comprehensive Environmental Response Compensation Liability Act (CERCLA) and Wis. Stat. §§ 292.11 and 292.31, which regulates the discharge of hazardous substances and environmental pollution.

When there are documented impacts that pose a threat to public health, welfare, safety or the environment, the Department can require shooting ranges to conduct the appropriate environmental response actions under the applicable statutory authority to address environmental concerns.

Additionally, state and federal courts have heard cases on environmental issues caused by ranges. Decisions vary by jurisdiction, but in one Wisconsin case, U.S. v. Lake Geneva Associates, No. 98-C-0972, (E.D. WI), a shooting club was held responsible for environmental contamination and loss of migratory birds. In that specific case, the United States Department of Justice pursued cost recovery for remediation and natural resources damages. The Department encourages any entity to consult with municipalities, the Department, and their legal counsel to identify potential liability.

### **DEPARTMENT REGULATORY ACTIONS**

At active ranges, the practice has been to consider the deposition of lead shot to be part of the operation of the shooting ranges; however, site specific circumstances, including but not limited to deposition in water, may affect the applicability of the above referenced federal and state laws. The particular facts in a given case will be especially important in making a determination to take regulatory action. Our practice has been that RCRA or state waste permits are not required to operate a shooting range. State or federal waste water discharge approvals or permits may be required based on the location of the range, body of water affected, and circumstances specific to a particular range. The Department will encourage shooting range operators to contact the designated staff to discuss any questions related to regulatory requirements.

The Department may consider taking regulatory action at shooting ranges that fall into one or more of the following categories:

1. Closed shooting ranges, in particular where there is a pending real estate transaction or a change in land use;
2. When there are documented impacts to surface water or groundwater, and/or evidence of adverse impacts to wildlife such, including measured concentrations of lead in rivers, lakes, or private wells that exceed applicable criteria; or
3. When off-site properties have been impacted.

If a shooting range meets any of the criteria listed above, the Department's Remediation and Redevelopment program will evaluate the information available and may send the shooting range a Letter of Responsibility under Wis. Stat. § 292.11, asking the property owner and/or range owner or operator to take appropriate actions under the Wis. Admin. Code § NR 700 rule series. These actions will include hiring an environmental consultant. If the property owner and/or shooting range owner or operator fail to respond, enforcement action may be considered based upon an assessment of the environmental contamination and the risk to the health, safety, or the environment.

The Department may be notified of a potential discharge of a hazardous substance from shooting ranges through citizen complaints or an environmental investigation. Before taking action, including the collection of environmental samples, DNR staff should discuss such complaints with the appropriate District Water Leader, District AWARe Program Manager and the Remediation and Redevelopment Program Director.

### **BEST MANAGEMENT PRACTICES**

The Department strongly recommends Best Management Practices (BMPs) be established and implemented at outdoor shooting ranges. BMPs provide methods to limit the extent of lead shot contamination, facilitate periodic clean up (lead shot, bullets and bullet fragments and other debris, including wadding, shell casings, clay and paper targets), and set objectives for the development of a site specific management plan. The use of BMPs makes environmental and fiscal sense by minimizing the potential for adverse environmental effects and limiting liability for cleanup costs.

BMPs are particularly important in avoiding shooting over wetlands, into surface water or beyond the property boundary of a range. If a range is oriented so that the fall zone is over wetlands or water it may be possible to change the orientation of the range and avoid further lead deposition in those areas. If changing the fall zone by reorienting the range is not possible, the Department suggests the use of non-toxic shot as defined by 50 CFR 20.21(i)(1). Additionally, the Department will require the management of shot shell-wads and targets to prevent deposition into waters or wetlands. These measures will help control the deposition of lead to wetlands and waterways, as well as neighboring properties. Taking these steps may minimize environmental contamination and the need for cleanup actions either now or in the future.

The EPA and a number of national organizations, including the National Association of Shooting Ranges have developed BMPs that are readily available to the public. The following is a list of resources and references for more information and guidance on BMPs and environmental issues at outdoor shooting ranges:

U.S. Environmental Protection Agency:

[http://www.epa.gov/region02/waste/leadshot/epa\\_bmp.pdf](http://www.epa.gov/region02/waste/leadshot/epa_bmp.pdf)

National Association of Shooting Ranges:

<http://www.nssf.org/ranges/rangeresources/>

Michigan Department of Environmental Quality: [http://www.michigan.gov/documents/deq/deq-oppca-shootingranges-managelead\\_287288\\_7.pdf](http://www.michigan.gov/documents/deq/deq-oppca-shootingranges-managelead_287288_7.pdf)

Interstate Technology & Regulatory Council: <http://www.itcreweb.org/Documents/SMART-2.pdf>

## **POTENTIAL FOR LEAD RECLAMATION**

For active ranges shooting, the Department practice has been to not apply solid or hazardous waste laws to the collection and storage of range related wastes, such as spent slugs and bullets, expended shot, wadding, casings, clay targets, etc. However, shooting ranges should follow best management practices and be encouraged to periodically collect and properly dispose or recycle lead and other range related waste at their facilities, in accordance with Wis. Admin. Code § NR 500 Series, which applies to solid waste. There is the potential for lead collection and/or removal efforts to trigger fugitive dust issues under Wis. Admin. Code § NR 415. Owners of shooting ranges wishing to remove lead from wet areas may need applicable permits, including but not limited to, Wisconsin Pollution Discharge Elimination System (WPDES) permits. Disposal of the return water or other materials must be done in accordance with the WPDES permit. Please consult with your District AWaRe Program Manager and District Water Leader about the appropriate response to these efforts.

## **UNITED STATES COAST GUARD**

Be advised, the United States Coast Guard (USCG) has jurisdiction to regulate and enforce federal law on federal waters, including Lake Michigan, Lake Superior, and the Bay of Green Bay. Owners and operators of shooting ranges located within or shooting in an area of jurisdiction of the USCG should be directed to contact a local representative of USCG to ascertain whether operation is permissible.

## **CONTACTS**

The following people are available resources to help answer questions you may have:

John Robinson, NOR Remediation & Redevelopment Team Supervisor (715) 359-8932

Steve Sisbach, Environmental Enforcement Section Chief (608) 266-7317

Coast Guard Contact: Sector Lake Michigan, Milwaukee (414) 747-7148