Environmental Risk Overview

Gun Ranges

Gun ranges present many potential environmental hazards and pollution risks for the property owner. They are often found on military installations and can be quite extensive in nature, such as a bombing range or a tactical weapons training facility. Gun range facilities can be either indoor, outdoor or a combination of both, and include trap and skeet shooting. Lead and other heavy metals, including zinc, antimony, tungsten and mercury, could be leached into the soil causing contamination that may migrate downward and impact groundwater. These contaminants could come in contact with stormwater at the site and enter storm drains, onsite drywells and sewer systems. The contaminated stormwater could flow off-site and have a negative impact on lakes, rivers, streams and their tributaries. Outdoor gun ranges, or large bombing ranges are also susceptible to illegal dumping of pollutants and other materials on the property.

Environmental Exposures May Include

- Lead bullets, bullet particles, dissolved lead and other metals from an outdoor gun range may contaminate soil and groundwater and can collect in stormwater runoff. If these metals are not properly contained, managed and maintained they can migrate and contaminate neighboring properties leading to third-party claims for property damage and bodily injury.

- People living near gun ranges, and the surrounding wildlife and natural resources are at greater risk for harm and health issues if they are exposed to the toxic metals present on the sites. This exposure can lead to many health issues including reproductive harm, developmental issues in children, paralysis, neurological damage and even death. Lead from gun ranges could enter nearby wetlands and waterways such as lakes, rivers or streams in the area and cause contamination, negatively impacting fish and wildlife.

- Ranges with buildings present may receive third-party claims for bodily injury for the exposure to mold or legionella growth, which could be present in air conditioning and misting systems, or exposure to lead dust from ammunition used at the site.

- There a number of options for removing lead from soil onsite. This can include soil washing or flushing, which uses a washing fluid and can generate waste water and sludge that will need to be properly treated for resuse or disposed of as hazardous waste, and soil reclamation which can generate contaminated dusts. Proper protective gear must be worn by those conducting the process, and dusts must be controlled onsite and during any transit for disposal to avoid violating air quality standards.

- Older buildings may contain lead-based paint. Lead could also be present in the pipes. Lead in pipes can get into drinking water, and paint chips and dust from lead-based paint can be ingested. Exterior lead-based paint can also leach into soil around the structure. Lead exposure can cause significant bodily injury, including brain damage, nervous system problems, learning disabilities, reproductive issues (including miscarriage or still birth), along with muscle and joint pain. Extremely high levels of lead can cause anemia and affect kidney function, and can damage the nervous system bad enough to lead to seizures, coma and death.

- Existing soil and/or groundwater contamination may be present on, under or adjacent to a property and resulting in potential environmental liability. Without knowledge of existing contamination at the site, the property owner may be held responsible for addressing the cleanup and/or remediation of the property.

- Indoor firing ranges can expose third-parties to lead suspended in the air from lead particles and smoke released during shooting, and from lead dusts that are emitted when bullets strike targets. Improper building ventilation or maintenance of ventilation systems can not only pose bodily injury to shooters at the range, but also expose those who reside or work near the range.

- Illicit abandonment is the illegal dumping of pollutants on a property by a third-party. It can become the burden of the property owner for cleanup and third-party bodily injury or property damage if law enforcement cannot find the originator of the waste.

- Firing ranges generate solid waste and debris, such as shot wads and target waste. Shotgun shell casing, wads, and assorted packaging materials can contain lead, chemicals, and other materials potentially harmful to the environment. For example, polycyclic aromatic hydrocarbons found in clay targets are said to be known carcinogens. Improper containment, storage and management of these wastes can lead to contamination of the soil at the site. Wastes taken to disposal sites must also be properly segregated and disposed-of. Improperly segregated and disposed-of wastes can result in regulatory fines or lead to cleanup and environmental tort liability.

- Some products are flammable, such as gunpowder, targets and target stands, and may result in a fire that spreads and releases other materials contained on a site. A fire at the buildings located on a site could emit toxic fumes and smoke from the materials stored in the buildings or due to a mix of materials that occurs as a result of the fire. Firefighting solutions such as water and foam could create contaminated runoff that spreads to nearby storm drains or properties and results in environmental cleanup and tort liability.

- Common contaminants in soil at gun ranges, including lead and other heavy metals, require proper containment and dust reduction procedures. Contaminant removal should be hauled in covered dump trucks, and taken to approved treatment, storage, recycling or disposal facilities. Equipment must be thoroughly cleaned and decontaminated prior to leaving the site. Inadequate procedures can cause migration of the contamination and lead to cleanup and third-party bodily injury and property damage liability.

Environmental Pollution Liability Can Provide Coverage For

- On-site cleanup of new and preexisting pollution conditions
- Off-site cleanup of new and preexisting pollution conditions
- Third-party claims for cleanup costs
- Third-party claims for bodily injury and property damage
- Both sudden and gradual pollution conditions
- Defense costs for third party claims
- First and third-party transportation liability
- Loading and unloading
- Mold, bacteria, legionella and more
- Natural resource damage
- Coverage for civil fines and punitive damages where allowed by state law
- Non-owned disposal sites
- Illicit abandonment

Claims Scenarios & Examples

- A large city paid $22 million for a cleanup at the site of a former rod and gun club, which for 80 years operated a trap shooting range on the shores of a large lake. For many years, the club allowed lead shot to be used at the site, much of which remained in the soil. To ensure the property is was safe for any future use, the city was required to replace four feet of topsoil over eleven acres.

- A group of fishermen filed a lawsuit against a gun club that was situated on a peninsula jutting into the ocean. A study found that the club had deposited 5 million pounds of lead and 11 million pounds of toxic target fragments on its grounds and nearby waters. Half the ducks in the area had acute lead poisoning, caused by ingesting the shot while diving for food. Mussels, clams, and oysters were found to contain 10 times the normal level of lead. As a result, the town banned shellfish harvesting on the site. The lawsuit filed by the fishermen alleged the club was responsible for cleaning up the debris under the Resource Conservation and Recovery Act, which regulates disposal of hazardous waste. The ensuing fight split local gun owners. The club and its members argued that laws on disposal of hazardous waste didn't apply to materials leftover as a result of recreation. The fisherman ultimately won their case, but the cleanup was not easy and was very expensive.

- As part of a consent decree, current and past owners of a former property agreed to pay the U.S. government $1,000,000 in cleanup costs for contamination from a trap and skeet shooting range. The contamination at the abandoned site was discovered after 200 geese died of lead poisoning. The federal government was reported to have spent $1.75 million for cleanup as of the time of the agreement.

- A day care center was forced to close and the children were required to have blood tests after it was discovered that a neighboring indoor shooting range was venting lead-contaminated air into the center's playground area. Lead levels just outside the range's exhaust fan were found to be 8,000 times higher than the acceptable level set by the county's Department of Environmental Management, and those in the soil near the border between the range and the daycare center were about 40 times the acceptable level. The proprietor of the private shooting range was reported to be "shocked" by the revelation, arguing that the ventilation system had been inspected by health officials 10 years earlier when the range was built.

- A coalition of environmental groups led by a well-known local politician filed a lawsuit against a large county and its Parts Department for violating federal statutes by failing to remove an estimated 500 tons of lead at a 1500-acre wildlife reservation, stating that the concentrations were a threat to humans and wildlife. Lead is a carcinogen particularly dangerous to children and its use is regulated under the Migratory Bird Treaty Act, which prohibits hunters from depositing lead in water or wetlands that are spawning grounds for fish or are areas used by birds.

- Lead dust from a gun range forced the closure of a kids' gymnastic center, along with the gun range. It was determined that the concentration of lead dust was so severe that it posed a threat to the children at the training center located next door to the firing range. Federal and state agencies contend that levels of lead dust greater than 1,000 parts per million are hazardous. The lead levels at the firing range were almost entirely in the thousands of parts per million and ranged as high as 52,000 ppm.

Final Consideration

Your property can be faced with the cost to defend itself against allegations or legal action from pollution related events, regardless if you are at fault or not. Having the proper insurance coverage in place will help fund the expenses incurred to investigate or defend against a claim or suit and provide you with environmental claims handling expertise.

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