

Shooting Range Guidance

Regulatory Classification of lead shot and/or lead

Under the RCRA hazardous waste regulations, shooting ranges can remove lead and place the treated soil back on the range, even if the soil being placed back on the range fails TCLP. This activity is considered range maintenance, rather than hazardous waste treatment or remediation as long as the range will continue to operate, even if the range is currently inactive. (When the range closes, lead left on the range becomes RCRA hazardous waste, and the range owner or operator would be required to clean up.) The lead recovered from the range is treated as hazardous scrap metal or processed scrap metal and is exempt or excluded from the 370 series regulations. A Part 364 waste transporter permit may be required unless the transportation meets an exemption in 6 NYCRR 374-2.1(b)(5). **Ranges should contact the Division of Water in their local Regional DEC Office before beginning any construction or lead recovery activities, since a permit may be required.**

Soil from shooting ranges that fails TCLP that is being moved off-site for treatment or disposal would usually be treated as hazardous waste under 370-374 and 376, and a Part 364 permit may be required whether or not it is regulated hazardous waste.

Both the process of removing the lead and of directing it for reclamation are exempt from the Parts 370-374 hazardous waste regulations. The following are the applicable regulatory citations:

6 NYCRR 374-1.13(c)(1)(i)(‘c’) exempts the process of sifting or otherwise recovering munition fragments during range clearance activities at active or inactive ranges. This exemption allows range operators (or their contractors) to do range maintenance to remove munition fragments, and then replace the sifted soil back on the range, even if the soil fails the TCLP test. [https://govt.westlaw.com/nycrr/Document/I4ead605fcd1711dda432a117e6e0f345?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/nycrr/Document/I4ead605fcd1711dda432a117e6e0f345?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default)). Although this is regulation applies to military ranges and several of the definitions below describe military ranges, **civilian ranges are subject to the same requirements and exemptions.**

374-1.13(b)(1) “‘Active range’ means a military range that is currently in service and is being regularly used for range activities.’

6 NYCRR 374-1.13(b)(7) “‘Inactive Range’ means a military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.’ For civilian ranges, the Department considers that a ranges at a municipal or private site may be considered an “Inactive Range” if it remains under the control of the site owner or operator, the range owner or operator may reopen the range, and it has not been put to incompatible used.

6 NYCRR 374-1.13(c)(3)(ii) A used or fired military munition is a solid waste “if recovered, collected, and then disposed of by burial, or landfilling either on or off a range.” USEPA, in the

February 3, 1997 “Military Munitions Final Rule Response to Comments Background Document” section 6.3 Comment number 5, states that “The collection of fired bullets, including those that contain lead at indoor firing ranges, from active firing ranges is considered by EPA to be range maintenance and not hazardous waste management activities within the scope of the rule. EPA cautions, however, that although on-range collection may not be a waste management activity, the removal of such materials, from the range may result in the generation of a solid waste and the off-range storage and subsequent treatment or disposal of such waste may be subject to RCRA regulation.” NYSDEC accepts the interpretation that these provisions of 40 CFR 266.202 and the corresponding state regulations, 6 NYCRR 374-1.13(c) may also apply to civilian ranges.

Status of lead munitions recovered from the range:

The “hazardous scrap metal exemption” of 6 NYCRR 371.1(g)(1)(iii)(‘b’) exempts recoverable lead that is being directed to reclamation from the hazardous waste regulations of 6 NYCRR Parts 372-374; or for ammunition that has been processed such as sorted by size or type subsequent to removal from the range, processed scrap metal exclusion 371.1(e)(1)(xiii). In both cases, the metal must be reclaimed.

[https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=Id10d5690b5a011dda0a4e17826ebc834&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/nycrr/Browse/Home/NewYork/NewYorkCodesRulesandRegulations?guid=Id10d5690b5a011dda0a4e17826ebc834&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

A c7 notification should be submitted to this office before the lead is sent off-site. The c7 notification is currently required by parties claiming the scrap metal exemption or exclusion.

http://www.dec.ny.gov/docs/remediation_hudson_pdf/genc7fillform.pdf

Part 364 Waste Transporter Permits regulations exempt transport of up to 2,000 pounds of waste in a single shipment: 364-2.1(b)(5)

[https://govt.westlaw.com/nycrr/Document/Id4d78e88dfe911e7aa6b9b71698a280b?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/nycrr/Document/Id4d78e88dfe911e7aa6b9b71698a280b?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

Soil Washing

If soil washing is conducted, then there may be water regulations such as a requirement for a SPDES permit and/or a stormwater management permit.

The process of aqueous soil washing is described in USEPA’s “Best Management Practices for Lead at Outdoor Shooting Ranges,” located at:

http://www2.epa.gov/sites/production/files/documents/epa_bmp.pdf (see III-14 to 15; in pdf file, pages 46-47). In the manual, the process describes a closed-loop water system. There is a recent practice of excavating an area on or near the range, pumping in water, and discharging the water to the excavated area, or settling pond after soil washing. The settling pond is allowed to dry

after the soil washing is complete. In some cases, the contractor or range operator might be planning to discharge to an existing pond or wetlands near the range. The process of soil washing, and the associated excavation and discharges may be subject to water regulations. **Ranges contemplating aqueous soil washing should contact to the Division of Water in their local Regional DEC Office.**

Lead Shot or Bullets That Fall Off-Range

Per 374-1.13(c)(4), “For purposes of ECL 27-0701.1, a used or fired military munition is a solid waste, and, therefore, is potentially subject to corrective action authorities under ECL 27-0911 and 71-2727(3), or imminent and substantial endangerment authorities under ECL 71-0301, if the munition lands off-range and is not promptly rendered safe and/or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munition and its location (to the extent the location is known).”

Imminent and Substantial Endangerment

If the Department, EPA or a private entity knows or suspects that lead or other chemicals may be migrating off-range including into waters of the state, the range owner or operator may be compelled to investigate and potentially remediate the range. Several citizen suits have been threatened or filed in New York State under RCRA 7003 or ECL 71-0301. USEPA has used this mechanism, together with Clean Water Act authorities to require ranges on or adjacent to wetlands or water bodies to investigate, reorient the range, or remediate. When a private citizen expresses concern about the operations of a particular range, the DEC Regional office or USEPA Region 2 conduct a site visit and assess any concerns. Sampling is sometimes conducted.

Emergency Response

Emergency response personnel sometimes use shooting ranges as sites to detonate explosives during an emergency response. Such use of a shooting range is exempt from hazardous waste requirements under 6 NYCRR subparagraphs 372.1(b)(3)(i) and (ii), subparagraph 373-1.1(d)(1)(xiii), subdivision 374-1.13(e), or alternately 6 NYCRR section 621.12. Transportation of the explosive material to the range is exempted under 6 NYCRR subparagraph 364-2.1(b)(22).

The generator of the explosive waste is responsible for disposal of any residues resulting from the emergency response.

Closed, Transferring or Transferred ranges:

Regulatory classification of lead shot and lead contaminated soils from former ranges: Lead shot and metal casings recovered from the range and recycled or reclaimed are eligible for exemption under the hazardous scrap metal exemption 371.1(g)(1)(iii)(‘b’) or processed scrap metal exclusion 371.1(e)(1)(xiii). The separated metal is not subject to any of the regular RCRA storage and labeling requirements, nor is a hazardous waste manifest required, and the smelter or

scrap metal dealer does not need a Part 373 permit. C7 notification is required. It is strongly recommended that any lead fragments and shell casings be stored in a manner that eliminates any run-off or soil contamination.

The process of separating lead shot and bullet casings from the soil can be exempted under the recycling exemption of 373-1.1(d)(1)(viii). However, if soil is to be replaced that does not meet the land disposal restrictions of 6 NYCRR Part 376, then the area should be handled as a Corrective Action Management Unit (CAMU), since the range clearance exemption in 374-1.13(c)(1)(iii)(‘c’) does not apply to Closed, Transferring, or Transferred ranges.

Soil that fails TCLP and is sent for disposal needs to be handled as ordinary hazardous waste. The storage time limits and other requirements of 6 NYCRR Parts 370-374 and 376 apply. See 373-1.1(d)(1)(iii) for less than 90-day storage requirements.

Additional Resources

The following documents describe some range operations and maintenance practices that can make the lead more recoverable and/or mitigate migration of the lead off-range and/or to surface or ground water.

ITRC small arms firing range publications:

<http://www.itrcweb.org/Guidance/ListDocuments?TopicID=26&SubTopicID=25>

seminar archive: http://www.clu-in.org/conf/itrc/smartemp_062805/

USEPA Region 2's Best Management Practices manual: <http://www2.epa.gov/lead/best-management-practices-lead-outdoor-shooting-ranges-epa-902-b-01-001-revised-june-2005>

Additional resources: http://www.clu-in.org/conf/itrc/smart_061003/resource.cfm

NYS Department of Health “Aim at Lead Safety” guidance:

https://www.health.ny.gov/environmental/lead/target_shooting/