

# Health, Safety and Environmental considerations in Shooting range regulations

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# Discussion points

- **Current regulatory requirements – Enforced specifications**
- **Proposed new requirements – Draft specification making SANS 10353 compulsory**
- **International Benchmarking – USA and Victoria Police, Melbourne Australia**
- **Challenges and shortcomings of the South African regulations**
- **Recommendations – way forward**

# Current requirements

- **VC 9088 – Compulsory Specification for Small Arms Shooting Ranges**
- **VC 9088 - contains the minimum safety requirement for constructing, planning and operation of indoor and outdoor shooting range, but some critical areas lack.**
- **Does not apply to any area it could be otherwise be lawful to discharge a firearm.**
- **No administrative requirements (Approval requirements)**

**included.**

# Proposed new requirements

- **Refers to latest edition of SANS 10353 “Small arms shooting ranges”**
- **Proposed to cover general requirements for the planning, construction and design of small arms shooting ranges (hereafter referred to as shooting ranges) including ballistic test and gunsmith test firing ranges.**
- **Excluded from the scope are.:**
  - **A “sighting range” used to sight in a rifle on a farm for hunting purposes;**
  - **A bush “jungle lane”; and**
  - **Open areas for field guide training.**
- **Includes Administrative requirements (Approval requirements)**

# Proposed new requirements

## (APPLICATION FOR APPROVAL )

The owner or a representative of the owner of a facility shall apply to the NRCS for the approval of the facility. The application shall be accompanied by the following pertaining to the facility

- Completed and signed NRCS application form.
- Technical drawings to scale indicating the following as a minimum:
  - Range dimensions.
  - Materials used for the construction of the stop butt, baffles, bullet traps, back plate and sound proofing, as may be applicable.
- Aerial photographs of outdoor ranges.
- Photographs of the interior of indoor facilities or and the features of outdoor facilities, as may be appropriate to demonstrate compliance with requirements.
- Zoning / land use certificates.
- Any reasonable additional information required to clarify the above as may be requested by the NRCS

# ➤ NRA requirements **International benchmarking**

- Lead management : Environmental stewardship plan
- Evaluate existing conditions
- Identify environmental issues
- Identify management and engineering solutions
- Prepare plan
- Implement plan
- Keep records and revise plan

## **Range safety**

- Issues of key interest relates to range maintenance, occupational health and safety, lead management, noise control, stakeholder identification including community members or neighbours who may be affected by the operations of shooting ranges

# International benchmarking

## (Victoria Police requirements)

- **Use a Risk Based Range Safety Model (RBRSM)**
- **RBRSM is an improved approach to range safety which enables:**
- **Identification, Description, and Estimation of the probability of significant hazards and hazardous events**
- **Enables the nature, magnitude and the probabilities of consequences of hazards and hazardous events to be estimated.**
- **Enables the evaluation of risk based on data and plainly acknowledges the assumptions used, calculation processes involved , uncertainties in the results, and the sources of the uncertainties.**

# International benchmarking

- **Application considerations**
- **When considering an application, the Chief Commissioner will particularly consider the proximity of:**
  - **public roads, paths, parks and centres of habitation**
- **flanking the sides of the range and within a direct unobstructed (excluding any backstop) distance. This distance must be sufficient to cover the range danger area for the type of firearm and ammunition to be used on the range.**
- **Further protective measures may be required if the Chief Commissioner considers that the siting constitutes a danger to the public. These measures can be in addition to the requirements set out.**

# International trends

## Provisional Range Approval

- Prior to submitting an application for a planning permit to the relevant authority, documentation for a new range may be forwarded to the Chief Commissioner for comment and provisional approval of the safety aspects. This provisional approval may also incorporate an inspection of the proposed range site. The provisional approval document could then be sent as part of the Planning Permit Application.
- Final approval will be given for the range after construction, provided it complied with the original and provisionally approved design.

# Problems identified

- **VC 9088 was compiled to be used on static ranges only. During surveillance inspections it was found that it is difficult to evaluate a non-static range using VC9088.**
- **VC9088 does not cover the health and safety issues faced by the range owner, employee and public.**
- **No requirements included on management of potential negative environmental and health effects of range. In particular, the public is concerned about potential risks associated with the historical and continued use of lead shot and bullets at shooting ranges.**

# Problems identified (continued)

- Shooting ranges in protected areas – No specific/ special requirements outlined
  - How do we deal with their unique problems?
  - Noise control
  - Lead pollution
  - Type of business in the area (mainly leisure)
- Human settlements developed/ established around existing shooting ranges.
  - Linkage between the various regulatory and administrative bodies.
  - Zoning issue

# Recommendations

## ➤ Zoning

- It has become very clear during enforcement that many ranges fails or are closed down because communities and public at large are not consulted and communicated with. When new ranges or existing ones which might have been far away from people before, but now surrounded should conduct public hearings and make people aware of what they are doing, measures taken to ensure that the shooting will operate safely, indicate benefits to the communities and any corporate social investments.
- Establish liaison with government departments on lead management, health and safety & environmental issues (Environmental Affairs & Labour)

# Recommendations

## ➤ Considerations regarding Neighbors

- How far are dwellings / neighbors from a shooting range?
- Where can the closest inhabited dwelling be placed to the range property according to zoning laws?
- Where are churches and schools?
- How is the land zoned?
- What are special considerations for Protected areas?

# Recommendations

## ➤ Lead management : Environmental stewardship plan

- Evaluate existing conditions
- Identify environmental issues
- Identify management and engineering solutions
- Prepare plan
- Implement plan
- Keep records and revise plan

## ➤ Noise abatement and reduction

- Sound survey should also be conducted from time to time.

# Thank You

- Any Questions