



TOWN OF CAPE ELIZABETH

Code Enforcement Office
P. O. Box 6260
320 Ocean House Road
Cape Elizabeth, Maine 04107-0060

Phone: 207-799-1619

Email: benjamin.mcdougal@capeelizabeth.org

December 18, 2015

Michael McGovern, Town Manager

Dear Michael,

On October 14, 2015, the Town Council approved the License Application of the Spurwink Rod and Gun Club conditioned upon the final certification being made by the Code Enforcement Officer regarding compliance with the following sections of the Shooting Range Ordinance (Chapter 24):

- 24-6-5 Access to Shooting Range Facility
- 24-7-1 Maintenance
- 24-5-1 Shot Containment (25 yard Range only)
- 24-7-2 Best Management Practices

Based on the attached report dated December 14, 2015 prepared by Rick LaRosa, Registered Architect, I hereby determine that the Spurwink Rod and Gun Club has satisfied the following requirements of the Cape Elizabeth Shooting Range Ordinance (Chapter 24):

- 24-6-5 Access to Shooting Range Facility
- 24-7-1 Maintenance
- 24-5-1 Shot Containment, 25 yard range only. The 50 and 100 yard ranges have not met the requirements of the Shooting Range Ordinance as it relates to Shot Containment.

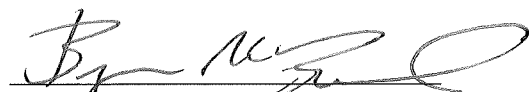
Regarding the 4 items listed on page 3 of the LaRosa report, Tammy Walter, President of the Spurwink Rod and Gun Club, has agreed that no one will be allowed in the shooting area after dark until the egress lighting and an exit sign are installed. Ms. Walter also informed me that stenciled notices have been completed as specified by Mr. LaRosa and the ballistic rubber is securely fastened so no edges are exposed to the firing line.

Based on the following, I hereby determine that the Lead Management Plan for the Spurwink Rod and Gun Club meets or exceeds the standards set forth in the E.P.A. Lead Management Guidelines and therefore satisfies the requirements of Section 24-7-2:

1. On June 8, 2015 the Firing Range Committee voted unanimously that the Lead Management Plan submitted by the Spurwink Rod and Gun Club was adequate to meet this requirement.

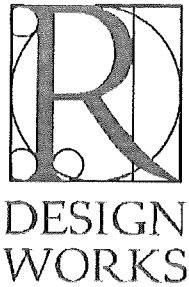
2. The attached report dated December 11, 2015 prepared by Richard A. Sweet, Certified Geologist, states that the Lead Management Plan submitted by the Spurwink Rod and Gun Club is adequate to meet this requirement. Mr. Sweet recommends that the outlet pipe for the underdrain is sampled and tested for lead every 2 years. Spurwink Rod and Gun Club has agreed to adopt this recommendation into their Lead Management Plan.

As Code Enforcement Officer of the Town of Cape Elizabeth, I hereby certify that the Spurwink Rod and Gun Club has satisfied the conditions placed on the approval of their License Application.



Benjamin McDougal
Code Enforcement Officer

CC: Neil Williams, Police Chief



Benjamin McDougal
Code Enforcement Officer
Town of Cape Elizabeth
320 Ocean House Road
P.O. Box 6260
Cape Elizabeth, ME 04107

December 18, 2015
DRAFT

RE: Spurwink Rod and Gun Club
Range Remediation

Mr. McDougal:

As an NRA recommended range Architect, a licensed Architect in the State of Maine and the author of the range report that recommended the suspension of live fire at the Spurwink Rod and Gun Club (SRGC), I am adequately familiar with the previous situation and condition of the existing range. Our firm has over 8 years' experience in designing, evaluating and remediating indoor and outdoor gun ranges across the County, including all facilities and ranges for GLOCK. Our firm also has national experience with similar projects, concerns and in providing solutions to range owners, adjacent property owners and municipalities.

After our report resulted in the suspension of live fire at the SRGC, our firm volunteered (100%) to donate our Architectural design services to assist the SRGC in creating a safe and professional shooting club. Today, upon the request of the Town of Cape Elizabeth and the SRGC, I visited the range to see if our design had been successfully implemented and if I felt the deficiencies, as noted in our report, had been adequately addressed. With very few exceptions, I have determined that the SRGC 25-yard range is ready to reopen, pending authorization from the Authorities of Jurisdiction. Specifically...

1. The SRGC is found to be in compliance with Section 24-6-5 in regard to access limitations with adequate security and control of ingress and egress with electronic entry coded for members, subject to the Town Code Enforcement Officer's final certification of compliance in the record of this Application.

2. Based on the revised SRGC Range Manual, the SRGC will meet the standards specified in the NRA Range Source Book thereby meeting the requirements of Section 24-7-1 in regard to anticipated maintenance, to be confirmed by the Town Code Enforcement Officer final certification thereof in the record of this Application.

3. The SRGC is found to be in compliance with Shot Containment provisions Section 24-5-1 based on the observed and recently improvements (designed for the 25-yard range by Richard F. LaRosa, Architect), to be confirmed by the Town Code Enforcement Officer's final certification of satisfactory completion in the record of this Application. For all live fire on the 25-yard range, the current design and range remediation provides 100% shot containment so long as 1) the range is managed as

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intended, 2) shooters are firing from established firing positions and elevations and 3) ballistics are limited to those identified in the revised SRGC range manual. This finding is limited at this time to the 25-yard range. Use of live ammunition at the remainder of the existing Shooting Range Facility beyond the 25-yard range, including the 50-yard and 100-yard ranges, shall remain suspended with the exception of air rifles, pending such further design and implementation of improvements that are certified by a reputable safety instructor to result in 100% shot containment for such portions of the applicant's Shooting Range Facility, as confirmed at such time by the Town Code Enforcement Officer's final certification of satisfactory competition in the record of this Application.

Regarding the definition of '100% shot containment,' the following definition was established and is acceptable regarding the previous (existing) SRGC range by the Town of Cape Elizabeth in a previous meeting...

Findings

- 1) By a vote of 4 to 1, we find that as designed the Spurwink Rod and Gun Club meets the requirement for Shot Containment set forth in the ordinance, further supporter by the written range rules.*
- 2) By a vote of 4-1, that the surface danger zone is contained within the boundary lines of the facility.*
- 3) By a vote of 3-2, we find that when the range is used as intended it would appear to have 100% shot containment.*
- 4) By a vote of 4-1, we find that the club is exempt from the 65 dBA section of the ordinance, due to the 30-A M.R.S.A. 3011, meaning that the municipality cannot limit noise, as the club appears to meet the definition of section 3011.*
- 5) By a vote of 5-0, we find that the Spurwink Rod and Club qualifies under the ordinance as an existing shooting range, therefore the sections of the ordinance exempting existing ranges apply.*
- 6) By a vote of 5-0, we find that the Spurwink Rod and Gun Club as adequate security and control of ingress and egress with a coded pad lock.*
- 7) By a vote of 5-0, we find that the Spurwink Rod and Gun Club has an adequate EPA Lead Management Plan, consisting of four parts including record keeping with annual review.*

Recommendation

- 1) By vote of 5-0, we recommend that the Town Council ask the independent safe evaluator if he could comment on the design phasing plans and how they will have shot containment.*
- 2) By a vote of 4-1, we recommend that the Town Council ask the independent safety evaluator about the design of the club compared to the standards of the NRA, as well as their phasing design.*
- 3) By a vote of 3-2, we recommend that the Town Council consider changing the hours of operation of Shooting Ranges on the weekends.*
- 4) By a vote of 5-0, we recommend that the Town Council review and compare the liability insurance requirement to other local range standards.*

With these Findings and Recommendations we the Shooting Range Committee, move for action on the application that the Application go to the Town Council with the Recommendation that the application be APPROVED, by a vote of 4-1.

As previously noted, a few minor improvements should be addressed by the SRGC prior to any review by the Authorities of Jurisdiction. They are:

1. Add 1 foot-candle minimum lighting level to interior and exterior of range house at all times daylight is not available and shooters can be present,
2. Add exit sign on an emergency power back-up,
3. Add a stenciled notice to the concrete area between each shooting bench stating, 'No Prone Position Shooting Allowed!' and
4. Assure all ballistic rubber material is securely fastened so no edges are exposed to the firing line

Finally, responding to a question regarding the use of Air Rifles on the 50-yard and 100-yard ranges, in my opinion, this use should be permitted.

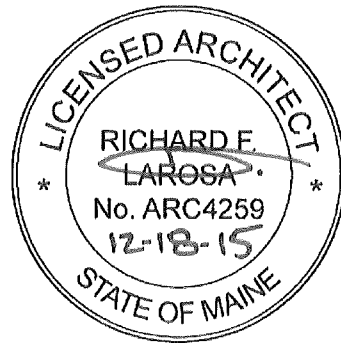
R Design Works shall not be held liable by Town of Cape Elizabeth or the Spurwink Rod and Gun Club for any damages or injuries incurred due to any negligence, gross negligence or intentional act of any user of the subject range. By accepting this Letter, the Spurwink Rod and Gun Club and the Town of Cape Elizabeth agree, upon the final inspection by the Authority of Jurisdiction, to indemnify and hold R Design Works harmless from any liability for design, costs and related expenses (including attorney's fees) for any claims or charges made by any party.

Sincerely,

R Design Works



Rick LaRosa, NCARB, DBIA, LEED
Principal



December 11, 2015

Mark Mayone
Spurwink Rod and Gun Club
1250 Sawyer Road
Cape Elizabeth, ME 04107

RE: Review of the Spurwink Rod and Gun Club Lead Management Plan

Dear Mr. Mayone:

At your request, I have reviewed your four part lead management plan for the Gun Club and offer the following comments and recommendations.

To summarize your plan, you propose to allow shooting only in a specific area in order to keep all bullets on the Club property. In addition, you will implement a plan to control lead migration off the property through soil pH, plantings and surface slope. Also, you propose a plan to collect and recycle all bullets. Lastly, a record keeping program will be set up to document all activity on the property.

You reference the EPA publication titled Best Management Practices for Lead at Outdoor Shooting Ranges revised June 2005. The publication describes a check list for managing all aspects of a shooting range. It focuses on three themes from environmental concerns of the impact of lead to the groundwater, to lead containment at the range and to best management practices.

Since lead oxidizes in air and dissolves in acidic water, it can move through soil and into the groundwater or overland in stormwater over time. Maine groundwater is generally acidic, so it should be assumed that the soil at the site will need treatment to stop any lead from mobilizing and moving off site. This can be done by either adding lime to raise the pH or phosphate to bind the lead particles. The Club is proposing to use phosphate which is suitable for an older range like this one. The level of phosphate treatment proposed is considered conservative.

Bullet containment structures have already been built to keep bullets from entering the surrounding woods and to make it easier to collect bullets. Rubber backstops will also allow easier bullet pickup and collection in storage buckets.

Most of this site is underlain by silt and clay soils with a shallow water table. The shooting range is relatively flat with a covering of sandy fill overlying the silt and clay. The Club has already dug trenches under the main shooting area which drain to a ditch along the north side of

the range which drains into the natural drainage for the site. Since the range where shooting occurs is relatively flat with sandy fill, little to no surface runoff is expected from the range and the underground trenches should keep groundwater from surfacing.

The record keeping outlined in the Club management plan meets the intent of the plans listed in the EPA report.

Recommendations:

A review of the Club management plan shows it to be adequate. One recommendation I would make is to sample the outfall of the underlying drains to make sure no increase in lead is leaving the site over time. The outfall pipe of the underlying drains where the water enters the northerly ditch or the ditch itself if no water is leaving the outfall pipe when the sample is taken should be sampled once every two years in the fall and analyzed for lead. This should be part of the record keeping. No additional recommendations are proposed.

Sincerely,



Richard A. Sweet
Certified Geologist #GE100

