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December 12, 1995

Michael K. McGovern, Town Manager
TOWN OF CAPE ELIZABETH
320 Ocean House Road
P.O. Box 6260
Cape Elizabeth, ME 04107

RE: Spurwink Rod and Gun Club

Dear Mike:

Although I am not personally familiar with the facility, I understand the Spurwink Rod and Gun Club is a privately owned and operated rod and gun club in the southern portion of Cape Elizabeth near the Scarborough Town line. It sponsors activities including target practice with firearms. I also understand that the Club has been in existence for many years. The discharge of firearms has apparently annoyed some nearby residential property owners. I have read in the *Cape Courier* where they have held meetings to discuss their concerns. With future growth anticipated in this area of Cape Elizabeth, I understand you anticipate a request will be made to the Town Council to intervene, perhaps by the adoption of an ordinance regulating the discharge of firearms at this or any other rod and gun club located in Cape Elizabeth. You have asked for advice as to the Town's right to adopt an ordinance to regulate the use of firearms.

Since 1989, the State of Maine has preempted the entire field of legislation concerning the regulation of firearms, components, ammunition and supplies, except in a very limited area. Under 25 M.R.S.A. §§2011 and 2012, you will see the preemption specifies that no political subdivision of the State, such as Cape Elizabeth, may adopt an ordinance, rule or regulation concerning the use or certain other matters pertaining to firearms, with the express exception of a regulation in regard to the discharge of firearms within a jurisdiction. Therefore, while there is an extremely clear State preemption on the ownership, use, licensing, registration and other aspects of firearms, the regulation of the discharge of firearms was not preempted by the State as of 1989.

However, in September of 1995, the Legislature further restricted a municipality's ability to regulate firearms by

adopting "an Act to limit nuisance actions and noise ordinances relating to sport shooting ranges." This Act amends 17 M.R.S.A. §2806 and 30-A M.R.S.A. §3011. A "sport shooting range" is defined as "an area designed and used for archery, skeet and trap shooting or other similar shooting sports and the shooting of rifles, shotguns and pistols." I believe this includes rod and gun clubs. 30-A M.R.S.A. § 3011(1) states that "a municipal noise control ordinance may not require or be applied so as to require a sports shooting range to limit or eliminate shooting activities that have occurred on a regular basis at the range prior to the enactment date of the ordinance." Although this language is somewhat ambiguous, I interpret this section to prohibit noise ordinances limiting shooting activities similar or analogous to those that have occurred prior to the enactment date of the ordinance. In other words, even if the Town of Cape Elizabeth were inclined to adopt an ordinance regulating the discharge of firearms at a gun club, §3011(2) specifically prohibits such an ordinance. Section 3011(3) does allow a municipality to regulate noise "produced by the expansion of activity at a sports shooting range."

Although Title 17 M.R.S.A. §2806 does not concern the Town directly, it applies to the property owners residing near the Spurwink Rod and Gun Club. Section 2806(1) states, "a person may not maintain a nuisance action for noise against a shooting range located in the vicinity of that person's property if the shooting range was established as of the date the person acquired the property." Section 2806(1) goes on to state that if there is a "substantial change in use" of the shooting range after the person acquires the property, a nuisance action may be maintained if it is brought within three years from the beginning of the substantial change. A person who owns property in the vicinity of a shooting range that was established after the person acquired the property has five years to bring a nuisance action (or, again, three years after a "substantial change" in the use of the range). Section 2806(2). Finally, §2806(4) provides that §2806 "does not limit nuisance actions against shooting ranges established after the effective date of this section [September 29, 1995]."

In providing this letter to you, I have reviewed the John Doe v. Portland Housing Authority case of 1995 whereby the Maine Law Court found the lease prohibition of tenants of the Portland Housing Authority from possessing firearms to be improper. The Court relied upon 25 M.R.S.A. §2011, finding that the Legislature intended to preempt the area of firearm regulation except in regard to the discharge of firearms. By enacting 30-A M.R.S.A. §3011, the Legislature has expressed its intent to further restrict a municipality's ability to regulate firearms, this time restricting a municipality's ability to regulate the discharge of weapons at a shooting range (or rod and gun club).

I have reviewed the case law of Maine and am unaware of any challenge to the regulation of the discharge of firearms on the

basis of the Second Amendment of the U.S. Constitution or Article 1, Section 16 of the Maine Constitution. The Law Court ruled many years ago that the State's entire Fish and Game Law rested upon the valid exercise of the police power of the State. Woods v. Perkins, 119 Me. 257 (1920).

Therefore, we believe the Town can only regulate noise produced by any expansion of activity at a rod and gun club, but cannot limit or eliminate shooting activities similar to those which have occurred in the past on a regular basis.

While the above discussion discusses the preemption by the State of Maine of the most common concern with rod and gun clubs or sport shooting ranges, being noise, you have also asked me to review the ability of a municipality to regulate other aspects of a rod and gun club based upon concerns other than noise such as the public safety and the environment. While noise is at the heart of the State preemption and most regulation, your inquiry suggested there may be other concerns properly within the police powers of governmental regulation if not otherwise preempted. Such regulation would be permissible only if rationally related to the specific public interest intended to be protected. Presumably, the safety concern suggested relates to the endangerment of the public, including neighbors and possibly fellow club members, from the discharge of firearms. The environmental concern relates to the potential pollution from discharged lead bullets being left upon the club's (or neighbors') property.

I could find no case or statutory law in Maine on point. I would therefore conclude that the general standard as to municipal regulation would be applicable, as perhaps best stated in the case of Town of Windham v. LaPointe, 308 A.2d 286 (Me.1973). In that case, the Law Court held that a town may not interfere with the use of private property unless "the use causes an actual and substantial injury or impairment of the public interest [health, morals, safety, order or welfare]," and only to the extent the regulation is reasonable, not arbitrary, and does not violate any constitutional limitation. Id. at 291.

On the safety issue, I am unaware of any "actual or substantial" injury or impairment but there is always a risk of such injury from the discharge of firearms. Being unfamiliar with the specific operation of the Spurwink Rod and Gun Club, I do not know where there is any substantial risk to the public or to other Club members by the discharge of firearms. Presumably, the discharge is limited to specific areas, most often seen as against gravel embankments. If the concern were for a person walking into the line of fire, one might assume the regulation designed to protect against such risk would be signage or fencing. If I am correct in my assumption, then it would seem the issue is whether such signage or fencing is arbitrary in light of the risk; the significance and cost of the regulation being weighed against the

public interest sought to be protected. For example, fencing of a large tract of land that may be owned by a rod and gun club may be prohibitively expensive in light of the modest risk involved. If so, it would be unreasonable regulation and would be subject to attack, in my view.

As to the environmental risk associated with discarding of lead bullets upon the property of the Club or elsewhere, the State has addressed lead poisoning under the Lead Poisoning Control Act, 22 M.R.S.A. §1314-A *et seq.* That statute defines "environmental lead hazard" as "a presence of lead . . . that exceeds permissible concentrations and that exists in an unacceptable condition . . . [and] may include, but is not limited to, lead in dust, paint, soil or water." Section 1315(3-A). The Department of Human Services is responsible for adopting rules and regulations pursuant to this Act including a definition of "permissible concentrations." The Department of Human Services is required to give notice of an environmental lead hazard to residents and owners of the contaminated property only. Section 1321. Only owners may be found liable for damages arising out of an environmental lead hazard, and then only in certain circumstances. Section 1324-A.

The Lead Poisoning Control Act does not have the clearly stated preemption by the State as does the firearms statute referred to above. In fact, 22 M.R.S.A. §1324 expressly provides that a municipality may enact "any enforcing ordinances which establish a system of lead poison control that provides the same or higher standards than those provides in this Chapter." However, as to how this State law relates to the issue of possible soil or water contamination by lead bullets, both the stated goal of the State law, and most of its provisions, make clear its focus and concern is primarily to eradicate childhood lead poisoning, focusing on paint used on toys, furniture, fixtures and interiors of dwellings and child care facilities. Therefore, I do not feel this particular State law serves to preempt a municipality from adopting an ordinance to deal with pollution of soils or groundwater by lead.

Further, the State's Hazardous Waste laws, specifically 38 M.R.S.A. §1319-P entitled "Municipal Hazardous Waste Control" provides:

Nothing in this chapter shall be construed as a preemption of the field of hazardous waste regulation and study on the part of the State. Municipalities may study hazardous waste and adopt and enforce hazardous waste control and abatement ordinances, to the extent that these ordinances are not less stringent than this chapter or than any standard under, or other action promulgated pursuant to this chapter. Local ordinance provisions which touch on matters not dealt with by the chapter or

which are more stringent than this chapter shall bind persons residing in the municipality.

However, while the State does not appear to have preempted municipal regulation of hazardous wastes, I am not conversant enough in the environmental area to conclude that lead, particularly in the quantity generated by a rod and gun club, poses a significant pollution risk for which the Town may exercise its police powers to reasonably regulate. I would need to better understand the environmental risks to evaluate any regulation by ordinance.


Naturally, any individual whose groundwater may be contaminated by another party, by lead or other contaminant, may take appropriate action against that party, so that a private remedy is available to residents in regard to the environmental concern.

I hope the above advice is helpful to you as you consider the role of the Town in regulating a rod and gun club. If particular concerns or issues are crystalized, we will be glad to review them more closely and advise you accordingly. Needless to say, if you have any questions regarding the above advice, please let us know.

Very truly yours,

MONAGHAN, LEAHY, HOCHADEL & LIBBY

By


Thomas G. Leahy, Esq.

TGL/ktl

HAZARDOUS WASTE AND WASTE OIL
Ch. 13

38 § 1319-Q

Laws 1987, c. 517, §§ 7, 8.
Former §§ 1303-A, 1303-B of this title.

§ 1319-P. Municipal hazardous waste control

Nothing in this chapter shall be construed as a preemption of the field of hazardous waste regulation and study on the part of the State. Municipalities may study hazardous waste and adopt and enforce hazardous waste control and abatement ordinances, to the extent that these ordinances are not less stringent than this chapter or than any standard under, or other action promulgated pursuant to, this chapter. Local ordinance provisions which touch on matters not dealt with by the chapter or which are more stringent than this chapter shall bind persons residing in the municipality.

1979, c. 383, § 11; 1979, c. 663, § 238, eff. March 28, 1980; 1987, c. 517, § 23, eff. June 29, 1987.

Historical Note

Codification

This section was enacted as § 1311 of this title by Laws 1979, c. 383, § 11, without reference to § 1311 of this title as enacted by Laws 1979, c.

511. Laws 1983, c. 663, § 238, reallocated this section to § 1310-A.

This section was reallocated from § 1310-A of this title by Laws 1987, c. 517, § 23.

Library References

American Digest System

Health and Environment ⇐25.5(5.5)

Encyclopedias

C.J.S. Health and Environment §§ 91, 92, 106, 109, 129 to 131.

WESTLAW Research

Health and Environment cases: 199k [add key number]

§ 1319-Q. Data; facility needs plan

1. **Data collection and monitoring.** The board shall have data on the generation, transportation and handling of hazardous waste collected and monitored in a coordinated manner. It shall use that data to review the need for adequate waste facilities for generators in this State, and it shall develop appropriate policies and recommendations to insure that suitable waste facilities are available.

2. **Report to the board.** The commissioner shall annually, prior to May 1st, prepare a report to the board covering the prior calendar year which shall include the following data:

- A. The amount of hazardous waste by type that is generated, handled or transported within the State;
- B. The amount of hazardous waste by type that is handled at commercial hazardous waste facilities within the State;
- C. The number of hazardous waste facility permits by type currently active and the number granted and revoked in the year;
- D. The amount of hazardous waste by type generated outside the State that was handled at permitted facilities within the State, and the amount of

CHAPTER 252-A

FIREARMS REGULATION

Section
2011. State preemption.
2012. Sale of firearms to include safety brochure.

WESTLAW Electronic Research

See WESTLAW Electronic Research Guide following the Preface.

§ 2011. State preemption

1. Preemption. The State intends to occupy and preempt the entire field of legislation concerning the regulation of firearms, components, ammunition and supplies. Except as provided in subsection 3, any existing or future order, ordinance, rule or regulation in this field of any political subdivision of the State is void.

2. Regulation restricted. Except as provided in subsection 3, no political subdivision of the State, including, but not limited to, municipalities, counties, townships and village corporations, may adopt any order, ordinance, rule or regulation concerning the sale, purchase, purchase delay, transfer, ownership, use, possession, hearing, transportation, licensing, permitting, registration, taxation or any other matter pertaining to firearms, components, ammunition or supplies.

3. Exception. This section does not prohibit an order, ordinance, rule or regulation of any political subdivision which, with the exception of appropriate civil penalty provisions, conforms exactly with any applicable provision of state law or which regulates the discharge of firearms within a jurisdiction.

4. Law enforcement agency. Nothing in this section limits the power of any law enforcement agency to regulate the type and use of firearms issued or authorized by that agency for use by its employees. For the purposes of this section "law enforcement agency" has the same meaning as set forth in section 3701.

1989, c. 359; 1989, c. 502, § D, 19, eff. June 30, 1989.

Historical and Statutory Notes

1989 Amendment. Laws 1989, c. 502, § D, 19, added subsec. 4.

Notes of Decisions

1. Moot questions
Applicant for concealed firearm permit was not entitled to file supplemental pleading asking court to decide impact of newly enacted statute preempt-

§ 2012. Sale of firearms to include safety brochure

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Basic firearm safety brochure" means a brochure, produced by a national, nonprofit

HAZARDOUS MATERIALS CONTROL
Ch. 256

- (1) Rules for safe handling, storage and use of firearms;
- (2) Nomenclature and descriptions of various types of firearms; and
- (3) Responsibilities of firearm ownership.

B. "Firearm" has the same meaning as in Title 17-A, section 2, subsection 12-C. "Firearm dealer" means a person who is licensed as a dealer under 18 United States Code, Section 923, or who is required to be licensed as a dealer under that section.

2. Requirement. A firearm dealer must:

A. Include a basic firearm safety brochure with every firearm sold at retail in the State, except that the brochure need not be supplied by the firearm dealer if the firearm manufacturer provides a basic firearm safety brochure with the firearm. The dealer must collect a charge for the brochure, which may not be greater than the dealer's cost to obtain the brochure;

B. Offer to demonstrate to the purchaser the use of a trigger locking device; and

C. Post in a conspicuous place information relating to the availability of known local voluntary firearm safety programs.

3. No liability. Organizations that produce basic firearm safety brochures for distribution to firearm dealers for subsequent distribution to purchasers of firearms and firearm dealers are not liable for injuries resulting from the accidental discharge of nondetectable firearms purchased from any dealer.

1991, c. 127.
118 U.S.C.A. § 923.

Library References

Words and Phrases
Words and Phrases (Perm.Ed.)

CHAPTER 256

HAZARDOUS MATERIALS CONTROL

§ 2103-A. Adoption of rules

The Commissioner of Public Safety shall adopt state rules to adopt by reference the federal regulations as found in 49 Code of Federal Regulations, Parts 107, 171, 172, 173, 174, 177, 179, 387 and 397, as amended, and subsequently shall adopt state rules to adopt by reference every subsequent amendment to those federal regulations. Except as provided in this section, the Maine Administrative Procedure Act, Title 5, chapter 375, does not apply to those adoptions.

1. Content of state rules. Any state rule adopted under this section must contain a brief description of the substance of the referenced federal regulations or amendments and instructions for obtaining a copy of a certified copy of those federal regulations or amendments from the appropriate federal agency.

2. Filing, publication and availability of rules. For every state rule adopted under this section:

A. The commissioner shall file with the Secretary of State:

- (1) A certified copy of the state rule adopting by reference that federal regulation or a subsequent amendment;
- (2) A published copy of the federal regulation or amendment as printed in the Federal Register; and
- (3) Annually, a published copy of the updated volume of the Code of Federal Regulations containing the federal regulations in question;

B. The commissioner shall supply, without cost or at actual cost, copies of each state

shooting sports and the shooting of rifles, shotguns and pistols.

2. Limitation. A municipal noise control ordinance may not require or be applied so as to require a sport shooting range to limit or eliminate shooting activities that have occurred on a regular basis at the range prior to the enactment date of the ordinance.

3. Expansion of activity. Nothing in this section limits the ability of a municipality to regulate noise produced by the expansion of activity at a sport shooting range.

See title page for effective date.

CHAPTER 232

H.P. 548 - L.D. 744

An Act to Apply the Hospital Cooperation Act of 1992 to a Broader Range of Health Care and Social Service Agencies

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 22 MRSA §1882, sub-§1, as enacted by PL 1991, c. 814, §1, is amended to read:

1. Cooperative agreement. "Cooperative agreement" means an agreement among 2 or more hospitals or nonprofit mental health care providers for the sharing, allocation or referral of patients, personnel, instructional programs, mental health services, support services and facilities or medical, diagnostic or laboratory facilities or procedures or other services traditionally offered by hospitals or nonprofit mental health care providers, or for the coordinated negotiation and contracting with payors or employers.

Sec. 2. 22 MRSA §1882, sub-§3 is enacted to read:

3. Nonprofit mental health care provider. "Nonprofit mental health care provider" means a corporation organized under the Maine Nonprofit Corporation Act or an organization recognized as exempt from federal income tax under 26 United States Code, Section 501(c)(3) that is engaged primarily in the provision of mental health services.

Sec. 3. 22 MRSA §1883, sub-§1, as enacted by PL 1991, c. 814, §1, is amended to read:

1. Authority. A hospital or nonprofit mental health care provider may negotiate and enter into cooperative agreements with other hospitals or

nonprofit mental health care providers in the State if the likely benefits resulting from the agreements outweigh any disadvantages attributable to a reduction in competition that may result from the agreements.

Sec. 4. 22 MRSA §1883, sub-§4, ¶¶ A and B, as enacted by PL 1991, c. 814, §1, are amended to read:

A. In evaluating the potential benefits of a cooperative agreement, the department shall consider whether one or more of the following benefits may result from the cooperative agreement:

(1) Enhancement of the quality of hospital and hospital-related or nonprofit mental health care or related care provided to Maine citizens;

(2) Preservation of hospital or nonprofit mental health care provider and related facilities in geographical proximity to the communities traditionally served by those facilities;

(3) Gains in the cost efficiency of services provided by the hospitals or nonprofit mental health care providers involved;

(4) Improvements in the utilization of hospital or nonprofit mental health care provider resources and equipment; and

(5) Avoidance of duplication of hospital or nonprofit mental health care resources.

B. The department's evaluation of any disadvantages attributable to any reduction in competition likely to result from the agreement may include, but need not be limited to, the following factors:

(1) The extent of any likely adverse impact on the ability of health maintenance organizations, preferred provider organizations, managed health care service agents or other health care payors to negotiate optimal payment and service arrangements with hospitals, physicians, allied health care professionals or other health care providers;

(2) The extent of any reduction in competition among physicians, allied health professionals, other health care providers or other persons furnishing goods or services to, or in competition with, hospitals or nonprofit mental health care providers that is likely to result directly or indirectly from the hospital cooperative agreement;

(3) The extent of any likely adverse impact on patients or clients in the quality, availability and price of health care services; and

emergency clause. In view of the emergency in the preamble, this Act takes effect when

Effective June 9, 1995.

CHAPTER 229

H.P. 739 - L.D. 1013

An Act to Facilitate the Regulation of Alcohol in Auditoriums

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 28-A MRSA §1069-A, sub-§3, as enacted by PL 1989, c. 158, §9, is repealed.

See title page for effective date.

CHAPTER 230

S.P. 72 - L.D. 160

An Act to Protect the Integrity of Seawalls and Retaining Walls

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 38 MRSA §480-W is enacted to read:

§480-W. Emergency actions to protect threatened property

Notwithstanding section 480-C, if the local code enforcement officer or a state-certified geologist determines that the integrity of a seawall, bulkhead, retaining wall or similar structure in a coastal sand dune system is destroyed or threatened, the owner of property protected by the seawall, bulkhead or similar structure may, without obtaining a permit under this article:

1. Protective materials. Place riprap, sandbags or other heavy nonhazardous material to shore up the threatened structure and replace, repair or leave the materials in place until a project designed to alleviate the threat is certified by the department and by the local code enforcement officer, and that project requires removal of the material; and

2. Strengthening of structure. Take such actions as are necessary to strengthen the seawall, retaining wall or other structure, including widening the footings and securing the structure to the sand with bolts.

If a local code enforcement officer fails to determine whether the integrity of a structure is destroyed or threatened within 12 hours of initial contact by the property owner, the property owner may proceed as if the code enforcement officer had determined that the integrity of the structure was destroyed or threatened.

See title page for effective date.

CHAPTER 231

H.P. 60 - L.D. 96

An Act to Limit Nuisance Actions and Noise Ordinances Relating to Sport Shooting Ranges

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 17 MRSA §2806 is enacted to read:

§2806. Sport shooting ranges

1. Acquisition of property near existing range. Except as provided in this subsection, a person may not maintain a nuisance action for noise against a shooting range located in the vicinity of that person's property if the shooting range was established as of the date the person acquired the property. If there is a substantial change in use of the range after the person acquires the property, the person may maintain a nuisance action if the action is brought within 3 years from the beginning of the substantial change.

2. Establishment of shooting range near existing property. A person who owns property in the vicinity of a shooting range that was established after the person acquired the property may maintain a nuisance action for noise against that shooting range only if the action is brought within 5 years after establishment of the range or 3 years after a substantial change in use of the range.

3. Dormant shooting range. If there has been no shooting activity at a range for a period of 3 years, resumption of shooting is considered establishment of a new shooting range for purposes of this section.

4. Application. This section does not limit nuisance actions against shooting ranges established after the effective date of this section.

Sec. 2. 30-A MRSA §3011 is enacted to read:

§3011. Regulation of sport shooting ranges

1. Definition. As used in this section, "sport shooting range" means an area designed and used for archery, skeet and trap shooting or other similar

Sept 29, 1995



To: Town Council

From: Michael K. McGovern, Town Manager

Re: Spurwink Rod and Gun Club

Date: February 29, 1996

Earlier this week I met, at their request, with Ellen Mugar and John Leasure regarding the Spurwink Rod and Gun Club.

They provided the attached information which they requested be provided to the Town Council.

They expressed concern that the Club does not follow the standards of the National Rifle Association for the operation of outdoor shooting ranges. They are also concerned that the Club has done virtually nothing since our forum on the issue last Summer.

I share some of their frustration. While the attached letter from Tom Leahy indicates there is little the Town can do, the Town is nonetheless facing a growing number of citizens who will be unhappy as this area of Town continues to be developed.

The Rod and Gun Club needs to be encouraged further to look at their operations and to be responsible citizens of the community.

February 26, 1996

Dear Michael McGovern and the Town Council,

We are submitting a sound report on the gunfire from the Spurwink Rod and Gun Club and an NRA range manual on sound abatement on shooting ranges. We would appreciate your taking the time to read these reports.

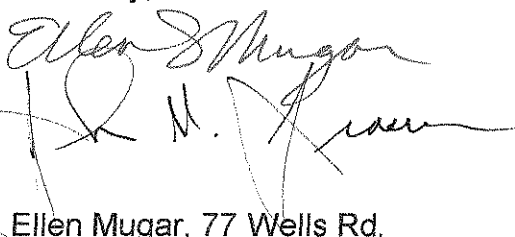
The sound report shows that the decibel levels taken, when small arms were being fired, are in the unacceptable range. The extrapolation chart shows decibel levels when larger arms are being fired.

We believe the sound report and the NRA manual speak for themselves. Yes, there is a noise problem at the Spurwink Rod and Gun Club and, yes, it involves the community.

Please note that this non-conforming use in a residential area is approximately 50 feet from a public road, on which people drive, jog, walk, and bicycle.

We would be happy to meet and discuss solutions.

Sincerely,

The image shows two handwritten signatures in black ink. The first signature is for Ellen Mugar, and the second is for John Leasure. The signatures are written in a cursive style.

Ellen Mugar, 77 Wells Rd.

John Leasure, 1243 Sawyer Rd.



HAROLD R. MULL, BELL AND ASSOCIATES, INC.

HMB ACOUSTICS / P.O. Box 304, Trumbull, Connecticut 06611 / 203-268-7979

October 20, 1995

John Leasure
1243 Sawyer Road
Cape Elizabeth, Maine 04107

Subject: An Environmental Analysis Of Gun Noise Emanating From The
Spurwink Rod & Gun Club. Report R-9544.

Dear Mr. Leasure:

The enclosed report details the results of the environmental analysis of gun noise that was conducted on October 8, 1995.

Should you have any questions, please contact me.

Sincerely,



Allan Smardin

Existing Conditions

Land use in this area appears to be residential / rural in nature. The residences are basically surrounded by wooded areas.

The property at 1243 Sawyer Road (Leasure residence) abutts Sawyer Road. The property directly across Sawyer Road, and generally to the Northeast of the "Leasure" residence, is the Spurwink Rod & Gun Club.

The members of the club fire in a Northeasterly direction. The "Leasure" property line is located approximately 125 feet from the firing lines at the rod & gun club. The "Leasure" residence itself is approximately 400 feet from the firing lines.

Data Acquisition

An environmental analysis was conducted on Sunday, October 8, 1995, between the hours of 12:00 noon and 3:30 p.m. The weather conditions were as follows:

- a) the sky was overcast.
- b) the temperature was approximately 65 degrees F.
- c) the wind was calm.

The noise data was taken in the driveway of the "Leasure" residence, approximately 300 feet from the firing lines. The data was tape recorded and analyzed using real-time spectral analysis equipment.

The measured data was compared to other gun report data taken at various shooting ranges in other states, in order to determine compatibility. All data was compared to the definition of "Small Arms" as stated in the National Rifle Association (NRA) Range Manual - Sound Abatement On Shooting Ranges. The definition of "Small Arms" is "Generally considered to embrace projectile firearms of small caliber, including rifles, handguns, shotguns, sub-machine guns and machine guns."

Noise Analysis

The noise analysis section will contain information on the following subjects:

- a) Impulse noise
- b) Startle response
- c) The effect of foliage on gun report noise
- d) The effect of wind / direction on gun report noise
- e) Noise levels in warm vs. cold air
- f) Background noise levels
- g) Gun report data
- h) National Rifle Association Range Manual (NRA)
- i) Mitigation measures
- j) Conclusions (social surveys)
- k) Table 1
- l) Figure 1 (Sigarms Noise Data)
- m) Common noise levels & typical reactions

Noise Analysis

An impulse noise consists of a rapid and extremely brief change in sound pressure level, e.g. an explosion, a gun report, a sonic boom, or the impact noise from a punch press, often having a rise time of 0.001 sec. or less. Such an impulsive noise may startle the listener. It is judged to be more annoying than a steady noise having the same overall energy content. The amount of additional annoyance depends upon how much higher the peak sound level of the impulsive noise is above the otherwise steady background sound level. Even when the impulses are regular and expected, their sharpness and startle effects contribute to increased annoyance. The amount of this increase depends upon the difference in level (dB) between the peak level of the impulse noise and the background noise level. However, other factors, such as the number of impulses, the impulse waveform, and reverberation, also affect annoyance.

The startle response includes a widespread integrated burst of activity in voluntary muscle. The general purpose appears to be protective. Eye closure, facial muscle

contraction into a characteristic expression, and general assumption of a flexed posture, including a head-jerk movement, occur. The magnitude of the response appears to be related to the magnitude of the stimulus and the rate of onset; this has been verified by recording muscle action potentials evoked by a blank pistol shot. It has been suggested that the acoustic startle threshold for a pure tone of 1000 Hz is a sound pressure level of about 93 dB within a critical time of about 11 millisecond, but individual variation presumably limits the usefulness of such estimates. To produce these results, a very widespread activation of motor mechanisms must be achieved, with all the implications with central integration of motor activity, including the reduction or prevention of activity in muscles antagonistic to those activated.

Although there is a wooded area between the gun club and the residences, trees and bushes usually are poor barriers and provide little attenuation as a result of shielding. Therefore, leaves have a negligible effect on the noise level. To obtain appreciable barrier attenuation, very dense vegetation with large leaves, as in a cornfield, and significant distances are required.

The effect of wind or wind direction is at most a secondary influence to noise propagation. Wind velocity at 15-20 knots is negligible compared to the speed of sound of approximately 700 knots.

Finally, noise travels slower, but much further during winter. This occurs because cold air is dense, when compared to warmer, less dense summer air.

The background noise level at the Leasure residence measured 40 dBA without the gun club in operation, and without traffic on Sawyer Road. This noise level is consistent with rural / residential background noise levels. The addition of vehicular traffic on Sawyer Road raises the noise level to 68 dBA.

Background noise is defined as "noise which exists at a point as a result of the combination of many distant sources, individually indistinguishable. In statistical terms,

it is the level which is exceeded 90% of the time in which the measurement is taken."

The data demonstrates that all of the gun reports exceeded the existing background noise level and the traffic noise levels.

The minimum noise level measured from the gun club was 80 dB, and the maximum noise level was 98 dB, when measured at a distance of 300'. The gun noise would continue to exceed the background noise level to a distance to 3,400'. Independent noise studies by gun manufacturers show similar results. See Sigarms data on Fig. 1. The gun noise would be clearly audible to all residences within the 3,400' range.

It is important to note that dB is measured on a logarithmic rather than a linear scale. Every increase of 10 dB represents an increase of approximately 300% in sound pressure. A 100 dB noise is, therefore, 3 times as intense as a 90 dB noise, rather than about 10% more intense, as might be expected. Illustrated another way, if one gun produces a noise level of 90 dB, a second gun of the same kind firing simultaneously will result in a combined noise level of 93 dB, rather than 180 dB, which may seem more likely. In your situation, the perceived noise levels at your residence are 300% to 1200% above the existing background noise levels. See Table 1.

NRA Range Manual

A comparison of the recommendations in the National Rifle Association (NRA) Range Manual Sound Abatement On Shooting Ranges was compared to the existing conditions surrounding the Spurwink Rod & Gun Club.

The enclosed sections pertain to the noise study:

- 1) Page I-6-8, section 3.01.1.4 (1-3).
- 2) Page I-6-9, section 3.02.1.1 (1-6).
- 3) Page I-6-11, section 3.03.6
- 4) Page I-6-12, section 3.03.9.

- 5) Page I-6-12, Sections 3.03.11.1; and 3.03.11.2.
- 6) Page I-6-14, Section 3.04.5.
- 7) Page I-6-15, Section 3.05.2.1.

Noise Mitigation Measures

By increasing the height of the existing building, and installing the proper absorption coefficients, a noise reduction of 10 dB could be achieved at the Leasure residence. The building height should be increased to 12' and the absorption should be applied to the roof and the walls. I have enclosed manufacturers information on Eckoustic Functional Panels for your review.

The use of a barrier wall for the purpose of attenuating shotgun and / or rifle noise is not recommended for the following reasons:

- a) Sound waves will bend over and around the barriers as running water does when passing a rock in a stream or brook.
- b) The sound waves will then bend back to earth at full strength in a short distance.
- c) Depending on the location (orientation) of the barrier, its height and length, including the construction material that is used, the barrier may actually amplify the sound due to reflected noise at critical frequencies.

If the pistol range were enclosed, the result would be a noise reduction of 20 dBA at the Leasure residence. Similar reductions would be measured at distances of approximately 3,000 feet.

Finally, the following list will further reduce noise levels, and the exposure time:

- a) If feasible, modify the shooting hours.
- b) Restrict the types of loads that are used in the guns.
- c) Specify the types of guns that can or cannot be used at the club. Choose the gun types based on noise level.

Conclusions

Community noise exposure can be measured and summarized. There are a variety of competing methods that take into account at least some of the following, not necessarily independent factors:

- 1) a scheme for identification of noises.
- 2) the intensity levels and durations of identifiable noise events.
- 3) number of occurrences of the noise events.
- 4) the background noise level.
- 5) the variability of the noise levels.
- 6) one or more special factors related to the perceived noisiness or loudness of the noises.
- 7) the time of day and type of area; whether urban, suburban, or rural.

One fact about the relations among perceived noisiness, annoyance from noise, disturbance of activities by noise, complaints about noise, and community actions against noise is especially significant. It is that noisiness, annoyance, and disturbance of activities are more closely tied to the physical characteristics of the noises than are the rates of formally placed complaints or the probabilities of group anti-noise action. Thus, whether or not one files a formal complaint or participates in group anti-noise action, the quality of one's life is influenced by noise.

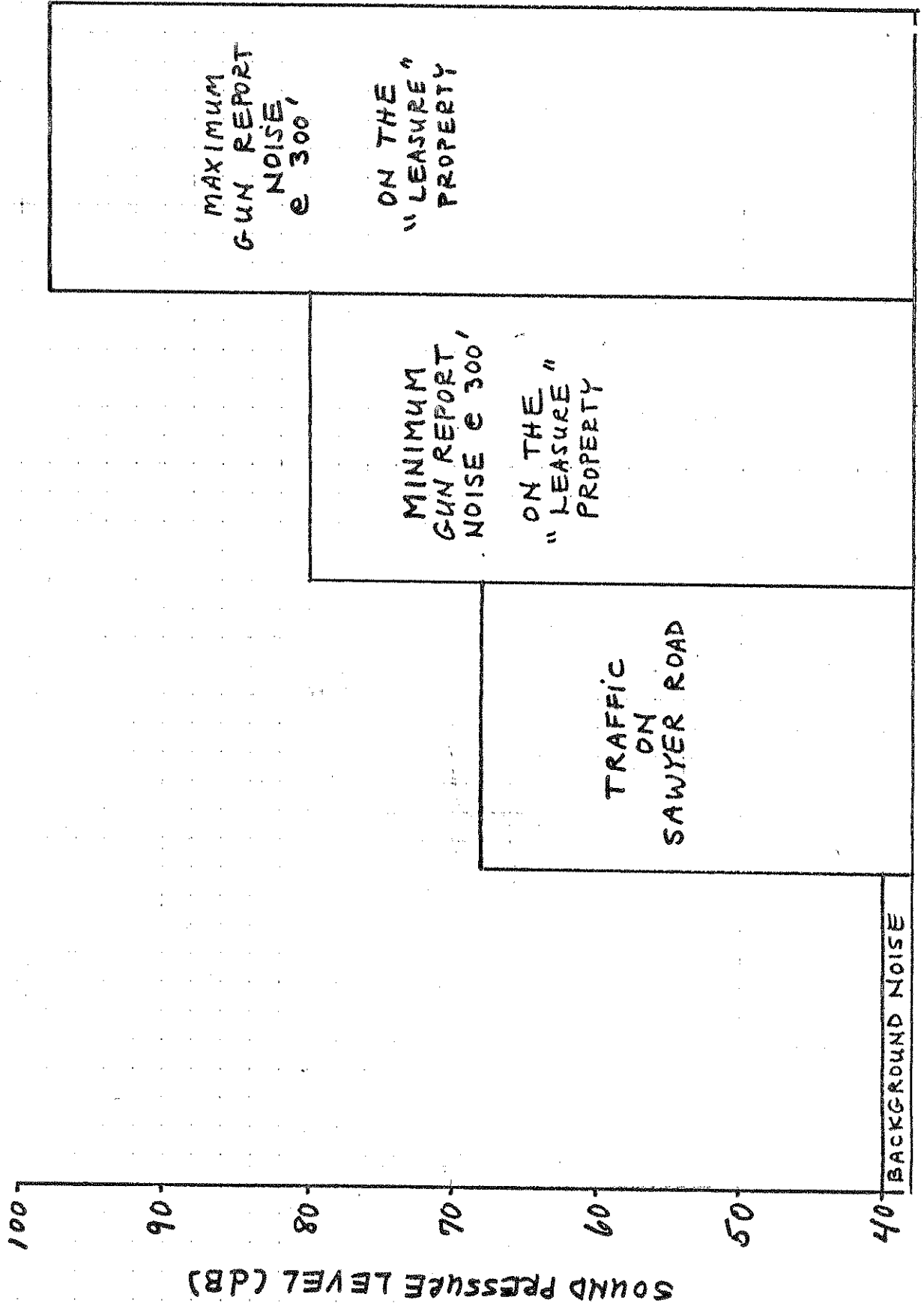
Sincerely,



Allan Smardin

TABLE 1

A COMPARISON OF GUN SHOT NOISE FROM THE SPURWINK
ROD + GUN CLUB - BACKGROUND NOISE - TRAFFIC NOISE



SIGARM'S

PEAK LEVELS FOR VARIOUS FIREARMS
at 100 ft

FIREARM	CARTRIDGE	PEAK LEVEL (dBA)
.45 A.C.P. <small>A.C.P. = automatic Colt pistol</small>	230 GRAIN	128
9 mm	147 GRAIN	125
#2 guage shotgun	-----	126
.30-06 rifle	185 GRAIN	132

①
②
③
④

EXTRAPOLATED TO 400', THE NOISE LEVEL IS -

- ① 112 dB
- ② 109 dB
- ③ 110 dB
- ④ 116 dB

FIGURE 1

COMMON NOISE LEVELS AND TYPICAL REACTIONS

Sound Source	Noise Level (dBA)	Apparent Loudness	Typical Reaction	Categories	Activities
	135		Painfully loud	↑ Unacceptable	
Military Jet, Air Raid Siren	130	64 times as loud	Limited amplified speech		
Amplified Rock Music	110	16 times as loud	Maximum vocal effort		
Jet Takeoff at 1600 Ft Train Horn at 100 Ft	100	8 times as loud			
Freight Train at 50 Ft	95			↓ Unacceptable w/o adequate sound insulation	
Heavy Truck at 50 Ft, Busy City Street, Loud Shout	90	4 times as loud	Very annoying Hearing damage (8 hours)		
Busy Traffic Intersection	80	2 times as loud	Annoying		
Highway Traffic at 50 Ft, Train Horn at 1600 Ft, Noisy Restaurant	70	Base Reference	Telephone use difficult	↓ Normally acceptable	
Predominantly Industrial Areas	60	1/2 as loud	Intrusive		
Light Car Traffic at 50 Ft City or Commercial Areas or Residential Areas Close to Industry					Outdoor Recreation
Noisy Office	50	1/4 as loud	Speech interference		

THE RANGE MANUAL
SOUND ABATEMENT
ON
SHOOTING RANGES

National Rifle Association
Range Division

Yearly Day-Night Average Sound Levels DNL): The 24-hour average sound level, in decibels, for the period from midnight to midnight. Day night averages are obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 am and between 10 pm and midnight, local time, as averaged over a span of one year. It is the FAA standard metric for determining the cumulative exposure of individuals to noise.

ARTICLE 3. CONCEPTS AND METHODOLOGY

3.01 Concepts

- 3.01.1 The National Rifle Association has developed the information in this chapter to provide a general discussion on sound, its potential effects and sound abatement technologies suited for use on ranges. This will be helpful to ranges which may be required to install sound abatement materials or where future land use criteria deems it necessary.
- 3.01.1.1 Any observer may or may not consider "Sound" generated by a given source to be "noise". Therefore, in most recreational activities, especially with small arms, planners of ranges must consider what effect sounds generated will have on the nearby environment.
- 3.01.1.2 "Noise" exposure is the integrated effect, over a given period of a number of different sound levels and durations. The integration also includes specific weighting factors for the events during certain time periods in which sound affects the environment more severely, such as when people are trying to sleep. The national quiet time is considered to be between 10pm and 7am. The various scales for "noise" exposure in use throughout the country differ by the methods of integration or summation, time period weighting factors and frequency weightings.
- ✱ 3.01.1.3 That certain types of noise can affect human health and safety is well documented. Adverse effects depend on their loudness and frequency range. Generally, sounds generated on ranges will have little, if any, effect on the physical or psychological health of inhabitants of the surrounding area. Where they do, it is noted for inclusion in a "noise" plan.
- 3.01.1.4 From the first planning meeting to the last nail driven during construction, it is important that the master plan include a sound mitigation program. Failure to adopt such a plan can result in financial losses for the range owners or operators, or the termination of an otherwise quality range operation. Where once there was nothing for miles, clubs are waking up and finding that housing developments are moving in with little if any response time. Therefore for existing ranges it is wise to develop a noise mitigation program within its long range plan.
- (1) Develop concepts and methods to abate sound for eventual use on planned ranges. Each range will be different from any other. Methods that will work for one may not be suitable for another.
 - (2) Conduct research on materials that may be suitable for use on a particular type range such as benchrest, pistol, smallbore or highpower. Specific applications can then be determined.
 - (3) Develop specifics on:
 - a. Terrain features.
 - b. Soil and surface geology characteristics.
 - c. Hydrology and vegetation
 - d. Existing land uses and utilities.
 - e. Population densities.
 - f. Other environmental considerations, such as air quality, prevailing wind conditions, temperature changes, and humidity fluctuations.

3.02 Land Use Determinants

3.02.1 Master Plan

* 3.02.1.1 Developing a master plan for a specific site may seem to be a lot of unnecessary work in some cases, but it's smart planning. The master plan outlines sound abatement technology and involves a study of the following:

- (1) Any sound abatement program must meet the standards of existing regulations, ordinances or laws. In most instances existing laws will specify a sound level for a particular land use. To determine if the facility will meet the standards, measurements must be taken to determine what if anything must be done to mitigate any problem. Sound level measurements for small arms will use the fast detector response mode as identified on a Precision Integrating Sound Level Meter and Analyzer. Sound measuring devices must meet ANSI standards and have a factory calibration date within one year of the date when testing is to be conducted. All meters used for testing must be designed to allow for field calibration with field calibrators having a factory calibration certificate validated each year.
- (2) A complete description of the proposed site and surrounding areas including site maps to aid in determining if the land use is compatible with current and projected land uses around the proposed site. In addition, it is advisable to conduct an environmental analysis, a part of which would be the development of a "noise" profile as discussed in this chapter. (See Section I, Chapter 3, Paragraph 2.13 for guidance and procedures for conducting an environmental analysis.)
- (3) A study of the economic impact the proposed range will have on the area surrounding or in close proximity to the proposed site.
- (4) A complete description of the range facility including detailed drawings. Draw a "noise" profile overlay and include it in the sound abatement program. Include in this portion of the document solutions to the identified existing or potential problems. How much will they cost? How effective will they be? Are they politically and socially possible?
- (5) A complete description of the community and neighboring properties. Include: existing use, planned use, safety, and other environmental considerations.
- (6) A sound survey of the area. This will provide information on which future plans will hinge. It will also provide an vehicle whereby public input can be obtained towards the construction of a project. It will also provide time to educate the community on the benefits of the project. Where results of these surveys show significant public opposition may exist, the master plan must include sound abatement strategies that will answer opposing arguments.

3.03 Land Use Compatibility

3.03.1 Area

3.03.1.1 Land use as it relates to existing conditions is but one facet of the study and is directly linked to what future conditions may exist at a site. Regulation of land use in some areas is so stringent that any other than what already exists may be rejected. When a range locates in an area the one factor seldom considered, is the "community" and its role as a regulatory body. Should a "noise" complaint arise as a result of range operations and the proper approvals have been received, the noise problem is no longer a problem the range facility must fore alone. The "community" must also become involved and assist in resolving the conflict. In other instances, even with full knowledge of the presence of a range. adjoining parcels have been rezoned for new housing developments, giving little, if any,

forethought to future consequences.

- 3.03.1.2 One of the primary yet often overlooked considerations in developing a range project is the economic impact the facility will have on the community. How it effects the community should it locate nearby, or if it is forced to move to another site are critical issues. Local economies are important. Even though shooting is a recreational activity, the range becomes part of the local business community. Outside activities, such as tournaments, bring outside money into the economy thereby playing an important political role in the local community. Most range operators do not give the economic impact a range can have on a local area sufficient consideration. Major tournaments, especially trap and skeet, will not only draw hundreds of individuals into an area, but it will also attract new revenues.

3.03.3 Existing Conditions

- 3.03.3.1 What are the existing conditions at the proposed or existing site? Study the environment to determine what impact is occurring. This is the reason an environmental analysis (EA) is necessary. Conducting an EA requires a thorough review to determine if there is any reason to implement a major and costly sound abatement program. It requires a complete description of what may or may not occur if the range is built. (See Section I, Chapter 3 paragraph 2.13 for guidance and procedures for conducting an environmental analysis.)

3.03.4 Future Conditions

- 3.03.4.1 The following is a protocol developed by the NRA for the express purposed of conducting a sound level study on small arms fire. This protocol requires the use of a Precision Integrating Sound Level Meter and Analyzer that set on the A scale and using the FAST detector response mode. As a general guide, the following catagories were developed based on field and text book work.

- (1) Unacceptable: If the sound level exceeds 90 dB(A) for 1 hour out of 24 or exceeds 85 dB(A) for 8 hours out of 24 and the receiver is less than 1/4 mile from the sound source.
- (2) Discretionary: Normally Acceptable, if the level exceeds 80 dB(A) for 8 hours out of 24 or if there are "loud" impulsive sounds (referring to sonic booms, artillery, etc.) on site and the distance from the property boundary and the receiver is one mile or more.
- (3) Discretionary: Normally acceptable if the level does not exceed 75 dB(A) at the property boundary more than 6 hours out of 24 hours and distance from the boundary line and the receiver is over 1/2 mile.
- (4) Acceptable: If the sound levels at the receiver do not exceed 65 dB(A) more than 8 hours out of 24 or activities do not extend into the nighttime hours of 10pm through 7am.

Active shooting is to take place during the daytime hours of 7am 10pm, with curtailed, but not necessarily discontinued activities during evening hours of 7pm - 10 pm. Shooting activities should not continue into nighttime hours, 10pm - 7am.

3.03.5 Regulatory Controls

- 3.03.5.1 Governmental planning organizations offer services to local agencies to assist them in developing goals and policies for community "noise" control. They also provide general land use, environmental protection and open space recommendations. In July 1981, the U.S. Environmental Protection Agency developed a Community Noise Assessment Program designed to assist communities to assess, control and improve their noise environment. Even though this document focuses on larger more densely populated areas, it does provide some valuable tips for the range planner. For example, they define assessment tools to be similar to those provided in this chapter for site evaluation purposes for both existing and proposed range facilities.

* 3.03.6 The Community and its Role

- a. Develop a noise control program and goals.
- b. Develop details of an acoustical survey, before, during and after.
- c. Develop details for an attitudinal survey.
- d. Gather existing complaint data.
- e. Present the program design, and its implementation costs.
- f. Make noise measurements. The standard criteria to be used when taking noise measurements are:
 - (1) At the property line, and in direct line with the receiver.
 - (2) Select measuring points that are clear of interfering objects (other than naturally occurring ones such as trees) or terrain.
 - (3) Describe the surface area over which the sound travels. Certain surface area configurations, such as a good grass cover affects the rate of decay for sound. The intervening distance between a point source and a receiver is also an attenuating factor. As a rule, each time the distance is doubled the sound pressure level is reduced by one-half, or reduced by about 6 dB. Take note of any walls, buildings, signs, people or other barriers normally between the point source and the measuring point. These obstacles serve also to attenuate the sound pressure levels. A hard surface does not add much to attenuation but distance, thick grass and heavy shrubbery do. Significant terrain features are also important, for example a noise source in a depression is provided barriers that will redirect sound and is not as serious as one at a higher elevation. Therefore, a range located in a valley presents less of a problem than one at the same general elevation as the surrounding area. Ranges elevated above a receiver will have the advantage of atmospheric attenuation, with additional components attenuated via wind. Atmospheric and wind attenuation is a function of temperature, wind speed, humidity and frequency. Atmospheric attenuation has a greater effect on high frequencies such as the supersonic crack of a bullet. Wind and temperature together affect propagation of sound in a variety of ways, but one of the more important is called a temperature inversion, but are normally directional. A wind gradient tends to cause a sound wave traveling with the wind to slope or bend toward the ground and appear to be louder. A sound wave traveling against the wind will bend upward and away from the earth, hence developing a sound shadow very near the source. This is one reason it is difficult to hear upwind from a source. Another reason is the masking effect of wind noise around the ears.
 - (4) Note noise reflecting off surface areas, such as trees, bodies of water, overhead firing line covers, hillsides, hard surfaces such as pavement can have a marked affect as well. Information needed on the field data sheet should include:
 - a. The time the receiving property is occupied.
 - b. What are the characteristics of the home?
 1. Is it air conditioned?
 2. Do they have a stereo?
 3. Is the room most used in the house closest to the range?
 4. Are there large pane windows facing the range?
 5. How thick are the walls?
 6. Is the house insulated?
 7. The elevation of the house in relation to the range?

- g. Conduct attitudinal survey
- h. Review complaint data
- i. Review noise survey results A review of the survey results will now permit a fuller understanding of the extent of the alleged problem. Once the data collection is complete, break it down into categories for analysis.

There are three sources for solutions to a noise problem. (1) What the range can do to abate sound levels over what existing laws allow, (2) measures available to the complainant, and (3) the role of the community in the matter. The role of the community does not become important unless the community approved rezoning to allow the complainants to build in the recognized "noise" zone of the range. If the community approved an application to build, full knowing the range was preexisting, then it is incumbent upon that jurisdiction to be a part of the solution.

- j. Apply strategy analysis for development of "noise" abatement alternatives.
- k. Compile alternatives and recommendations for "noise" abatement.

3.03.7 Government

3.03.7.1 County: In many jurisdictions, the county will be the governing agency. County planning boards assist in planning general land use and often develop long range plans. These plans are helpful in determining how future development will impact a planned range.

3.03.7.1.1 State: In most instances, states rely on the county and local agencies. However, in some instances, state agencies will have jurisdiction.

3.03.8 Populations

3.03.8.1 Information on population characteristics such as density, growth rates for previous periods and projected future growth rates also provide valuable information. A range builder can use this data to determine how growth rates will aid or detract from the proposed facility. Population growth provides additional resources for the properly sited facility, and potential problems of encroachment for an improperly sited one.

3.03.9 Noise profiles

3.03.9.1 During the site selection process, develop a "noise" profile for each proposed site to determine what abatement procedures, if any, will be needed on each. Remoteness has, in the past, been the accepted norm used to select a site. By using modern technological advances in acoustical materials, outdoor ranges can be sited near population centers. Developing a noise profile requires the services of an engineer practicing in the field of acoustics or someone thoroughly familiar with sound testing equipment and sound abatement methodologies.

3.03.10 General considerations

3.03.10.1 Cooperation with other range operations, community groups, educational institutions, recreational related organizations and others can gain needed support when justification is being put together. Early cooperation will show other groups how the facility will benefit the local community. In many instances, this aspect is omitted. How a particular operation will affect the local economy is important and necessary to counter any negative input. This balanced with how the facility will impact the local environment is also important.

3.03.11 Noise Abatement Programs

* 3.03.11.1 Noise abatement programs are necessary on all ranges from the standpoint of the user. Hearing protection should be a requirement for all users who are within 50 feet of the firing line.

- ✖ 3.13.11.2 Sound abatement shields or barriers should be installed on ranges where neighbors are within 1/4 mile of the facility unless significant natural barriers exist. Any fixtures or terrain features must serve either to redirect or capture sound. Exact configurations depend upon site characteristics.

3.03.12 Noise Measurement Standards

3.03.12.1 Select equipment based on the following:

- (1) Must meet all ANSI specifications.
- (2) Select multi-directional microphones.
- (3) Position microphones 4-5 feet above the ground on a tripod.
- (4) Select test sites at property boundaries or according to existing statutes.
- (5) Use a wind screen in all outdoor conditions.
- (6) Average wind speeds must be less than 12 mph. (Wind noise at higher speeds will invalidate data.)
- (7) Set sound level meter on tripod or stand and use a 5 foot extension for the microphone. (Use an extension on the microphone when necessary.)
- (8) Calibrate sound level meter and other recording devices before, during (every hour) and after sampling.
- (9) Have equipment factory calibrated once each year.
- (10) Select appropriate dB range (referred to as dynamic range). In many areas the residual, background or ambient sound levels are in the 30-45 dB(A) range. To record impulsive sounds properly select a range that will record the lower ranges as well as the higher ones. As an example, four ranges are available on most meters. Select one of the ranges depending on the ambient sound levels, so the ambient levels consistently register within the scale. If the levels were 30 dB to 80 dB, 50 dB to 100 dB, etc. and the ambient level were around 40 dB, you would choose the lowest setting.
At a distance of 10 feet from an impulsive sound source the highest range would be selected, but at longer distances the lower ranges would be selected.
- (11) Reading and recording sound pressure levels is often difficult visually even with a digital readout. A better method is to use a recording device such as a graphic recorder. This instrument is linked via cable to the sound level meter and records a graphic display (permanent record) of sound pressure waves at a recording site.
- (12) The length of any sampling period is not going to be representative of what is occurring over 365 days each year. It can be representative of what occurs at periodic intervals. It is therefore important to quiz the range managers on specific times when the facility is used. To provide the best possible base of information, conduct tests during warm weather months when people are out doors, have windows open and are more susceptible to noise intrusion. Collect data at each test site for at least one hour to obtain a clear picture of what is occurring at that site. The best results are gathered over a 24 hour period, during which time all noise sources regardless of origin are measured. Such a technique requires sophisticated weather proof, expensive instrumentation and it is often better left to professional.
- (13) Record the following detailed information on the instruments used:
 - a. The name, make, type and serial numbers.
 - b. Date of last laboratory calibration (label on instrument).
 - c. On-site calibration and battery checks before and after a series of measurements.
 - d. Instrument settings.
 - e. The readings taken (make notations on recorder printout for references in reports).

(14) Record the following on environmental:

- a. Time and date of measurements.
- b. Name and location of measuring area (provide a sketch).
- c. Obstacles, walls, etc., that may influence readings.
- d. Position of observers.
- e. Position of microphone(s).
- f. Names of observers.
- g. General weather conditions temperature, wind, barometric pressure, etc.
- h. Other site characteristics, woodlands, grass, etc.

(15) During the sampling, record information requested in the blanks provided along the edges of the paper or tape.

3.04 Selection of Sound Absorbing Materials

3.04.1 Virtually all materials will absorb varying degrees of sound, even mirror smooth surfaces. The more broken a surface, however, the higher the sound absorption coefficient will be. Table 1 in the Appendix contains sound absorption coefficients for common construction materials.

3.04.2 The principle behind sound control is the introduction of reflecting, redirecting, absorbing, containing or isolating material. Noisy machines are enclosed to contain sounds in anechoic chambers; highways are equipped with reflecting and/or sound absorbing walls; airplane engines are tested in what are known as "hush" houses which are nothing more than another form of an anechoic chamber. Other applications are used in apartment or office buildings to absorb and isolate sounds once readily transmitted through ducts, walls, floors and ceilings. In schools, band rooms are typically equipped with sound absorbing panels to reduce the effects of musical instruments to adjoining areas.

3.04.3 Finding the proper applications requires a complete understanding of noise (sound) frequency spectrum to determine the selection of specific materials. Other considerations include terrain features, and vegetation. These include, padding for carpeting, insulation in walls, thickness of concrete, specially designed sound panels, acoustic tile, draperies, dividing walls, boxes, sound block, expanded wall areas and others. Expanded wall areas are one of the quickest ways of providing additional absorption material without taking up valuable space. Another is to place mass or a thick wall between the sound source and the receiver. Mass by itself is often sufficient to bring noise levels into an acceptable range.

3.04.4 On some ranges the application may require a completely enclosed firing line, while on others the addition of acoustical material into the covered firing line may suffice. The basic approach is to identify how the source is affecting the surrounding area and then devise the appropriate method for containment to bring the sound pressure levels down to an acceptable level. This calls for the use of sophisticated sound measuring equipment to determine what exists prior to making any changes. Changes made merely based on what one thinks might work often does little more than drain the bank account.

3.04.5 There are several methods that can be used to reduce the impact sound pressure levels created on shooting ranges.

- (1) Locate the facility in a remote area
- (2) Construction of sound abatement enclosures and barriers
- (3) Limit the type of firearm used on a facility

The first one, remote locations, may be ok in some parts of the country where truly remote areas still exist, but for many ranges this alternative is non-existent. The second is perhaps the alternative most ranges will use. However, it is important that range owners

contemplating the use of sound abatement enclosures and barriers that no two ranges are alike. What works on one will not necessarily apply to another. Therein lies the major difficulty with sound abatement technology for ranges. It is largely experimental. A typical application for a benchrest rifle range would be to use 24 - 36 inch diameter concrete pipe with a minimum wall thickness of 3.0 inches and 12 to 20 feet in length placed so that the rifle muzzle protrudes into the center of the pipe. This simple device will in most cases suffice to reduce the sounds of shooting to residual levels or below. In other cases, additional acoustic material will be required to further contain sound pressure levels. As an example, a special panel can be constructed for each end of the pipe with acoustic material glued to the panel and acoustic material used to line the pipe. For benchrest ranges this technique works very well, but for multi-purpose ranges where all types of firearms are used it may not. Other techniques include surrounding the area where the shooter is located with walls, such as an acoustically treated booth. This application, can also be used effectively on shotgun ranges including trap and skeet. Another technique is to treat the area where the receiver is located such as additional insulation in a home, or the use of white noise or anti-noise such as musac.

3.05 Sound Measurement Protocol

3.05.1 This protocol has been developed and is based upon guidelines provided by EPA, HUD, and the DOD, [HUD standard 51.103], [EPA recommendations 31:2021], [DOD AR 200-1]; and have been developed by the NRA for use on small arms ranges. The general lack of procedures that exist in the laws and ordinances throughout the United States as it pertains to sound pressure level measurements has made it necessary for the NRA to develop and adopt measurement procedures. These procedures were developed using the following resource materials:

- (1) Sound Measurement Procedures - Illinois EPA
- (2) Army Environmental Noise Abatement Program - AR 200-1
- (3) Environmental Protection Agency - Suggestions for Community Noise Assessment
- (4) Noise Regulation Report
- (5) Owners Manual - General Radio Sound Level Meter
- (6) New Jersey Stationary Source Rules

3.05.1.1 To quantify an outdoor noise environment at one location so it can be compared with others, simplify its description. One method is to measure the value of the residual noise level and the values of the maximum noise level for specific single event sounds at various times during the day, using either a simple sound level meter or the continuous graphic level recording of its output.

3.05.2 Program Goals & Objectives

3.05.2.1 The goal of this program is to control noise produced by community activities to protect the health and welfare of its members and the public within, adjacent to and surrounding the sound source. The following objectives are required to achieve this goal:

- a. Assess the environmental impact of sound produced by sound source activities; lessen harmful or objectionable effects to the greatest extent possible.
- b. Comply with applicable regulations on noise.
- c. Achieve sound abatement through the application of:
 - (1) Engineering sound reduction procedures.
 - (2) Administrative sound control measures.
 - (3) Modern land use planning.
- d. Incorporate sound control provisions, consistent with legal requirements.

May 7, 1996

Dear Town Council Members,

Re the Spurwink Rod and Gun Club, we have enclosed the 1951 Disturbance of the Peace Ordinance, the 1964 Firearms Ordinance, the 1995 "Shooting Range" Bill, a letter to Ernest MacVane, and Mr. MacVane's response.

The disturbance of the peace ordinance is not negated by the firearms ordinance, as Mr. MacVane implies. We expect to be protected under the same town laws that safeguard other areas of Cape Elizabeth. As for the state law, it does not undermine ordinances that were enacted prior to the establishment of a shooting range. We are dealing with public health and safety issues which the state law does not address anyway. You have reports in your possession which show that the shooting at the gun club exceeds acceptable decibel levels and that the club does not conform to NRA guidelines for sound abatement at shooting ranges. Also, the members shoot very close to a public road, use high-powered rifles with long range capacity in a residential area, and have been putting lead into their wetlands site for the length of the club's existence. Who is responsible, who is liable, now and in the future? A business enterprise or a private individual would have to answer to someone. The club answers to no one. We have repeatedly asked the club to take the responsibility to regulate itself and to be good neighbors. They have taken no action.

Please note the reference in Mr. MacVane's letter to the 1987 petition signed by 70 taxpayers and his denial of our request to revisit the matter with the Zoning Board of Appeals. This is an issue that has been around a long time and will continue to be revisited as long as

the club continues to operate as they have been operating, with no regard for their neighbors' peace, health and safety.

It is time for the town to take responsibility for this non-conforming use in an area that it has zoned residential and has deemed a growth area, where there will be even more homes and children. Who has been here the longest should not be the issue. Common sense, taking responsibility, and public health and safety should be the issues.

Sincerely,

Committee for Concerned Neighbors

Ellen Mugar, Robert Clements, 77 Wells , 767-5408

John and Margaret Leasure, 1243 Sawyer, 799-5872

Stephen and Cathie Jordan, 4 Farms Edge, 799-8397

John and Louise White, 373 Spurwink, 799-6702

Elizabeth Fisher Turesky, 8 Farms Edge, 799-3480

CHAPTER 12

MISCELLANEOUS OFFENSES

Article I. Offenses.....12-1
 Article II. Camping on Public Property.....12-2
 Article III. Loitering Dispersal.....12-3
 Article IV. Fort Williams Park Regulations.....12-3

Article I. Offenses. [From By-Laws approved 5/29/51.]

* → Sec. 12-1-1. Disturbing the Peace.

(a) Within the Town of Cape Elizabeth, no person shall make, continue or cause to be made, any loud, profane, boisterous, unnecessary or unusual noises which shall either annoy, disturb, injure, or endanger the comfort, repose, health, peace or safety of others. This shall not apply to agricultural activities, to school sponsored events, to fireworks shows approved by the Fire Chief or to concerts approved by the Town Council.

(b) No person shall perform or carry on, or cause to be performed, or carried on, any construction or excavation work during the hours between 10:00 p.m. and 7:00 a.m. that produces noise of a sufficient volume to disturb the sleep or repose of occupants of neighboring properties. This paragraph shall not apply in the event of an emergency in which a sewer, conduit or utility in or under any street breaks, burst or otherwise is in such condition as to immediately endanger the property, life, health or safety of any individual. It shall also not apply to repairs necessitated by storm events, earthquakes and other "acts of God".

(Revised 11-11-88)

Sec. 12-1-2. Animal Control. No owner or person having charge of any horse, cow, ox, swine, goat or other grazing animal shall turn such animal into, or permit the same to go at large in any street, highway or public place within the town.

Sec. 12-1-3. Nude, Topless Bathing. No person in a nude state shall appear on a public way, nor swim or bathe in the waters of the town or waters adjacent thereto so as to be exposed to view of spectators.

Sec. 12-1-4. Disturbing Public Meeting. No person shall disturb any public meeting, singing school, entertainment, or meeting of any kind, by making loud or unusual noises,

CHAPTER 9

FIREARMS

Article I. Discharge of Firearms. [Adopted eff. 3/9/64;
R.S. 1964, T. 30, Sec.
2151. Revised Eff.
8/7/91]

Sec. 9-1-1. Prohibition of Discharge of Firearms The discharge of firearms, air rifles or pistols is prohibited in all areas of Town excepting the salt marshes, property owned by the Spurwink Rod and Gun Club, and property under federal jurisdiction, and excepting the use of such weapons at military exercises or in the lawful defense of person, family or property of any individual or entity. Use of rifles except on target ranges authorized by the police department is prohibited within all areas of the Town.

Sec. 9-1-2. Killing Wildlife Damaging Crops. No person shall discharge firearms at any deer, raccoons, skunks, woodchucks or other wild animals doing damage to any orchards or growing crops except in accordance with applicable state statutes. Such person shall notify the police department, prior to commencing each such activity, of the time and location where such activity is proposed and shall also notify the police department immediately upon the completion of each such activity, unless other arrangements are made with the Police Chief. Such person shall exhibit to the police department once during its effective period any written permission required by state statute or regulation for such activity. The police department may impose such reasonable restrictions upon the time or location of said activities, and the type of firearms to be used, as may be necessary to protect the public health and safety; it shall not prevent any such activity unless it has evidence that the person proposing the same is not competent to do so safely, and it shall not require that any police officer observe or take part in such activities. [Added, eff. 12/22/76.]

Sec. 9-1-3. Penalty. Any person found guilty of violating Sec. 9-1-1 or Sec. 9-1-2 shall be subject to a fine for each such violation in an amount not to exceed \$500.00, to be recovered for use of the Town by complaint to the District Court. [Revised, eff. 12/22/76.]

DATE: 5/12/95

(Filing No. H- 251)

MAJORITY
NATURAL RESOURCES

Reproduced and distributed under the direction of the Clerk of the House.

STATE OF MAINE
HOUSE OF REPRESENTATIVES
117TH LEGISLATURE
FIRST REGULAR SESSION

COMMITTEE AMENDMENT "A" to H.P. 60, L.D. 96, Bill, "An Act to Exempt Owners of Shooting Ranges from any Civil or Criminal Action Relating to Noise Pollution"

Amend the bill by striking out the title and substituting the following:

'An Act to Limit Nuisance Actions and Noise Ordinances Relating to Sport Shooting Ranges'

Amend the bill by striking out everything after the enacting clause and before the statement of fact and inserting in its place the following:

'Sec. 1. 17 MRSA §2806 are enacted to read:

§2806. Sport shooting ranges

A person who acquires title to or who owns real property in the vicinity of a permanently located and improved shooting range may not maintain a nuisance action against the person who owns the range to restrain, enjoin or impede the use of the range when there has not been a substantial change in the use of the range. This section does not prohibit actions for negligence or recklessness in the operation of the range or by a person using the range.

Sec. 2. 30-A MRSA §3011 is enacted to read:

§3011. Regulation of sport shooting ranges

1. Definition. As used in this section, "sport shooting range" means an area designed and used for archery, skeet and

COMMITTEE AMENDMENT

R. 9. 5.

COMMITTEE AMENDMENT "A" to H.P. 60, L.D. 96

2 trap shooting or other similar shooting sports and the shooting
3 of rifles, shotguns and pistols.

4 2. Limitation. A municipal noise control ordinance may not
5 require or be applied so as to require a sport shooting range to
6 limit or eliminate shooting activities that have occurred on a
7 regular basis at the range prior to the enactment date of the
8 ordinance.

10 3. Expansion of activity. Nothing in this section limits
11 the ability of a municipality to regulate noise produced by the
12 expansion of activity at a sport shooting range.'

14 Further amend the bill by inserting at the end before the
15 statement of fact the following:

18 **FISCAL NOTE**

20 This bill may reduce the number of civil suits and civil
21 violations filed in the court system. The Judicial Department
22 may realize some minor savings from reductions of workload and
23 administrative costs associated with the minimal number of cases
24 that will no longer be filed. Reductions in the collection of
25 fines and filing fees may decrease General Fund revenue by minor
26 amounts.'

28 **STATEMENT OF FACT**

30 The amendment replaces the bill. It prohibits a person from
31 suing a sport shooting range for nuisance unless there has been a
32 substantial change in the use of the range. The amendment also
33 limits the effect of municipal noise control ordinances to allow
34 sport shooting ranges to continue their regular level of activity
35 regardless of newly enacted municipal noise control ordinances.
36 This would not prevent the municipality from controlling noise
37 created by an expansion of activity at the range. The amendment
38 also adds a fiscal note to the bill.

COMMITTEE AMENDMENT

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RdB

L.D. 96

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DATE: 5/18/95

(Filing No. H-274)

Reproduced and distributed under the direction of the Clerk of the House.

STATE OF MAINE
HOUSE OF REPRESENTATIVES
117TH LEGISLATURE
FIRST REGULAR SESSION

HOUSE AMENDMENT "B" to COMMITTEE AMENDMENT "A" to H.P. 60, L.D. 96, Bill, "An Act to Exempt Owners of Shooting Ranges from any Civil or Criminal Action Relating to noise Pollution"

Amend the amendment by striking out all of section 1 and inserting in its place the following:

Sec. 1. 17 MRSA §2806 is enacted to read:

§2806. Sport shooting ranges

1. Acquisition of property near existing range. Except as provided in this subsection, a person may not maintain a nuisance action for noise against a shooting range located in the vicinity of that person's property if the shooting range was established as of the date the person acquired the property. If there is a substantial change in use of the range after the person acquires the property, the person may maintain a nuisance action if the action is brought within 3 years from the beginning of the substantial change.

2. Establishment of shooting range near existing property. A person who owns property in the vicinity of a shooting range that was established after the person acquired the property may maintain a nuisance action for noise against that shooting range only if the action is brought within 5 years after establishment of the range or 3 years after a substantial change in use of the range.

3. Dormant shooting range. If there has been no shooting activity at a range for a period of 3 years, resumption of shooting is considered establishment of a new shooting range for purposes of this section.

4. Application. This section does not limit nuisance actions against shooting ranges established after the effective date of this section.'

STATEMENT OF FACT

This amendment replaces the section of the amendment limiting nuisance actions against shooting ranges. This amendment provides that a person who acquires property near an existing shooting range may not sue the range for nuisance unless there is a substantial change in use of the range. In that case, the person has 3 years to bring the action. If a shooting range was established before the effective date of this bill as amended, but after the person acquired the property, the person has 5 years from the date of establishment or 3 years from the date of a substantial change in use of the range to bring a nuisance action. There is no limit on nuisance actions against shooting ranges established after the effective date of this bill as amended. Resumption of shooting at a shooting range that has been dormant for a period of 3 years is considered establishment of a new range and the limitations of this bill would not apply to such a resumption.

SPONSORED BY: Richard A. Gould
(Representative GOULD)

TOWN: Greenville



TOWN OF CAPE ELIZABETH

ERNEST W. MacVANE, JR. CEO
CODE ENFORCEMENT OFFICER
BUILDING/PLUMBING INSPECTOR
320 OCEAN HOUSE ROAD
CAPE ELIZABETH, MAINE 04107

799-1619
AREA CODE 207

September 7, 1995

John M. Leasure
1243 Sawyer Road
Cape Elizabeth, Me. 04107

Re: Spurwink Rod & Gun Club

Dear Mr. Leasure:

I am in receipt of your letter dated August 31, 1995 and your claim the Town is not enforcing Chapter 12 (Disturbing the peace miscellaneous offenses).

The Spurwink Rod and Gun Club is currently a legal non conforming use complying with Sec. 19-3-10 of the Zoning Ordinance. Chapter 12 Article 1 - Disturbing the Peace, is not applicable to uses permitted. The Rod & Gun Club is a permitted use. Chapter 9 Article 1- Discharge of Firearms Sub Sec. 9-1-1 specifically authorizes the discharge of firearms at The Rod & Gun Club.

The Board of Zoning Appeals in 1987 received a petition of 70 Cape Elizabeth tax payers who opposed the current use and a proposed expansion of the Gun Club. The Board after hearing all concerns including noise and possible impact on property values approved the clubs request. Your concerns and concerns of others did receive consideration by the board. I therefore have no recourse but to deny your request to have the Board of Appeals revisit this matter.

I hope I have answered all your questions, if not, please contact me.

Sincerely,

Ernest W MacVane Jr
Ernest W. MacVane, Jr.
Code Enforcement Officer

cc: Gerald Daigle
Michael McGovern
David Pickering
Ellen Munger, 51 Wells Road

August 31, 1995

Ernest W. MacVane, Jr.,
Code Enforcement Officer
Town of Cape Elizabeth
P.O. Box 6260
Cape Elizabeth, Maine 04107-0060

Subject: Spurwink Rod & Gun Club located on
Sawyer Road in Cape Elizabeth, Maine.

Dear Mr. MacVane,

We have contacted the Town Manager of Cape Elizabeth regarding the loud noises resulting from the activities at the above referenced Club. The Town Manager did have an informal meeting and discussion regarding our complaints. To date nothing has been solved and there has been no compromise regarding our request to limit the noise.

We are requesting a meeting with the Board of Appeals as to why the Town Code of Ordinances, specifically Chapter 12; Article 1; Section 12-1-1 is not being enforced in this residential neighborhood.

Please respond to the above request by writing to the following addresses:

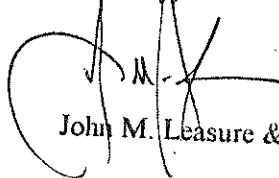
John M. Leasure
1243 Sawyer Road
Cape Elizabeth, Maine 04107
Tel. 799-5872

and/or

Ellen Mugar
77 ~~71~~ Wells Road
Cape Elizabeth, Maine 04107
Tel. 767-5408

Thank you in advance for your assistance.

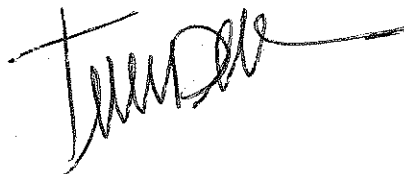
Sincerely,



John M. Leasure & Ellen Mugar

August 2, 1996

TO: Maureen O'Meara, Town Planner
FROM: Terry DeWan / TJD&A



RE: SPURWINK ROD & GUN CLUB

We are presenting the following information in response to the issues raised by a few members of the Planning Board concerning the Spurwink Rod & Gun Club (SR&GC). Since the last meeting on July 16, 1996, we have met with the Rod & Gun club and toured their facility on Spurwink Road. This summary is provided to give the Planning Board a greater understanding of the club, their facilities, and their emphasis on safety as it pertains to the future presence of Dominicus Crossing.

FACILITY

Clubhouse. The SR&GC built the clubhouse in 1952. The wooden building on Spurwink Avenue is a private club, used by members for meetings and social occasions. A gravel parking lot for approximately 20 cars is located just off the road.

Shooting Range. The shooting range is located at the base of a pronounced hill approximately 150 feet from the clubhouse. Access is through a locked gate and down a set of steps. The firing range is a cleared field 75 feet in width and 100 yards in length. A cattail swamp separates the end of the range from the firing area. The enclosed sketch plan indicates the relative size of the firing range and its orientation, relative to Dominicus Crossing.

Targets are set at distances of 25 and 50 yards for pistol shooting, and 100 yards for rifles. Bullets are fired into a wooded hillside, approximately 70 feet in height. The base of the hill has been cleared of vegetation.

Shooting Shed. The majority of the firing is done in the shelter of a wooden shooting shed, located at the foot of the stairs near the clubhouse. The shed is designed with stands that can accommodate up to seven shooters at any one time. An additional open-air stand is set up at the northerly end. A series of open pistol benches are found on the south side of the range.

In response to concerns raised by neighbors regarding the noise from the range, the SR&GC has recently begun several improvements to the shooting shed that are designed to muffle the noise from the firearms. The projecting roof is being extended to deflect more of the sound back into the interior. The roof and the walls are being insulated to absorb sound. The open end walls are being enclosed for the same reason.

According to the members we met with, several years ago the club began discussions with the town regarding the construction of an indoor range on the property. However, due to the presence of wetlands and requirements for buffering, the plans were dropped.

MEMBERSHIP

Membership in the SR&GC has historically been between 150 and 200. The majority of the members come from the Cape Elizabeth (1/3), Scarborough, and South Portland area. Members represent all walks of life. It was pointed out that several are police officers from local communities.

In order to become a member, the usual course is for an individual to be proposed by a current member. A Membership Committee reviews the application and contacts at least one listed reference prior to approval.

Non-members may only shoot at the range if they are invited guests of members and agree to abide by the rules of the club.

SAFETY

Safety was a major theme of the discussion with the membership. It was pointed out that there has never been an accident in the forty plus years since the club was organized. The club offers a Hunters Safety course and a Junior Marksmanship program to the general public.

Members who use the range are subject to the Rules Governing Use of Spurwink Rod and Gun Club Range, which is reproduced at the end of this report. It should be noted that the club no longer has a running deer shoot (referenced in Rules 11 and 14), primarily due to the club's concerns for noise.

The Sawyer Road section of the property is bounded with a six foot chain link fence. Signs noting the hours of operations and rules of the facility

are posted in prominent locations near the entrance. The perimeter of the property is posted with signs that warn: "Danger. Keep Out. Active Rifle Range."

The club is covered by a liability policy issued by the Blake, Hall & Sprague agency in South Portland.

BALLISTICS

Rod and Gun Club members use the range for a variety of shooting: pistols from the bench, shotguns for occasional skeet shooting, high powered rifles (30.06 and other hunting rifles) from under the shelter, etc. No fully automatic weapons are allowed.

The velocity and trajectory of the bullets that are used at the range is a function of the type of ammunition, the type of weapon, the length of the barrel, the distance from the end of the barrel, temperature, altitude, and wind. We contacted the Sporting Arms and Ammunition Manufacturers Institute (SAAMI), a Trade Organization of Firearms and Ammunition Manufacturers, for statistics on weapons commonly fired at the range:

Weapon	Size Shot/ Bullet Weight	Initial Velocity	Maximum Distance	Final Velocity
30-06 rifle	150 grams	2,710 ft/sec	12,465 ft. 2.3 miles	407 ft/sec
	220 grams	2,410 ft/ sec	13,544 ft. 2.5 miles	441 ft/sec
22 caliber rifle	40 grams high speed	1255 ft/sec	4,867 ft.	241 ft/sec
9 mm pistol	115 grams	1,225 ft/sec	5,726 ft.	265 ft/sec
	124 grams	1100 ft/sec	6391 ft.	289 ft/sec
Shotgun (12 gauge)	#8 target load	1,145 ft/sec	730 ft.	70 ft/sec
	#6	1,275 ft/sec	860 ft.	78 ft/sec
	#2	1,275 ft/sec	1,080 ft.	90 ft/sec
	#2 steel	1,365 ft/sec	875 ft.	78 ft/sec

Kenneth D. Green, the Director of Technical Affairs at SAAMI stated that the above data was calculated at 59° F, at a sea level altitude with no wind and a firing angle of 30°. This information has been plotted onto a cross

section to show the maximum distance trajectories at an angle of 30° (see enclosed).

One of the primary rules of the range is that "No shooter shall elevate the muzzle of his gun while shooting, so as to cause bullets to go over the top of the backstop, excluding shotguns when shooting trap." Weapons are discharged into paper targets that are pinned to cross ties on target racks. Bullets pass through the targets and strike the exposed base of the seventy foot high hillside behind the range.

For a bullet to leave the site, a shooter would have to disregard the Rod and Gun Club Rules by purposefully aiming above the line of trees that line the site. Firing into the trees would cause the bullets to tumble, quickly lose velocity, and fall to the ground.

Andy Tabor, a member of the Rod and Gun Club who is also associated with Troop 30 of the Boy Scouts, will provide us with a cross section of computer-generated trajectories that will determine the distance of a bullet fired just over the backstop hill. (to be presented at the August 20th meeting)

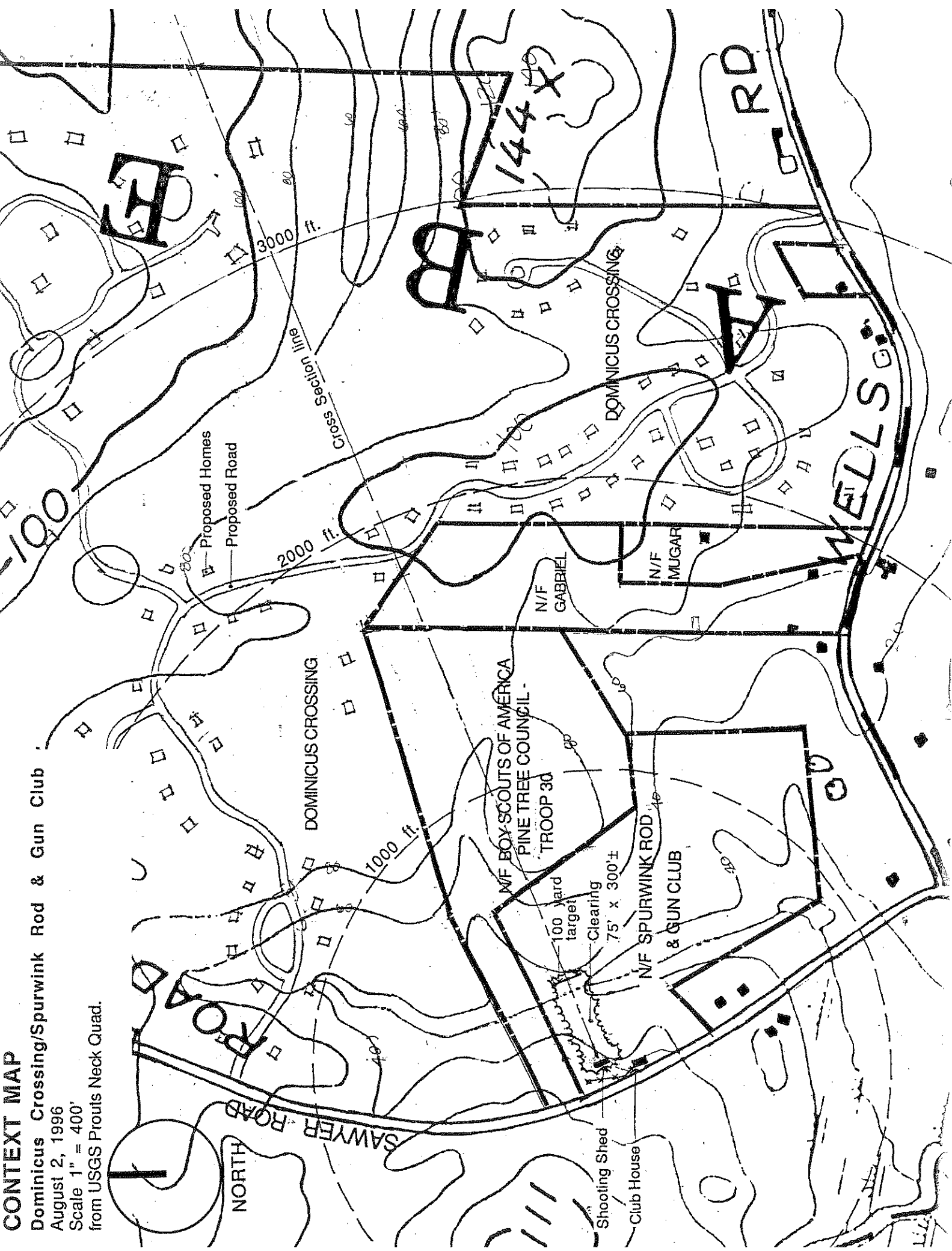
We hope to have one of the officers of the club present at the August meeting to answer any further questions that the Board may have on this issue. We look forward to presenting this material and concluding the discussion on this matter.

RULES GOVERNING USE OF SPURWINK
ROD AND GUN CLUB RANGE

1. All shooting shall conform to N.R.A. Rules.
2. All shooting on Sunday is prohibited until 12:00 Noon.
3. There shall be no shooting before 8:00 AM at any time, and no shooting after sunset.
4. Upon request, a shooter will be required to show his membership card. Any person unable to produce a current membership card shall be considered a non-member, and shall be prohibited from shooting unless accompanied by a current member who shall be responsible for his conduct.
5. Each individual shooter shall police the range when finished shooting.
6. No targets shall be pinned to the uprights of the target racks. All targets will be pinned between the uprights in such a manner that they hang between the cross ties.
7. No shooter shall elevate the muzzle of his gun while shooting, so as to cause bullets to go over the top of the backstop, excluding shot - guns when shooting trap.
8. When a shooter goes on the range to shoot and the range is being used, he will either use the same firing line or wait his turn. No member or group shall monopolize the range.
9. Members are responsible for the conduct of their guests.
10. Any member who flagrantly disregards rules of the range shall be reported to the Executive Board for action under the By-Laws.
11. There shall be no shooting when a person is down range from the firing line (except during the running deer shoot).
12. All shooting will cease whenever work parties are on or near the range.
13. Whenever the range is open to the public during an organized shoot, a duly appointed range master shall have complete authority.
14. The running deer target shall not be operated unless 3 or more members are present to ensure the safe use of the range.
15. Any guest and/or person under the age of 18 years must be accompanied by an adult member of the Club, when shooting on the range.
16. Whosoever violates any of these rules shall be liable for expulsion or suspension from the Club under the By-Laws.
17. No human silhouette targets may be used. In questionable cases, NRA approval of a target pattern shall determine that it may be used.
18. No full automatic weapon fire is permitted.

CONTEXT MAP

Dominicus Crossing/Spurwink Rod & Gun Club
August 2, 1996
Scale 1" = 400'
from USGS Prouts Neck Quad.



2/8/99

Dear Mike -

One of the planks in my platform in my candidacy for Town Council was respect for citizens' wishes.

Recently I received a copy of a petition from 316 residents of Cape Elizabeth seeking to have the Council consider the adoption of an ordinance relating to the Spurwink Rod and Gun Club.

Accordingly, I am requesting that an item be included on the agenda for the ~~February~~ Town Council Meeting to address the concerns of the petitioners and take any appropriate action.

Sincerely yours,

H. Berry III
Councilor

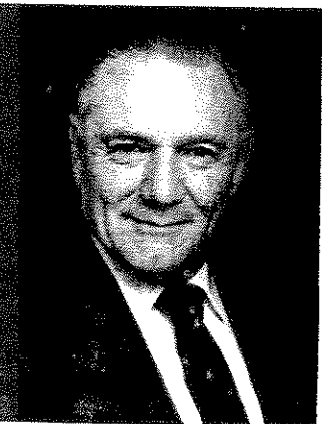
ELECT

HENRY N. BERRY III

FOR TOWN COUNCIL

- Prudent use of Taxes
- Preservation of Natural Assets
- Respect for Citizens' Wishes

ELECTION MAY 6, 1997



~~56~~
PETITION FOR ENACTMENT OF ORDINANCE

WHEREAS, there is a risk that persons discharging firearms at the Spurwink Rod & Gun Club, which is located in a residential zone, may allow bullets to escape the confines of the Club and to land on the property of nearby property owners, thereby causing a risk of personal injury and property damage; and

WHEREAS, the ammunition fired by patrons of the Spurwink Rod & Gun Club in the past, and potentially to be fired in the future, has caused and will continue to cause the deposition of substantial quantities of lead into the ground, including wetlands on the Gun Club site, which lead is vulnerable to leaching into the groundwater and contaminating water supplies and nearby brooks and streams; and

WHEREAS, gunshots emanating from the Spurwink Rod & Gun Club have caused, and have the potential to cause in the future, distraction of motorists, bicyclists, and joggers using the public road passing by the Club, with the result that traffic safety is impaired; and

WHEREAS, the suddenness of the sound of gunfire is inherently startling, and the extremely-high decibel levels of gunfire may cause hearing loss, threatening the health of persons exposed to it; and

WHEREAS, the above-described potential for personal injury, property damage, environmental contamination, and traffic accidents are a threat to the public health, safety, and welfare, independent of the levels of "noise" emanating from the Spurwink Rod & Gun Club; and

WHEREAS, the membership of the Spurwink Rod & Gun Club has increased substantially since September 29, 1995 (the effective date of 30-A MRSA § 3011), thereby causing an "expansion of activity" that is subject to direct noise regulation under 30-A MRSA § 3011(3);

NOW THEREFORE, the undersigned registered voters of Cape Elizabeth petition the City Council to adopt the following proposed ordinance amending Chapter 9, Article 1, Section 9-1-1 of the Cape Elizabeth Code of Ordinances:

Proposed ordinance adding the following Section A to Chapter 9, Article I, Section 9-1-1 of the Cape Elizabeth Code of Ordinances:

A. Notwithstanding any other provision of the Cape Elizabeth Code of Ordinances, every shooting range or gun club within the Town of Cape Elizabeth shall:

1. exercise due diligence to prevent all bullets or other projectiles from passing beyond the boundaries of the property owned, occupied, or controlled by said shooting range or gun club;
2. prohibit the discharge of firearms at any of the following times:
 - a. before 9 am. and after 2 pm, on Mondays, Tuesdays, Wednesdays, Fridays, and Saturdays;
 - b. before 9 am. and after sunset, on Thursdays;
 - c. at any time on Sundays, New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.
3. no less often than monthly, collect all spent bullets or other lead-bearing materials left by persons using the shooting range or gun club and transport those materials to a waste disposal facility licensed to accept such waste.

e	Signature	Printed Name	Address
67	<i>Ellen Mugar</i>	Ellen Mugar	77 Wells Rd. C.E.
17	<i>Mrs. AF White</i>	LOUISE AF WHITE	373 Sparrowhawk Ave C.E.
47	<i>John N White</i>	John N White	373 Sparrowhawk Ave C.E.
47	<i>John M. Leasure</i>	John M. Leasure	1243 Sawyer Rd. C.E. *
27	<i>Margaret M. Leasure</i>	Margaret M. Leasure	1243 Sawyer Rd. C.E. *
47	<i>Thomas A. Daly</i>	Thomas A. Daly	14 Jordan Farm Rd
47	<i>Patricia S. Daly</i>	PATRICIA S. DALY	14 Jordan Farm Rd.
67	<i>Elizabeth Fisher Juresky</i>	Elizabeth Fisher Juresky	8 Farms Edge Rd.
1	<i>Ann Caroline Croft</i>	Ann Caroline Croft	10 Lawson Rd Cape Elizabeth
1	<i>Catherine A. Jordan</i>	CATHERINE A. JORDAN	4 FARMS EDGE RD CAPE ELIZABETH
	<i>H. Stephen Jordan</i>	H. STEPHEN JORDAN	4 FARMS EDGE RD. C.E. 04107

* moved out of C.E.

Spurwink Rod and Gun

Signature	Printed Name	Address
	MICHAEL D. RHUS	4 Waverly
EE Hunt	Elizabeth E HUNT	12 Sea View Ave CE
Bruce F. Haffenreffer	BRUCE HAFENREFFER	340 Ocean Home Rd
Mallory Marshall	Mallory Marshall	340 Ocean House Rd.
M. Vetterlein	M. VETTERLEIN	29 Westminster Tr.
Patricia Beville	Patricia Beville	11 Wainwright Dr.
Dale Kessler	Dale Kessler	10 Wainwright Dr
Juergen Renger	Juergen Renger	5 Wainwright Drive
Joan Renger	Joan Renger	5 Wainwright Dr.
Jack E. Sprague	JACK E. SPRAGUE	2 WAINWRIGHT
Michelle Sprague	Michelle Sprague	2 Wainwright
Michael L. Hetzel	MICHAEL L HETZEL	78 WELLS RD.
Sara Hetzel	SARA HETZEL	78 WELLS RD.
Ulla Messerschmidt	Ulla Messerschmidt	39 Long-fellow Dr.
Joyce D. Lounie	Joyce D. Lounie	189 Spurwink Ave.
Robert R. Fillion	ROBERT FILLION	10 PHILIP RD
Christine	Christine	12 Falter Ave
Susan R. Haltorf	Susan Haltorf	14 Smugglers Cove
Mark Haltorf	Mark Haltorf	14 Smugglers Cove Rd
Jamie Hall	Jamie Hall	3 Hemlock Hill Rd.
Barbara Durgin	BARBARA DURGIN	73 STARBOARD DR
Suzanne VanWye	Suzanne VanWye	49 Wells Rd.
Guy F. Rowe	Guy F. Rowe	5 Broad Cove Rd.
Dorothy H Stack	Dorothy H Stack	24 Brentwood Rd
Wendy Keeler	Wendy Keeler	58 Old Colony Lane
Timothy E. Queeney	Timothy E. Queeney	58 Old Colony Lane
Cornac Morrissey	CORNAC MORRISSEY	72 Wells Ave.



**The Cape Elizabeth Town Council
Workshop Agenda
Monday, March 15, 1999
7:30 p.m.
Cape Elizabeth Town Hall**

- 1. Discussion on petition received on Gun Club activities**
- 2. Review Report from Fort Williams Advisory Commission, "Making Fort Williams Park Financially Self-Sufficient"**
- 3. Update on Town Council Goals**

To: Michael McGovern

From: Debra Lane

Re: Spurwink Rod and Gun Club Response

Date: May 14, 1999

Fred Brown was in yesterday. Fred asked me to give you this message.

The Spurwink Rod and Gun Club(Club) is not interested in participating in a mediation session. The Club has agreed to a log book. The log book, beginning June 1, 1999, will include the date, time(in and out) and number of people. As of January 1, 2000, each member will be assigned a number. The log book will then include the number of the member. Fred will hold the list of names and numbers. I am unclear whether the log book beginning in June will include the names. The Club's desire is to not publish the names in the book.

Fred would like you to contact him if you have any questions.

MARSHVIEW WATERFOWL

Eddie & Arlene Jordan

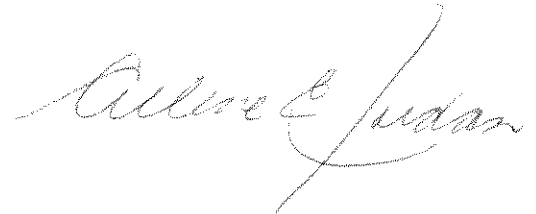
93 WELLS ROAD
CAPE ELIZABETH, ME 04107
(207) 799-7198

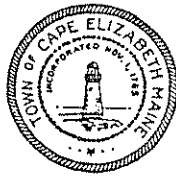
JUNE 2, 1995

TOWN COUNCIL
TOWN MANAGER

DEAR MIKE,
IN REGARDS TO THE ROD & GUN CLUB, STAN & NORMA DOUGHTY AND ED & I WOULD LIKE TO SPEAK IN FAVOR OF THE CLUB. WE HAVE BEEN THIER NEIGHBORS FOR THE LAST THIRTY FIVE YEARS, AND I BELEIVE STAN & NORMA HAVE BEEN SINCE THE CLUB WAS STARTED. THEY HAVE BEEN GOOD NEIGHBORS, NO WILD PARTIES OR UNDESIRABLE BEHAVIOR TAKES PLACE AT THE CLUB. WE WOULD LIKE TO KNOW WHY THESE PEOPLE WHO ARE UPSET WITH THE CLUB, BOUGHT HOMES IN THIS AREA, KNOWING FULL WELL THAT THE CLUB WAS HERE AND WOULD CONTINUE TO BE HERE, AS I AM SURE THEY WERE AWARE THAT IT WAS GRANDFATHERED. WHY THE DO THEY WISH TO CHANGE THE NEIGHBORHOOD THAT THEY CHOSE TO LIVE IN.
IF ANYONE IS TO BE CONCERNED WITH THIER TARGET HOURS, IT SHOULD BE ED & I, AS THIER LAND ABUTS OURS, AND WE RAISE WILD DUCKS & GEESE, AND HAVE FOR THE LAST 32 YEARS, THIS HAS NEVER BEEN A PROBLEM FOR US, OR THE BIRDS THAT WE RAISE. IF IT DOESN'T BOTHER THE WILDLIFE IN THE AREA, EITHER FROM THE NOISE LEVEL OR CONTAMINATION FROM THIER SHELLS, AND DOESN'T BOTHER THE RESIDENTS WHO HAVE LIVED HERE FOR THE LAST TWENTY TO FORTY YEARS, THEN CERTAINLY OUR NEWEST RESIDENTS & TOWN MEMBERS CAN ALSO LIVE WITH IT. PLEASE DON'T OUR NEIGHBORS THIER RIGHTS JUST TO ACCOMADATE PEOPLE MOVING INTO OUR AREA OR FOR THE PROPAOSED DEVELOPEMENTS THAT ARE BEING PLANNED.

WRITTEN FOR
STAN & NORMA DOUGHTY
EDWARD & ARLENE JORDAN





TOWN OF CAPE ELIZABETH

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November 19, 1999

Ellen Mugar
77 Wells Road
Cape Elizabeth, ME 04107

Dear Mrs. Mugar:

Thank you for your recent call to Council Chairman Penelope Carson regarding the Spurwink Rod and Gun Club.

The Town Council discussed your concerns and all agree that Maine Statutes severely limit the authority the Town has over activities at the Club. In the past the Council has encouraged neighbors to have a dialogue with the Club and in recent years they have had a public forum and meeting with representation of the Club.

While the efforts may not have led to the conclusion you may have hoped for, the Town Council does not wish to pursue any additional efforts with the Rod and Gun Club at this time.

The Town also does not have any regulations relating to any potential lead residue from spent armor. You may wish to address these concerns to the Maine Department of Environmental Protection.

The Town will continue to monitor activities at the site to ensure compliance with all applicable laws.

Sincerely yours,

Michael K. McGovern

cc: Town Council