

June 6, 2013

Mr. Andrew Kottkamp Kottkamp & Yedinak P.L.L.C. 435 Orondo Ave. P.O. Box 1667 Wenatchee, WA 98801

RE: SEPA Appeal of Conditional Use Permit

Application of Cascade Field and Stream Club

Dear Mr. Kottkamp:

Enclosed is the original and one copy of Memorandum of Appellant with Respect to SEPA Appeal regarding the above-referenced matter. This correspondence is being delivered via U.S. First Class mail and email.

Thank you.

Very truly yours,

Halverson | Northwest Law Group P.C.

Tori Durand Legal Assistant

**Enclosures** 

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This Memorandum is submitted on behalf of Dean and Danielle Tonseth, David Holmquist and Ken Fyall with regard to the Mitigated Determination of Nonsignificance issued by SEPA Responsible Official dated February 8, 2013. (Exhibit 65).

#### I. Introduction

Cascade Field & Stream ("Applicant") has filed a series of land use applications over the past decade requesting development of approval for a multi-faceted shooting range. While site designs and concepts have changed in minor respects, the basic concept has remained consistent. A critical component of each land use process has been the circulation of notice and provision of comment by adjacent property owners. Appellants have consistently commented on the applications and simply requested as a beginning proposition that there be a clear and concise project description. The recurring response has been that develo9pment will occur in a haphazard pattern as funds are available. The application has been a moving target. Despite the passage of more than eleven (11) years, the application remains a morphus, vague and undefined in terms of specific components, schedules and mitigation.

This is a SEPA appeal. The procedural duties imposed by SEPA – full consideration of environmental impacts – are to the fullest extent possible to be exerci8sed in a manner to ensure that the "attempt to buy the people to shape their future environment by deliberation, not default" will be realized. *Eastlake Community Council v. Roanoke Associates, Inc.*, 82 Wn.2d 475, 490 (1975). Appellants own adjacent properties and are directly and significantly impacted by the proposed shooting range. The appeal presents simple and straight-forward issues: (1) the project should be clearly defined and scheduled; (2) an appropriate professional noise study should be prepared based upon the specific project description; (3) mitigation measures should be specific, clear and objective and set forth within the mitigated determination of nonsignificance (MDNS); (4) mitigation measures and site improvements must be constructed prior to any use or occupancy of the facility; and (5) commenting agencies and the public should be given an opportunity in accordance with regulations to comment upon all submitted materials prior to issuance of a threshold determination.

Environmental information is required prior to decision-making. Appellants request that the threshold determination be reversed and the matter remanded for appropriate analysis and procedural review.

#### II. Appeal Analysis and Argument

#### 2.1 <u>Kittitas County Failed to Follow Required Review Procedures.</u>

Kittitas County provides for administrative appeals of SEPA procedures and threshold determinations. KCC 15.A.04.020. The environmental review process was procedurally defective in the following ways: (1) the lead agency improperly utilized the Optional Determination of Nonsignificance (DNS) process of WAC 197-11-355; and (2) SEPA Responsible Official failed to incorporate a review environmental information and comments with respect to prior iterations of the project proposal.

## (a) Notice of Application and Review Violated Optional Review Procedures of WAC 197-11-355.

Kittitas County has utilized the optional environmental review process established by WAC 197-11-355 (Exhibit 6). This process allows the lead agency to eliminate a second comment period under limited circumstances. *Id.* ("... if this process is used a second comment period will typically not be required when the DNS is issued).<sup>1</sup> DOE has recognized the limited scope of the optional DNS process.

When the GMA city or county is the SEPA lead agency for a proposal and they have completed their environmental review at the time they will issue the NOA, they may chose to use the optional DNS process. It is appropriate to use the optional DNS process when the GMA county/city has enough information at the time it issues the NOA to be reasonably certain that there are no significant impacts associated with the project. The optional DNS process may also be used when mitigation measures have been identified that will reduce all impacts to a nonsignificant level.

As previously discussed, GMA counties and cities may not issue a DNS before the close of the public comment period on a Notice of Application (14-30 days) under RCW 36.70B.110(6) [RCW 36.70B.110]. Although a comment period is not always required on a DNS, when it is required, this restriction results in two separate public comment periods.

A second comment period is required upon issuance of a Determination of Nonsignificance (DNS) or Mitigated Determination of Nonsignificance (MDNS). These procedures are required unless the agency properly utilizes the Optional DNS procedures of WAC 197-11-355.

Local jurisdictions are required to issue a Notice of Application (NOA) with respect to project proposals. RCW 36.70B.110. GMA counties and cities may not issue a DNS before the close of the public comment period on a Notice of Application under RCW 36.70B.110(6). DOE SEPA Handbook § 8.3 provides:

DOE SEPA Handbook § 8.3. There have been two fundamental predicates: (1) there is sufficient information to be reasonably certain there are no significant impacts; and (2) mitigation measures must be specifically identified in the notice. Neither predicate is present in this case.

The public was allowed only one opportunity to comment on the proposal. Appellants provided comment on the basis of the existing record and prior project applications. Specific comments were provided with respect to noise analysis based upon the "Preliminary Noise Measurements of Proposed Cascade Field & Stream Firing Range on Hayward Road" dated November 1, 2003. The comments were supplemented by letter prepared by Jerry G. Lilly, P.E., F.A.S.A. of JGL Acoustics, Inc. Subsequent to the circulation of the initial Notice of Application and closure of the comment period, Cascade Field & Stream submitted significant new information in the form of an additional noise report prepared by Acoustical Engineers. This information was not available to agencies or the public during the comment period. SEPA Responsible Official proceeded to issue a Mitigated Determination of Nonsignificance (MDNS) without further comment and adopted purported mitigation from the supplemental and late report. The procedure followed was erroneous.

## (i) Optional DNS Process is Not Appropriate Where Project Has Potential Significant Environmental Impacts.

WAC 197-11-355(1) allows the use of the optional environmental review process only when the "... lead agency for a proposal ... has a reasonable basis for determining significant adverse environmental impacts are unlikely, ... ." The administrative record at time of the original comment period disclosed significant environmental impacts associated with noise. *Piacsek Report* (Exhibit 2 – Attachment E-1). The report disclosed measured noise impacts in excess of a maximum permissible noise levels under state regulations. WAC 173-60-040. The record also identified significant impacts with regard to lead management, grading and site improvement of processes, ponds and stream corridors within the site, transportation impacts and a variety of additional factors. Kittitas County had, in fact, reviewed the same proposal during earlier application processes and prepared a summary analysis and mitigation for the proposal. (Exhibit 48, Exhibit K) (Attachment B). There was no basis for assuming that "... environmental impacts are unlikely."

## (ii) Kittitas County Failed to "List" Mitigation Measures on Notice of Application.

The lead agency must "... [1]ist in the notice of application the conditions being considered to mitigate environmental impacts, if a mitigated DNS is expected ...." WAC 197-11-355(2)(b). DOE SEPA Handbook § 8.3 specifically provides that the "... optional DNS process may also be used when mitigation measures have been identified that will reduce all impacts to a nonsignificant level." Kittitas County failed to identify any specific mitigation measures. Kittitas County's notice simply stated that it expects "... to issue a Determination of Non-Significance (DNS) for this proposal. The public was provided no information regarding mitigation. The failure to disclose "conditions being considered to mitigate environmental impacts" was compounded with the acceptance of supplemental environmental information directly discussing noise mitigation. Mitigation was not identified until the final threshold decision and the public and commenting agencies were deprived of their statutory right to comment.

## (iii) Kittitas County Accepted Material Environmental Information Following End of Comment Period.

Kittitas County accepted significant environmental information following close of the comment period. The information included the Noxon report which introduced new environmental information (ambient noise tests), and proposed alternative mitigation. (Exhibit 56). The report was filed on November 7, 2012 (Exhibit 55). An agency is required, however, to withdraw any environmental determination if "... [t]here is significant new information indicating, or on, a propsal's probable significant adverse environmental impacts ... ." WAC 197-11-340(3)(a). The purpose of this requirement is logical – agencies and the public provide comment based upon the environmental record available for review during the comment period. WAC 197-11-504. The ability to comment on the supplemental environmental information in this case is significant because it proposes specific mitigation measures designed to address significant noise impacts.

## (b) Kittitas County Failed to Consider and Incorporate Environmental Comments and Materials from Prior Applications.

Cascade Field & Stream had submitted at least four (4) prior applications for development of a shooting range at this specific site. (Exhibit 48). Each of the prior project

proposals were virtually identical to the current application but contained greater and more detailed information regarding proposed project improvements, timing and mitigation measures.<sup>2</sup> Appellants identified specific environmental information to be included in the review process. (Exhibit 48-2-3). None of the prior review and documents were incorporated or included in the current environmental review. The lead agency is required to determine whether "... [a]ll or part of the proposal, alternatives or impacts have been analyzed in a previously prepared environmental document ... " WAC 197-11-330(2)(a). Appellants specifically requested incorporation of the prior comments and materials. Kittitas County ignored this request and proceeded without critical and fundamental information pertaining to environmental impacts of the project.

# 2.2 <u>Application And Project Information Is Incomplete, Insufficient And</u> Contradictory.

An appeal of a threshold determination is based upon the administrative record. The record of a negative threshold determination by a governmental agency must "demonstrate that environmental factors were considered in a manner sufficient to amount to *prima facia* compliance with the procedural requirements of SEPA." *Pease Hill Cmty. Group v. Spokane County*, 62 Wn. App. 800, 810, 816 P.2d 37 (1991); and *Ellensburg Cement Products, Inc. v. Kittitas County*, 171 Wn. App. 691, 712, 287 P.3d 718 (2012). "The determination must be based upon information reasonably sufficient to determine the environmental impact of a proposal." *Id.* 

The administrative record is deficient in the following respects: (1) the application fails to clearly and specifically define the scope and timing of the project proposal; and (2) information contained in the Environmental Checklist is incomplete and insufficient to evaluate potential environmental impacts. SEPA is designed to consider environmental information (impacts, alternatives, and mitigation) before committing to a particular course of action [WAC 197-11-055(2)(c)]; identify and evaluate probable impacts, alternatives and mitigation measures [WAC 197-11-030(2)(b) and (g)]; encourage public involvement in decisions [WAC 197-11-030(2)(f)]; and prepare environmental determinations that are concise, clear and to the point [WAC 197-11-030(2)(c)]. DOE SEPA Handbook § 1.1.

<sup>&</sup>lt;sup>2</sup> Cascade Field & Stream filed applications in 2001, 2002 and 2003. Extensive public comment was provided with respect to each of the applications. A copy of application information from File C-2001-20 was included in comments provided by Appellants. (Exhibit 48-Attachment A). Environmental Checklist is much more specific and complete including information on grading and excavation, proposed uses (including dry camping and overnight stays), landscaping of disturbed areas, bullet backstop areas and best management practice and compliance, lead migration, and similar disclosures.

#### (a) Project Description and Timing is Vague and Unclear.

The beginning point for environmental review is a clear, cogent and understandable project description. Agencies conducting environmental review "... shall make certain that the proposal that is the subject of environmental review is properly defined." WAC 197-11-060(3)(a). "Accurately defining the proposal is key to a successful SEPA process." *DOE SEPA Handbook § 2.3.1.* ("Defining the total proposal involves the identification of all the related and interdependent pieces of the proposal.").

Cascade Field & Stream Club described the project proposal as "... Shooting Range on 182 acre site as per Attachment A with future use as per Attachment B." (Exhibit 2). Attachment A is a topographic depiction of the "existing conditions" on the parcel with no specific site plan. Attachment B contains "possible future ranges" but does not identify any specific development timelines or procedures. The reviewing agencies and commenting public were left to speculate with respect to timing, development and integration of the multifaceted facility. The nature and scope of usage is vague.

Appellants addressed this issue in subsequently-filed comments. (Exhibit 48). Neither agencies nor the public had these clarifications available at time of commenting. Applicant sought to clarify its proposal. (Exhibit 5).

Please review Attachment A to the SEPA Checklist, which is a detailed drawing with elevations depicting the current conditions on the property. Attachment B is a detailed drawing that shows not only the proposed parking areas but also a schematic layout of the property after the property is turned into a shooting range. Attachment B identifies parking areas, different types of shooting ranges and roads on the property.

In addition to Attachment B to the SEPA Checklist, which depicts the location of the ranges and types of ranges, Attachment F to this SEPA Checklist shows Model National Rifle Association drawings for different types of shooting ranges. The Club intends to construct the ranges in conformity with Attachment F.

(Exhibit 55 at 2). Attachment B presents a wide range of facilities and improvements. The problem is that there is no way to determine what is to be built at any given time. The project proposal sets the locations, components and activities that are to be evaluated in the

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environmental review process.<sup>3</sup> No information is provided, however, with regard to timing or integration of project improvements (e.g. parking, roads, ranges, etc.). And the attachment provides no specific information (e.g. berm location, sound baffles, excavation, target pits, lead management, etc.). All that is said is that the ranges will be constructed in accordance with Attachment F. Does this mean that range backstops, side berms, graded roads, concrete shooting slabs, trap houses and other features will all be installed prior to operation? There is simply no way to understand the sequence of phasing of the proposal. Applicant provides the following summary of phased development:

There were several comments related to phasing and how the facility would be used. What the Club proposes is that upon approval it will begin construction of the shooting ranges. It may construct one type of range before it constructs another range. The Club is not proposing to begin using the property as a shooting range for non Club members without constructing any improvements. For instance, it has proposed to construct a law enforcement and small arms range as well as a rifle range, which are depicted on Attachment B to the SEPA Checklist. Those two ranges may be constructed immediately, and if constructed immediately, will be constructed consistent with the schematic drawing depicted on Attachment B. The only portion of Attachment B that indicates a future facility is a storage and meeting facility that may be constructed in the future depending upon need.

(Exhibit 55). Will parking lots, water and sanitary facilities, road access and other features be constructed at the outset and prior to any range construction? What "range specific" improvements will apply to each specific facility? It is simply impossible to understand the scheduling and timing of improvements. And in the absence of a reasonable schedule, it is impossible to identify and implement appropriate mitigation measures.

#### (b) Environmental Checklist is Vague, Incomplete and Inaccurate.

The Environmental Checklist is a standard form used by agencies to obtain information about a proposal. DOE SEPA Handbook § 2.5. SEPA Handbook provides:

<sup>&</sup>lt;sup>3</sup> Applicant has included a Narrative Project Description with its land use application. (Exhibit 2-Exhibit A.) The narrative provides that "... [t]he property will be used in its existing condition with additional ranges and a storage facility being constructed as needed and funds allow." There is a suggestion that the applicant will use

the facility and allow shooting activities without any improvements to the property, i.e. use in "existing condition."

Environmental review normally starts with the completion of an environmental checklist. The checklist provides information to the lead agency about the proposal and its probable environmental impacts. It is the lead agency's responsibility to review the environmental checklist, permit application(s), and any additional information available on a proposal to determine any probable significant adverse impacts and identify potential mitigation. ... Mitigation is the avoidance, minimization, rectification, compensation, reduction, or elimination of adverse impacts.

*Id.* Essential to the review process is a determination that the project is completely and accurately described; interdependent pieces have been identified; necessary permits and licenses have been listed; and the descriptions of the environment are complete and accurate. *Id.* The information contained in the Environmental Checklist submitted by Cascade Field & Stream is so sparse and incomplete that it is virtually impossible to identify, evaluate and comment upon impacts and mitigation.

Deficiencies include, but are not limited to the following:

Checklist A.6. Does not disclose timing or schedule (including phasing) but simply states "... [i]mmediate use of current facility; Add ranges as the need and money allows." No initial improvements or mitigation is proposed.

Checklist A.7. Simply reflects that "... [a]dditional range is similar to Attachment F. Range designs may be added in the future." Those range designs include shooting range definitive drawings prepared by National Rifle Association. Those standards should apply immediately to the project and be constructed prior to any use of the property. The references also inaccurate because "possible future ranges" are identified in Attachment B. No timing or design standards are established for the identified "... possible future ranges."

Checklist B.1(e). Indicates that future ranges may be graded and gravel imported to surface parking areas. EPA Best Management Practices require construction of berms as do guidelines from National Rifle Association. Berm construction will include excavation and grading. Checklist needs to identify locations, quantities of grading proposed for the project.

Checklist fails to document and mitigate impacts on Type 5 stream draining the subject property, Hayward Canyon Creek. The stream is located within the shooting range and presents potential for lead migration to adjacent properties and surface waters.

Checklist 3. Checklist fails to "... [d]escribe the source of runoff (including stormwater) and method of collection and disposal. The insert is only that applicant expects water to seep into the ground and will create stormwater retention areas as required by

applicable law. Site plan includes designated parking areas but provides no analysis of grading or stormwater management with respect to such areas.

It is also indicated that it is "not likely" that waste materials could enter ground or surface waters.

Checklist B.5. Fails to identify impacts on birds and animals. The property is known for wildlife and shooting ranges may impact migration and wildlife environments.

Checklist B.11. Applicant may add lighting in the future. No assessment of light or glare impacts is provided with respect to the potential lighting of the area.

Checklist B.14. Transportation impacts are insufficiently identified and mitigated. The project site is served by Hayward Road from both Highway 10 and Horse Canyon Road. The most efficient access is from Highway 10. Hayward Road is a primitive road that does not meet applicable standards. Kittitas County Fire Protection District No. #1 previously commented that "... the lower portion of Hayward Road (canal to Highway 10) needs to be addressed – i.e. new culverts put in and turnouts established." Department of Public Works require that the roads should be improved to a 24' wide gravel road with sufficient crushed rock added to form an adequate structure and crown; access point to be at 90° angle.

Checklist B.15. Applicant indicates that it is "not likely" to increase needs for public services. This statement is incomplete and inaccurate with respect to prior review and analysis with respect to fire protection. Prior comments regarding fire protection are incorporated by this reference.

In addition to the identified deficiencies, Cascade Field and Stream has failed to include details sufficient to evaluate the project proposal in the following respects: (a) the intended build out schedule and completion of infrastructure improvements; (b) assessment or mitigation of project components (e.g. trap ranges, rifle ranges, law enforcement training areas, meeting facilities, etc.); (c) identification of specific best management practices; and (d) site development standards (meeting facility, access, etc.) and timing.

#### (c) SEPA Requires that Entire Plan be Considered as One Project.

SEPA requires that "... proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document." WAC 197-11-060(3)(b). Even though the project proponent suggests that additional ranges and facilities will be added as "needed" and "as funds are available", environmental review requires specific assessment of each component element of the proposal. Mitigation and assessment needs to be completed at this point in time.

#### 2.3 Noise Analysis and Mitigation is Incomplete and Insufficient.

A significant component in review of any shooting range is noise impacts. The uncontroverted fact is that there is no comprehensive noise analysis or study for the project.

Applicant has simply cobbled together two piecemeal observations containing information randomly obtained over a ten (10) year period. And the reports do not even measure or evaluate the specific proposal (e.g. measurements are not taken from identified range locations and no testing at receiving property boundaries).

Noise "information" was presented in two (2) documents: (1) "Preliminary Noise Measurements for Proposed Cascade Field & Stream Firing Range on Hayward Road" dated November 1, 2003 (Exhibit 2 Attachment E-1-7)<sup>4</sup>; and (2) Supplemental Noise Comments prepared by Arthur M. Noxon, P.E. with respect to the noise study prepared by Dr. Piacsek (2003).<sup>5</sup> (Exhibit 56). Neither analysis is a "noise study". Appellants have provided expert comments on both reports. (Exhibit 48 and attached).

#### (a) Piacsek Noise Report is Preliminary, Incomplete and Ineffective.

Applicant bases its application on an incomplete ten (10) year old report. The report was prepared by Andrew Piacsek dated November 1, 2003. The report was by definition preliminary and limited in scope and nature.

The measurements described above are considered preliminary. Only SPL was measured; the waveform was not reported, nor was

A total of 24 noise readings were taken of the rural environment that is around the shooting range location on Wed. evening and Thur. morning, Oct. 19 and 20, 2005. Each data run lasted at least five minutes. Transient, extra loud noise due to overhead airplanes, trains or vehicles passing by were excluded from the ambience measurements.

(Exhibit 56-12). The sole measurement was of "ambient conditions" and no measurements were made with respect to noise generated from the discharge of firearms.

<sup>&</sup>lt;sup>4</sup> The Preliminary Noise Measurements were prepared by Andrew A. Piacsek, Assistant Professor of Physics, Central Washington University. The report measured sound generation from a single source on two days (September 16 and October 24, 2003). The report included with the land use application did not contain mapping identifying either the sound source location or receiving property locations. That map is included in submissions by appellants (Exhibit 48).

<sup>&</sup>lt;sup>5</sup> Arthur M. Noxon, P.E. submitted his report dated October 15, 2012 (Exhibit 56). The report is purportedly based upon "... an ambient noise study taken on 2005, a survey of gunfire from the shooting range at various distances and directions and a noise impact assessment." The report does not include the background noise study dated October 24, 2010. The reference study included the following comment:

any spectral analysis conducted. Only one or two measurements of a single shot were made at each location, which does not provide sufficient information to characterize the day to day variation in sound level due to environmental changes (especially when) or in the nature and number of sources. This study also does not attempt to provide a long-term characterization of the background noise levels at residential sites within audible range of the source.

(Exhibit 2 Attachment E-5). Piacsek acknowledges report deficiencies and Applicant has taken no steps to correct the deficiencies. Appellants provided expert comment on the original noise report as prepared by JGL Acoustics, Inc., and dated December 13, 2003 (Exhibit 50). Acoustic expert Jerry G. Lilly, P.E., F.A.S.A.<sup>6</sup> identified specific errors, inconsistencies and defects in the report and concluded:

While the report is clear to indicate that the measurements are preliminary, I am concerned that the casual reader will conclude that noise from the proposed facility will have no noise impact on neighboring properties. This conclusion cannot be drawn from the results of this preliminary study. What is needed is a comprehensive noise study to assess the environmental impact of the proposed firing range. The preliminary study did not assess any of the following factors that must be included in the comprehensive noise study.

(Exhibit 50). Lilly then identified specific components of a comprehensive noise study which should include (a) assessment of the noise characteristics of different gun types that would be used at the facility; (b) assessment of the number of gunshots that could occur in any given hour; (c) assessment of existing ambient noise environment; (d) assessment of impacts of varying environmental conditions on the sound propogation from the firing range to nearby residences, particularly humidity, wind and air temperature profiles; and (e) consideration of impacts and mitigation for nearby residential properties. None of these items were specifically addressed in subsequent submittals by the project applicant.

Lilly identified a number of additional considerations in his comments.

<sup>&</sup>lt;sup>6</sup> Jerry G. Lilly is President of JGL Acoustics, Inc. He has a Masters in Engineering Acoustics from Pennsylvania State University; has been an acoustical engineer and consultant for 37 years; and has been an instructor and lecturer on matters associated with acoustical engineering. He is a Fellow in the Acoustical Society of America and served as President of National Council of Acoustical Consultants (1996-1998). (Exhibit 50).

- 1. Lilly and Piacsek agree that the measurement of one or two gunshots at each location is not sufficient to characterize the day-to-day variations and sound level caused by changing environmental conditions. A more complete study and analysis is necessary for determinations regarding acoustic impacts.
- 2. Lilly disagrees with the conclusion that the maximum sound pressure level with an impulse response (time constant of 35 ms) should be used to evaluate compliance with adopted noise standards. Lilly indicates that "... time waiting should not be permitted when dealing with the maximum sound level." The only way to eliminate the time waiting influences is to use the peak detector on the sound level meter. All technical papers regarding gun and firearm noise are evaluated at peak levels, not impulse average values.
- 3. Piacsek incorrectly identifies the receiving property as Class CEDNA. WAC 173-60-030. Receiving property should be classified as Class AEDNA (lands where human beings reside and sleep).
- 4. Piacsek's report establishes violation of applicable noise standards. Table I shows peak sound pressure levels measured at nearby residential properties as high as 81dBA at Location 12 and 79dBA at Location 14.

An appropriate noise study should be prepared by licensed acoustical engineer whose such report containing components specified by Jerry Lilly.

(b) Noxon Supplemental Report is Not a Noise Study and Does Not Contain Substantive Noise Assessment or Information.

Applicant supplemented the incomplete Piacsek report with narrative comments prepared by Arthur M. Noxon, Acoustical Engineer. The report purported to provide an ambient noise assessment together with legal arguments and vague mitigation alternatives. (Exhibit 56). The report was not available to the public during the comment period and SEPA Responsible Official issued a threshold determination without the benefit of agency or public comment. Jerry G. Lilly, P.E., comments are attached.

Lilly's comments include the following:

- Noxon background noise analysis did not have sufficient duration to accurately characterize the acoustic environment. Five minutes is not a sufficient duration to make a reasonable assessment of acoustic environment.
  - Criticisms registered with respect to impulse time responses.

- Disagreement regarding the applicability of WAC 173-060.
- Character of sound is critical to noise analysis. "An 80 dBA gunshot illicits a much different reaction than an 80 dB noise from a passing motorcycle or a note from a musical instrument."
- Noise measurements should be taken at the property line of the receiving property.
- Identifies mischaracterization of receiving property classifications Class A (residential).

Second, Piacsek measured single gunshots from a 30.06 rifle. Applicant's project proposal contains multiple range locations for a wide variety of firearms including two (2) trap ranges, law enforcement and small arms range; multiple distance (100, 200 and 300 yards) rifle range; and long-rifle range. None of these guns were tested from the designated range location. Lilly provides an obvious comment in that "... [a] comprehensive study should evaluate the different characteristics (including peak level, pulse, width, and directivity) of each gun type and factor these results into the analysis." This analysis and information was not made available but would be a part of a normal noise study.

The noise study should also include an assessment of the number of gunshots that could occur in any given hour. SEPA analysis "... should assess the worst-case scenario, not a typical or average hour of the day." Lilly comments (Exhibit 50). The preliminary report made no attempt to assess this very important component of the acoustical environment.

## (c) Applicant's Reports Fail to Contain Required Measurements at Property Boundaries and Test Only a Single Shot Location.

A fundamental beginning proposition is that noise information should be consistent with the design of the proposed project. No measurements were taken from the identified shooting platforms. Appellants own land bordering the west side of the proposed range. No measurements were taken at their property boundary. State of Washington has established maximum permissible noise levels within identified environments. WAC 173-60-010, et seq. The purpose of the regulations is to establish use standards relating to the reception of noise within such environments. *Id.* The basic premise of the regulations is that "... [n]o person shall cause or permit noise to intrude into the property of another person which noise exceeds the maximum permissible noise levels ..." set forth in the regulations. WAC 173-

60-040(1). The proper measurement point is the "property boundary" WAC 173-60-020(11). Applicant failed to provide specific noise measurements or other substantive information with respect to impacts at property boundaries.

#### (d) Ambient Noise Assessment is Incomplete, Insufficient and Deficient.

Piacsek did not include an assessment of the existing ambient noise environment. (Exhibit 50). Lilly commented with respect to ambient noise assessment as follows:

A comprehensive study should include continuous ambient noise monitoring at nearby residences over several days (with no shooting at the fire range) to develop the true ambient noise statistics in the area.

(Exhibit 50). Noxon purported to measure ambient noise conditions. (Exhibit 56). Testing was done on October 19, (evening) and 20 (morning), 2005. The datarun lasted only five (5) minutes. (Exhibit 56-Appendix Section 2). The receiving locations are identified in the report. The report was insufficient to properly characterize the environment.

## 2.4 Best Management Practices – Lead at Outdoor Shooting Ranges/NRA Range Sourcebook.

KCC 17.08.485 requires a "detailed site plan" establishing adherence to the practices and recommendations of (1) the "EPA Best Management Practices for Lead at Outdoor Shooting Ranges ("EPA BMP") and (2) NRA Range Sourcebook. Applicant has failed to provide a "detailed site plan" which identifies the location of berms and other procedures for management of lead on the site. Mitigated Determination of Nonsignificance (MDNS) simply provides:

The U.S. Environmental Protection Agency's Best Management Practices for Lead at Outdoor Shooting Range's manual shall be strictly adhered to.

(Exhibit 59). MDNS does not specifically identify or articulate the specific standards: *SEPA Handbook* requires that "... mitigation must be included as permit conditions to be enforceable." *SEPA Handbook* § 6.

1. Best Management Practices require development and construction of bullet and shot containment facilities. This is step 1 in the EPA BMPs. Applicant does not identify or propose to construct specific containment facilities. The most common bullet containment system at rifle and pistol ranges is earthen backstop (earth and material, i.e., sand, soil, etc.)

which is located directly behind the targets. (EPA BMP 3.1). The earth and backstop should be between 15 and 20 feet high with a recommended slope as steep as possible. EPA BMP 3.1.1. Sand traps, steel traps, lamella and rubber granule traps and shock absorbing concrete are alternatives. Applicants failed to identify or describe required bullet and shot containment areas. Design alternatives are also to be considered to address shot containment. EPA BMP 3.1.2. It should also be noted that construction of berms would necessarily require significant excavation which triggers additional environmental review and grading permit requirements.

- 2. EPA BMPs require monitoring and measures designed to prevent lead migration. EPA BMP Step 2. Mitigation to prevent lead migration includes monitoring and adjusting soil pH, immobilizing lead and controlling runoff. EPA BMP 3.2.2. Soil analysis is required to establish effective mitigation measures that provides for adjustment of soil pH and phosphates. Applicant's SEPA Checklist fails to include the required soil testing and information. No specific mitigation measures are identified. EPA BMP 3.2.1.
- 3. EPA BMPs provide direction with respect to controlling soil erosion and surface water runoff. A Type 5 stream is located within the shooting area but no information or mitigation is provided with respect to project design and mitigation. Filter beds, containment traps, detention ponds, dams and dykes are required to address surface water runoff from the target range. Applicant has provided no information or proposals with respect to management of surface water runoff and control of such runoff.
- 4. The most important BMP for lead management is lead reclamation (lead removal and recycling). EPA BMP 3.3. Applicant indicates that it will "... plan a lead reclamation project ... ." Neither the project nor mitigation measures are identified in the materials and no factual basis exists to appropriately condition project design, development and operation. Reclamation activities usually require that the area be clear of scrub vegetation (grass, mulch, or compost). EPA BMP 3.3.4.
- 5. BMPs require provision of specific information including number of rounds fired, soil pH, annual precipitation, soil type, depth to ground water and surface water assessment. None of the essential information has been provided for review. This information is also required in order to complete environmental review of project impacts. It is clearly recognized that lead presents a significant adverse impact.

The National Rifle Association Range Source Book recommends that berms and baffles be constructed as necessary safety measures. Moreover, the backstop area for ranges, if natural soil is to be used, needs to be "free of rocks and debris to a depth of 18-24 inches." Section 2.04.1.5. The Source Book goes on to say "in rocky soils, when the face of a hillside

is cut to provide a better angle, the cut must be over-excavated and clean fill placed in the cavity to provide an impact area free of any material large enough to create ricochets."

It recommends that berms be constructed eight feet high.

The Source Book recommends, for high-powered rifle ranges, that a target pit be constructed. These recommendations must be viewed in the light of the NRA's information that maximum ranges for center fire rifle cartridges range from 2,100 yards for a .22 Hornet to as much as 6,000 yards for the .338 Winchester Magnum and that maximum calculated ranges for pistol ammunition are, with one exception, over 1,500 yards, and can be as far as 2,500 yards.

The application fails to disclose the total area to be excavated for berms and backstops. It fails to state the total area to be used by the assortment of shooting ranges alluded to. Since all shrub vegetation will have to be cleared from firing range areas, there will be substantial habitat destruction involved in constructing this project. There is no description of whether that habitat currently serves as important feeding or nesting habitat for birds and other wildlife. No assessment has been done of the habitat to be destroyed from the standpoint of the presence of rare and important plans and plan communities.

#### III. Conclusion

SEPA appeal should be granted and environmental review remanded for (1) preparation of a full noise study; (2) complete description of proposal and phasing; (3) full and complete Checklist responses; (4) accurate and complete identification and description of mitigation measures; and (5) recirculation of MDNS for public comment.

RESPECTFULLY SUBMITTED this 6<sup>th</sup> day of June, 2013.

Halverson Northwest Law Group P.C.

ames C. Carmody, WSBA #520

#### CERTIFICATE OF SERVICE

I, Tori Durand, hereby certify under penalty of perjury under the laws of the State of Washington that the following is true and correct:

I am the legal assistant to James C. Carmody, attorney for Appellants, and am competent to be a witness hercin.

On the  $6^{th}$  day of June, 2013, I caused to be served via the method indicated below, a copy of the following documents:

Memorandum of Appellant with Respect to SEPA Appeal

#### And a copy this Certificate of Service to:

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DATED this 6<sup>th</sup> day of June, 2013.

Halverson Northwest Law Group P.C

Tori Durand Legal Assistant

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Memorandum of Appellant with Respect to SEPA Appeal - 17

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Phone: (425) 649-9344

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June 3, 2013

Dean Tonseth c/o The Farm 16532 Hwy. 10 Ellensburg, WA 98926

Subject:

Cascade Field & Stream Noise Study

Ladies and Gentlemen:

I have reviewed the 10/15/12 report from Art Noxon, and I offer the following comments:

- 1. The background noise study conducted by Arthur Noxon in 2005 did not have sufficient duration to accurately characterize the acoustic environment. Five minutes is not a sufficient duration to make any reasonable assessment of the acoustic environment. Fewer carefully chosen locations and much longer durations (at least 24 hours) could have provided the necessary information. This study could still be done, but now it might take more than a few days to properly characterize the environment with the wind turbines in the area.
- 2. My 2003 report was critical of the use of the impulse time response, not the peak time response. Dr. Piacsek' report tabulated both at some locations. For example, at the Pearson residence he measured 81 dB (peak) and 66 dB (impulse). In this case the difference is 15 dB. Note that the 81 dB value represents a violation of WAC 173-060 for a residential receiving property.
- 3. Art Noxon's statement regarding the applicability of the WAC 173-060 is confusing. I'm not sure of his point. As I read the WAC, the exemption for shooting ranges applies to existing approved facilities. It appears to me that if this facility becomes approved, then it would not have to comply with the noise ordinance during daytime hours (7 AM to 10 PM). In that case there would be no limit to the amount of noise that would be generated by the gun range.
- 4. It appears that Mr. Noxon is not concerned about the audibility of gunfire at distant properties and the psychological responses that it can generate. The noise ordinance deals only with the level of the sound, but the character of the sound is also critically important. An 80 dBA gunshot elicits a much different reaction than an 80 dB noise

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from a passing motorcycle or a note from a musical instrument. This should be taken into consideration.

- 5. It appears (see bottom of page 5) that Mr. Noxon does not feel that residential property should have to meet the noise ordinance at the property line when the house has a significant setback from that line. This is simply not the case. If a homeowner wants to achieve a quieter environment at his home he may need to buy more property to give him space to create the buffer zone that he needs. The noise ordinance must be met at all locations on the receiving property, including at the property line.
- 6. If you do a word search for "impulse" or "impulsive" in WAC 173-060 you will find no such words in the noise ordinance. The WAC simply ignores the issue of time constants when measuring noise levels. As a result, the peak noise level must also comply with the noise ordinance.
- 7. If the shooting range is Class B (recreational) and the receiver is Class A (residential), then the maximum allowable noise level is 57 + 15 = 72 dBA. This is clearly exceeded by gunshots in the Piacsek report.
- 8. It appears that only one type of gun has been tested at this site. Clearly a wider range of guns should be evaluated before a decision on mitigation is made. I do not disagree that a maximum noise level of 5 dBA above the background noise level is probably a good criterion. However, I don't think that we have a good idea of what the existing background noise level is at the nearby residences on a day without the wind turbines running. A 5 minute measurement at a time when the weather conditions were not reported is not sufficient.

In summary, a more complete assessment of the noise generated by different types of guns is needed, along with an ambient noise study that documents the background (L90) noise level at the nearby residences when the wind is not blowing.

If you have any questions regarding this matter, do not hesitate to give me a call.

Very truly yours, JGL Acoustics, Inc,

Den G Filly

Jerry G. Lilly, P.E., President, FASA Member INCE, ASTM, NCAC