



Office of
Communities

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File: A220817

Mr Sam Haddad
Director-General
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001


Dear Mr Haddad

**Re: Southern Highlands Regional Shooting Complex, Wattle Ridge
Road, Hill Top - Section 75W modification application regarding
noise limit and related matters**

I refer to the Section 75W modification application lodged by Sport and Recreation on 13 May 2011 seeking to vary conditions of approval A9, A6 and D4 arising from the determination of major project MP06-0232 issued on 1 March 2010.

The application was placed on public exhibition. Copies of submissions received were downloaded from the Department's website and reviewed by Sport and Recreation.

The modification application was initiated in order to establish clarity around the noise limit applying to the site, the method by which the noise measurements are analysed and related matters. In the current approval the noise limit is expressed as 75dB (L) peak hold when measured at the designated closest residential boundary location. The limit applied to all ranges, including the existing 800m range.

Following a review of the submissions received during the exhibition period, the following advice is provided.

Condition of Approval A9 - request to adjust noise level and related matters.

The arithmetic average methodology to analyse noise results should be adopted. The logarithmic average methodology put forward 13 May 2011 will not be used. This is consistent with submissions made by the Office of Environment and Heritage (OEH) and your Department.

A detailed analysis of noise measurement data indicates a noise limit of 80dB (L) peak hold analysed as an arithmetic average measure would be the appropriate limit for the 800m range and would reflect the existing approved operations.

Condition A9 should be amended in the following terms:

The noise from firearms on the existing 800 metre range or use of the site must not exceed 80dB (L) peak hold at the boundary to any existing private property with a residential dwelling, or where this is more than 30 metres from a dwelling, at the most affected location within 30 metres of the dwelling or an equivalent position when access to the private property is not available. The assessment will apply an arithmetic average measure and is to occur under still wind or light wind conditions so as to avoid the sound level meters recording wind rather than noise from the ranges.

The noise from firearms on the future ranges or use of the site must not exceed 75dB (L) peak hold at the boundary to any existing private property with a residential dwelling, or where this is more than 30 metres from a dwelling, at the most affected location within 30 metres of the dwelling or an equivalent position when access to the private property is not available. The assessment will apply an arithmetic average measure and is to occur under still wind or light wind conditions so as to avoid the sound level meters recording wind rather than noise from the ranges.

The condition should also include more specific information on the noise measurement locations. The measuring location on the west of the range should be more closely located to the nearest dwelling (at the point where public access is available being the western side of the dirt road opposite the bushwalker's car park). The measuring locations are shown in the table below.

Location	Latitude	Longitude	Description
A1	34°20'48.39"S	150°27'44.98"E	SW cul-de-sac of Rock Water Holes Road
A2	34°20'33.50"S	150°28'1.29"E	Northern end of Rock Water Holes Road at end of bitumen
B2	34°20'35.35"S	150°27'50.38"E	Western end of starlight crescent
A4A	34°17'50.49"S	150°25'44.02"E	Opposite car park entrance adjacent to rural property boundary

Condition of Approval A6 - request to increase from 7 to 30 days the period to publish noise compliance test results.

It is requested that the condition be varied to specify the number of hours that testing is required to be performed. Based on advice from OEH, a minimum of 50 shots should be monitored over a half hour period. Monitoring would occur on a maximum of two hours per session on each occasion that testing is required. Two hours would apply if noise tests were taken at the four agreed measuring points sequentially. Alternatively, half an hour of testing would occur if measurements were required at each of the points simultaneously.

The preference is to undertake measurements at each of the measuring points simultaneously over a half hour period. If the foregoing were agreed the condition could be amended to require completion and lodging of the results of noise monitoring within fourteen days.

Condition of Approval D4 - request to delete requirement to construct an acoustic shelter over the 800m firing point.

A quantity survey estimate has been obtained and the order of costs to design and construct the shelter is \$330,000. The majority use of this range (86%) occurs at the 100-400m firing positions. Therefore, the overall noise abatement affect of any new shelter would be very limited, occurring on those days only when the 800m firing position was in use. That would occur between 6-8 weeks, depending on the event schedule operating.

In terms of the expenditure of public monies it is difficult to sustain costs for the erection of an acoustic shelter over one only of eight firing positions.

Public submissions included suggestions for a portable acoustic shelter to be moved along the eight firing mounds and an earth mound constructed along the eastern side of the 800m range. It is not feasible to construct a portable acoustic shelter of sufficient acoustic abatement dynamics that could be moved up and down the firing lines.

Construction of an earth mound the full length of the eastern side of the 800m range at sufficient height to provide noise abatement with intervening entry/exit points at each of the eight firing mounds would be a prohibitive cost.

It is requested that the requirement to construct an acoustic shelter be deleted.

I also refer to the Department letter of 16 August 2011 requesting specific information relevant to the application. These matters are set out below.

Issue a) - Confirm that the loudest rifles identified in the noise testing/monitoring (which appear to be the .308, .303 and .233 calibre rifles) reflects the loudest firearms licensed to use the range. Military rifles to be used on the range should also be confirmed.

Response: This matter has been examined in detail with the licensee of the site. S&R is advised that firearm calibres above .308 have been tested. These include .357 pistol; .358 rifle; .41 rifle, .44 black powder pistol; .54 black powder rifle and 12, 16 and 20 gauge shotguns.

The known noisiest firearm used on the 800m range is the .308 Winchester. Higher rated calibre firearms permitted under the range approval have been included in noise testing and are not as loud when measured at the closest residential boundary measuring points than the .308.

Military use is governed by a Range User Agreement with the RMC (Range Management Committee) that restricts firearm use to that applying to civilian users. The .308 Winchester sniper rifle is the preferred firearm used by the ADF.

Issue b) - The Environmental Noise Control Manual (ENCM) guidelines state that existing ranges should incorporate a movement towards the future range use where possible. Given the increase in use of the range as a result of the project approval for the shooting complex, the future range criteria should apply to the 800m range.

Response – S&R believe the 800m range has existing use status. The range was in place and operational when the original application to develop future ranges adjacent to the 800metre range was prepared and approved by consent authorities.

The 800m range involved a relocation of the existing Welby Rifle Range due to the Mittagong by-pass road to the present site. It is similar to the Liverpool Rifle Club relocation in 1991 due to the proposed Badgerys Creek Airport. The then SPCC (State Pollution Control Commission) classified the relocated range as an existing range.

The range is referred to as an existing range in both the development application and approval documents. Condition of approval A1 details that the project approval provides for retention of the existing 800m rifle range. Further, condition of approval A6 specifies use of the existing 800m range.

The consent conditions have imposed restrictions on use of the existing range and that action is consistent with the planning principle of applying consent conditions on exiting uses. The status and description of the range as an existing facility is not changed by the imposition of conditions of consent on the use of the range.

The 800m range retains its shooting configuration being one target location (stopbutt) and seven different firing mounds/distances.

Clubs using the 800m range have not changed since October 1988, with members of the Southern Highlands Rifle Club, Kiama-Albion Park Rifle Club, Illawarra Regional Shooting Association, Illawarra Service Rifle Club and the SSAA (Illawarra Branch) being users. Club member participation levels have also remained constant, given the limited access each club has had to the range (Saturday/Sunday use) and limited range use at any one time.

Two of the five rifle clubs; Illawarra Regional Shooting Association and the SSAA – Illawarra Branch will relocate to the 500m range. The practical benefit to the three remaining clubs (Southern Highlands Rifle Club, Kiama-Albion Park Rifle Club and the Illawarra Service Rifle Club) is improved access to the range, not an increase in use of that range. Use of the range will continue as present with shooting disciplines over the 100m – 800m firing positions.

Reference is made in submissions received to the change in firearm and event approvals for the 800m range with effect from August 2007 (Range Approval 409605460). S&R have researched this issue. The additional firearms/events included in the Range Approval are pistol disciplines (air pistols, black powder pistols, rim fire pistols, centre fire pistols). Pistol events are typically held over 10m, 25m and 50m distances and have not been held on the 800m range (although were used in compliance testing). Air rifles are used but have negligible noise emissions as projectiles are propelled through compressed air or other gases (NB. The Chapter 164 guideline specifically excludes air rifles and pistols from the assessment).

It has been clarified with the relevant Range Inspector in August 2011 that he included these pistol firearms/events for a rifle range in the knowledge that the Phoenix Pistol Club faced the prospect of eviction from the Scheyville National Park range. His view was that the bigbore range template was safe to be used by pistol shooters. However, no pistol club has moved to the Hill Top site.

Sport and Recreation do not believe that anything of significance has occurred at the 800m range that would constitute alterations to the range captured by the ENCM guideline.

Therefore, S&R submit that the 800m range is entitled to be categorised as an existing range'.

Issue c) - Based on the ENCM guidelines for future range use, if the maximum noise level for the 800m range is to be an average 85dB (Lin) peak hold, the use of the range should be limited to 2 days per week. A justification would therefore need to be provided for use of the range for up to 4 days a week at this noise level.

Response - Refer to the response to issue b) above regarding retention of the existing range status for the 800m range.

On the basis that recent noise monitoring of the 800m range recorded levels at 82dB(L) peak hold from certain firing positions, S&R believe that future use of the 800m range can proceed with a noise limit expressed and applied as 80dB (L) peak hold under an arithmetic average protocol. If the existing range classification is maintained then the current use up to four days per week should be confirmed.

The RMC have confirmed that a restriction on the use of the existing range would affect the viability of the facility. The capacity to run multi day competitions, use by the defence forces and capacity to undertake mid week competitions and practice by the clubs would be affected. The capacity to raise fees to maintain the site would also be adversely affected.

NSW 2021 – A Plan to Make NSW Number One includes as a goal "Make it easier for people to be involved in their communities". Maintenance and utilisation of existing facilities is a key element in improving participation in sport.

Issue d) - The ENCM guidelines for shooting ranges state that an arithmetic average for noise levels should be used. A more detailed explanation on why logarithmic averaging is appropriate should be provided.

Response: It is agreed that arithmetic average can be adopted.

A summary of submissions received and comments by S&R is forwarded for consideration in the attached document which also contains the history of NSW Firearms Registry approvals for the range and a survey of how clubs utilise the range.

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A report from The Acoustic Group (TAG) is also forwarded for review. TAG is a consulting firm with expertise in the specific area of noise measurement at shooting venues. Their report provides comments on the submission received by Renzo Toni and Associates, the acoustic consultants retained by the local resident action group.

The material is now forwarded to assist your Department to finalise the modification application.

Yours sincerely

A handwritten signature in dark ink, appearing to be 'Carol Mills', with a long horizontal stroke extending to the right.

Carol Mills
Chief Executive Officer

23 NOV 2011

Attach: Summary of submissions with comment
TAG Report