

Objection to Southern Highlands Shooting Complex Project Application

**Prepared for
Hill Top Residents Action Group**

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EXECUTIVE SUMMARY

This submission has been prepared on behalf of the Hill Top Resident Action Group (HTRAG) by a panel of experts engaged by the HTRAG to review the *Southern Highlands Regional Shooting Complex Environmental Assessment* (EA) dated February 2008 prepared by GHD Pty Ltd for the proponent, the NSW Sport and Recreation.

The project application should be refused for the following reasons:

1. Approval is Beyond Power

In accordance with Clause 80 of the Regulation, our client has not cited evidence that the project is not the subject of an authorisation or requirement under section 75M of the Act to apply for approval of a concept plan, and is prohibited by an environmental planning instrument. Clause 80A does not apply because the provisions contained in Clause 80 were not introduced before the environmental assessment requirements were prepared in August 2007.

2. Procedural Anomalies

The project application was not made in accordance with the procedures set down in the EP&A Act and there is no evidence that the owner of the land was notified of the application before it was made.

Furthermore it is considered that there has not been full and proper consultation with the public which is only possible if the EA contains all relevant information on which to make an informed decision (discussed below). There is no evidence of the outcomes of consultation with key government agencies such as the Sydney Catchment Authority and the submission from the NSW Police has not been implemented.

3. Significant Methodological Deficiencies and Inadequacies

The HTRAG panel of environmental experts considers that the information collected on the existing environment and the analysis undertaken are deficient and do not enable the impacts of the proposed development to be properly identified, measured and considered. Thus no reasonable person would be in a position to approve the application based on the available information and assessment. Key inadequacies are:

- The impacts of the project are assessed in most cases against the base case of the existing operation. The existing operation is not being undertaken in accordance with the terms of its consent and is arguably illegal. Existing use is more intense than that approved and for different uses. The project should be assessed against a base case of no existing operation. This is discussed in the submissions by Planning Workshop Australia to the exhibition of an application to modify the existing consent on the site (Appendix 7).
- In relation to the assessment of impacts on **flora**, the EA is flawed in that:

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- area of investigation is restricted to proposed clearing rather than the area of impact (such as asset protection works to prevent the spread of wildfire to other properties);
- it relies on old data sources;
- it is based on limited and inadequate sampling effort (5.5 hours for searches of threatened plant species);
- the limited data recorded in quadrats (lower number of species recorded per 0.04 ha than expected is indicative of limited extent of survey and investigation);
- insufficient quadrat sampling with only 47% of species recorded in the four quadrats;
- no comparison with Final Determinations or community descriptions in DECC (2004);
- no assessment of significance addressing the factors of assessment in the 7 part test or DECC guidelines for Part 3A assessments;
- no adequate mitigation measures are identified;
- no details of the vegetation in the areas proposed as offsets. The offset sites may be already highly flora constrained with little or no future development potential.

The EA does not adequately address the Director General's Environmental Assessment Requirements for the project in that the EA:

- does not adequately demonstrated that the proposed clearing of vegetation will not have a significant effect on any threatened species, populations or ecological communities, or their habitats, communities or populations;
 - does not clearly state whether it meets each of the key thresholds identified in Step 5 of the draft Guidelines;
 - does not adequately described the actions that will be taken to avoid / mitigate impacts or compensate for unavoidable impacts of the project on threatened species and their habitats;
 - there has been no consultation with the Commonwealth Department of Environment and Water Resources to confirm whether the proposal is a controlled action under the Environmental Protection and Biodiversity Conservation Act 1999.
- In relation to the assessment of impacts on **fauna**, the EA is flawed in that:
 - The fauna assessment is grossly inadequate as it is based on an inadequately performed fauna habitat assessment, with rudimentary fauna surveys which are not in accordance with the Draft Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities [Department of Environment & Climate Change (DECC), 2005];

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- There have been no systematic surveys for threatened amphibians, reptiles, ground-dwelling mammals or bats, listed under the schedules of the NSW Threatened Species Conservation Act, 1995 (TSC) and Commonwealth Environment Protection and Biodiversity Act, 1999 (EPBC Act) despite these species occurring in the locality and the authors recognition that they are likely to occur in the study area;
 - Survey efforts associated with targeted nocturnal surveys for Yellow-bellied Gliders and threatened owl species are inadequate and do not meet the minimum survey efforts that are recommended in DECC (2005);
 - Only 20 fauna species were recorded in the study, all of them except the Yellow-bellied Glider, were listed as incidental sightings. Such a list is useless in assessing the value of the subject site as habitat for native fauna. Sites (such as this one) which contain threatened fauna species, are usually rich and diverse in fauna species;
 - Hollow-bearing trees have only been mapped in less than 7% of the area that has been proposed for habitat clearance;
 - Key data for the SEPP-44 (Koala Habitat) Assessment are not presented in the report. The authors say that the study area is not Potential Koala Habitat under SEPP-44. However, there is evidence of Koalas on the site;
 - No seven-part tests of significance for Threatened NSW Fauna species (under the EP&A Act) have been conducted;
 - The authors have only considered the areas to be cleared (16 ha) when assessing the impacts of habitat clearance and modification on the status of fauna species and their habitats for the establishment of an Asset Protection Zone (APZ) for bushfire management purposes or security fencing;
 - There has been no assessment of the impacts of the proposed development on migratory species listed under the schedules of the EPBC Act and regionally-significant fauna species;
 - It is a requirement for the applicants to seek approval from the Commonwealth Minister for the Environment, for their proposal, which has not been done. It is not correct for the authors to claim in the report that such a referral to the Commonwealth is not required;
 - The study area is near the Blue Mountains World Heritage Area. It is very likely that native fauna (e.g. bird species, bats, and arboreal and ground-dwelling mammals) move between the Blue Mountains World Heritage Area and the study area. The authors of the report have not assessed the impacts of the proposal on world heritage properties, a requirement under the EPBC Act.
- In relation to the assessment of **acoustic impacts**, the EA is flawed in that:
 - The assessment has been limited to ECNM construction and shooting range guidelines, which are no longer endorsed by the NSW DECC.

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- Consideration has not been given to other relevant shooting range guidelines;
- Monitoring of background noise is considered acceptable;
 - The presented distances from site to the nominated measurement locations are incorrect;
 - Operator-attended measurements of gunshot noise in surrounding receiver areas lack consistency, which raises the question of their validity in any assessment;
 - No site meteorological data is provided to describe the prevailing wind and temperature inversion conditions to be used in any assessment;
 - No specific noise mitigation measures have been recommended.
- In relation to the assessment of **traffic impacts**, the EA is flawed in that:
 - The assessment undertaken lacks independence and sufficient detail of the variable use of the complex in terms of traffic generation forecasts and peak period parking demands during peak events and the range of weekday and weekend day use during an entire year;
 - Insufficient assessment has been undertaken of the traffic generation effects on the main access route provided by Wattle Ridge Road, as well as through the township of Hill Top;
 - Given the current condition of Wattle Ridge Road, an independent road safety audit of this road is necessary that outlines current deficiencies and hazards that need correction prior to permitting increased traffic flows;
 - The full range of the types of vehicles that will use the shooting range needs to be outlined;
 - Construction vehicle access effects and traffic management plans for both the construction and operational stages of the development need to be outlined in detail;
 - The statement by the applicant's consultant that Wattle Ridge Road does not need any upgrade fails to acknowledge current conditions and hazards along the route;
 - No assessment of seasonal variations in traffic;
 - No assessment of night time impacts;
 - No assessment of parking demand on weekdays and weekend days, nor seasonal variations in that demand;
 - No justification statement with regard to the non compliance of existing consent conditions, particularly in relation to the sealing of access road.
 - No justification of the 200m separation within access roads for passing bay provision;
 - No assessment of the ability of large trucks / Fire Brigade appliance vehicles ability to access the site;

- No assessment of the proportion of additional traffic generated that are unfamiliar with access roads to the site. No accident rate assessment compared against relevant road standard that exists.
- In relation to the assessment of **bushfire impacts**, the EA is flawed in that:
 - The bushfire assessment states that the NSW Rural Service guideline entitled Planning for Bush Fire Protection 2006 (PBP) does not apply to the proposed ranges. In fact the guidelines do apply and should have been considered;
 - No measures are identified or assessed to mitigate the escape of wildfire off the site onto adjoining lands from sources associated with the use of the facility;
 - No management strategies have been provided which would enable ignitions to be controlled within the capability of the NSW Rural Fire Service. No wildfire protection or asset protection is proposed other than for the clubhouse;
 - the bushfire assessment does not take into account the potential for ignitions to occur due to ricochets from rock formations, targets etc;
 - The bushfire assessment does not take into account the adequacy of Wattle Ridge Road to provide satisfactory access to, and egress from, the site in the event of a bushfire emergency;
 - the assessment does not take account the lack of all utility service such as electricity, water and communications to assist in the fire fighting effort;
 - the assessment does not identify evacuation measures/strategies to be implemented in a bushfire event.
- In relation to the assessment of **contamination and water quality impacts**, the EA is flawed in that:
 - soil and sediment sampling density (spatially, laterally and to depth) does not comply with AS4482.1 (2005) or similar;
 - 'background' locations were not assessed;
 - water sampling during run-off events in the ephemeral streams about the site has **not** been undertaken;
 - a risk-based approach has not been considered, including identification of potential receptors and receptor pathways;
 - the soil, sediment and water analytical suite does not include other chemicals of potential concern (CoPC) such as polycyclic aromatic hydrocarbons (PAHs) associated with coal tar pitch in clay pigeon targets;
 - the analytical suite does not include additional soil data requirements to allow solubility and bioavailability;
 - leach testing has not considered methodologies to assess potential impacts on human health or plant ecology;

- lead (and other heavy metal) analysis did not consider concentrations in varying soil particle size ranges to assess ingestion potential;
- the lack of recommendation for further, more detailed, assessment of the potential for lead (in particular but not exclusively) impacts on potential receptors and beneficial uses (primarily the ecosystem including flora and fauna and human health);
- The EA does not include the results of any discussions with the Sydney Catchment Authority;
- A neutral or beneficial effect analysis as referred to in Drinking Water Catchments Regional Environmental Plan No 1 has not been undertaken.
- In relation to the assessment of **social impacts**, the EA is flawed in that the EA has not adequately addressed:
 - impacts on the safety and security of the community of Hill Top;
 - impacts on the future growth of Hill Top;
 - impacts related to the stigma of being known as a rifle range town; and
 - impacts on local property values.

There are key deficiencies with the data sets collected and used as the basis for assessment, the methodologies employed and the impacts measures and assessed. The information collected on the existing environment and the analysis undertaken do not enable the impacts of the proposed development to be properly identified, measured and considered.

4. Insufficient Description of the Development

- Plans Lack Sufficient Detail:
 - no plans of the clubhouse, indoor pistol range or other buildings;
 - no indication given on the drawings of fuel storage area for the generator or fire protection measures;
 - no plans of the access road, lighting or other utility services.
- Insufficient Operations Details:
 - no details are provided of the operations of the facility in terms of staffing numbers and qualifications (including staff who will be there at all shooting times);
 - security staff or management arrangements;
 - No arrangement is made for bus parking or for bus transport to the facility. This is highly likely to be required to provide access to larger groups who would use the facilities such as the pistol ranges.
- Inadequate Consideration of Capacity
 - The capacity of the facility is not clearly stated. The development proposes a total of at least 220 firing points. If the average shoot is half a

day, then the predicted average weekend use would reach only about 30% of the available capacity. The capacity of the facility in terms of firing points will increase by 1000% over the current range. It is considered that the EA underestimates the utilisation of the facility and thus the impacts.

- Impact assessment should be based on the capacity of the facility.
- Inadequate Controls over Major Events
 - EA proposes that major shooting events and gun shows to be staged at the facility are exempt development without the need for further approval. This is unacceptable.

5. Inadequate Consideration of Alternatives

- Consideration of alternatives as required by EA has been pre-empted by the decision of the NSW Government to locate the facility at this site with the gazettal of the National Parks and Wildlife (Adjustment of Areas) Act 2006 which excised from the State Conservation Area;
- The consideration of alternatives is limited and does not justify the why 1,000 hectares of State Conservation Area adjoining a site listed on the World Heritage Register and available for use by the public of New South Wales was excised and handed over for the use of a few;
- There is no reference to a site selection process or referenced to any recognised site selection criteria;
- There is no assessment of whether this site meets any recognised site selection criteria for the location of a regional shooting complex;
- No serious consideration has been given to alternatives, including alternatives closer to the main population base for the clubs whose shooting activities will be based at the facility – being Wollongong and the Illawarra.

6. Inadequate Assessment of Range Danger Areas

- The range danger area for the proposed new use of the existing range has not been determined on the same basis as the other proposed ranges;
- Were the same template used the range danger area for the existing range would not be contained within the site boundary. This indicates that the site is unsuitable and that occupants of adjoining lands (including bushwalkers and Energy Australia staff maintaining the transmission lines) and assets (such as the transmission lines) would be placed at risk.

7. No Assessment of Compliance of Existing Range with Current Design Standards

- The EA contains no assessment of the extent to which the existing 800m range complies with current design and operational standards in terms of factors such as stop-but design range danger areas and other key safety elements.

8. Inadequate Security Arrangements

- The only request of the NSW Police Service for a fences around the property has been rejected;
- The inability to provide adequate security to meet the requirements of the NSW Police is a major inadequacy of the project and is indicative that the site is simply not suitable for the proposed facility.

9. Inadequate Provision of Utilities and Lighting

- The site has no utility services available. A regional sport and recreation facility would be expected to be located at a site that had these basic utility services available. The lack of such facilities hinders the effective and safe operation of the facility and limits the ability to respond to emergencies.
- The lack of utility services indicates that the site is not suitable for the proposed use.

10. No Hazard Risk Assessment

- A comprehensive hazard risk assessment should be undertaken by a recognised expert in accordance with accepted hazard risk methodologies.

11. Site is Inadequate

- Site does not meet key locational criteria listed in the NSW Police *Range Users Guide*;
- it is located within the catchment of Sydney's water supply and the existing and potential impacts of the range on water quality and contamination has not been fully assessed;
- there are no utility services available to the site;
- the site adjoins a world heritage listed National Park system;
- the site is in an area frequented by bushwalkers and others accessing the national park for recreational purposes;
- the site is close to an existing small township and the facility will have a significant detrimental impact on the image of the town and the lifestyle of the residents;
- the topography is unsuitable and the geology rocky making it inappropriate for a shooting range;
- the site is in an area of high fire risk with increased potential for the ignition of a wildfire capable of spreading throughout the adjoining national park systems;
- the existing access via a dirt road is totally inappropriate.

12. Conditions of Approval

It is considered that the EA does not provided sufficient information and assessment to enable the impacts of the project to be considered and a determination made. In this context

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the appropriate course is for the application to be refused and a new application lodged with all appropriate information. In the event that the Minister is of a mind to approve the application, a number of conditions of approval will be required. These will be presented under a subsequent submission.

1. Introduction

This submission has been prepared on behalf of the Hill Top Resident Action Group (HTRAG). It has been prepared by a panel of experts engaged by the HTRAG to review the *Southern Highlands Regional Shooting Complex Environmental Assessment* (EA) dated February 2008 and prepared by GHD Pty Ltd on behalf of the proponent of the Southern Highlands Regional Shooting Complex (Shooting Complex), the NSW Sport and Recreation (an agency of the NSW Department of Arts, Sport and Recreation).

HTRAG has engaged experts in a range of disciplines to review the EA including the following:

- ecology (flora);
- ecology (fauna);
- bush fire management;
- contamination and water quality;
- acoustics;
- traffic;
- planning.

The review by the members of the panel are appended to this report and are described below. These form the basis for the objection to the development and a call for the application to be refused.

2. An Approval is Beyond the Power of the Minister under Part 3A of the EP&A Act

Clause 80(1) of the Regulation states:

For the purposes of section 75J (3) of the Act, approval for the carrying out of a project may not be given under Part 3A of the Act for any project, or part of a project, that:

- (a) is not the subject of an authorisation or requirement under section 75M of the Act to apply for approval of a concept plan, and*
- (b) is prohibited by an environmental planning instrument that would not (because of section 75R of the Act) apply to the project if approved.*

Our client has no evidence that the project is the subject of an authorisation to apply for approval of a concept plan. The EA states on page 17 that the development of the site in the manner proposed (i.e. recreational shooting complex) is not permissible under the LEP. The lack of such evidence gives rise to the following concerns.

Clause 80 of the Regulation was introduced in 20 July 2007. Clause 80A of the Regulation was introduced in November 2007. It states:

Clauses 8N and 8O do not apply to a project application if, before the commencement of those clauses, the Director-General had notified the proponent of environmental assessment

requirements under section 75F of the Act relating to the project, or part of the project, concerned.

The environmental assessment requirements were notified in August 2007 which was not before the commencement of clause 8O. Thus at the time the project was declared and the DGs EARs were issued, the Director-General had not notified the proponent of environmental assessment requirements under section 75F of the Act relating to the project before the commencement of clauses 8N and 8O and thus the project does not benefit from clause 8OA.

The Minister must refuse the application.

3. Procedural Anomalies

Part 3A of the EP&A Act 1979 and Part 1A of the EP&A Regulation 2000 set out the processes for preparing and submitting a project application.

No Valid Project Application

In relation to the current proposal the following is relevant:

1. Part 3A of the EP&A Act only applies to the carrying out of development that is declared to be a project to which the part applies.
2. The Shooting Complex was declared to be a project under clause 6 of the SEPP (Major Projects) on 20 August 2007 with the previous declaration being revoked.
3. Project Application lodged August 2006.
4. DG's Environmental Assessment Requirements were issued on 22 August 2007.

Section 75E sets out the procedure for applying for approval of the Minister to carry out a project. An application under Part 3A cannot be made until the development is declared to be a project to which Part 3A applies. This declaration was made after the project application which is the subject of this exhibition was made, rendering the application invalid as it was not made for the project to which the declaration related. Section 75F(2) states that environmental assessment requirements cannot be issued until a project application is made. No such application has been made.

It is considered that the application has not been duly made and, in accordance with Clause 8D(2) of the Regulation, the Minister should reject the application.

Notification of the Land Owner

At the time the project application was lodged (August 2006), the site comprised the Bargo State Conservation area vested with the Minister administering the National Parks and Wildlife Act. Clause 8F(1) of the Regulation states (relevantly) that the consent of the owner of land on which a project is to be carried out is required for a project application unless the application is made by a public authority. Clause 8F(3) provides that, if the consent of the owner of the land is not required under this clause (i.e. in the case of a public authority), then the proponent is required to give notice of the application to the owner of the land at any time **before the application is made**. There is no indication in the EA that the owner of the land

was notified prior to the application being lodged. Thus there **may** be a procedural problem is the then owner was not given notice of the application.

This should be confirmed by the Department of Planning. If the public authority land owner was not notified as required under the Regulation, the application would not have been duly made and, in accordance with Clause 8D(2) of the Regulation, the Minister should reject the application.

4. Inadequate Assessment Methodology

The EA contains a number of methodological inadequacies. There are problems in the way investigations were undertaken that have been identified by the member of the HTRAG panel of environmental experts in the reports appended to this submission.

The HTRAG panel of environmental experts considers that the information collected on the existing environment and the analysis undertaken are deficient and do not enable the impacts of the proposed development to be properly identified, measured and considered. Thus no reasonable person would be in a position to approve the application based on the available information and assessment.

The assessment methodology is further flawed because the base case used to assess impacts is the existing operation of the facility which is not in accordance with the consent and therefore underestimates the impacts of the new development. In many instances impacts are measured and assessed relative to the existing operations on the site.

The present use of the existing rifle range does not comply with the development consent under which the range operates and therefore is arguably illegal. The range of users is in excess of that approved and the intensity of use is beyond that originally approved. There is no approval for the Army use of the facility which currently occurs.

When considered against the base case, being the existing situation, the extent of impact attributed to the project is understated because the existing use of the facility is not as approved and is well in excess of the current approvals. The lease for the existing facility is due to cease at the end of this year.

Because the present use of the facility is arguably illegal, and because the proposed use is significantly different to the current use which is due to cease at the end of the year, the impacts of the proposed development should be assessed on the basis that the existing use has ceased.

5. Inadequate Description of the Development

Lack of Plans

The EA or project application contains no plans of the clubhouse, indoor pistol range or other buildings. There is no indication given on the drawings of fuel storage area for the generator or fire protection measures. There are no plans of the access road, lighting or other utility services.

Insufficient Operations Details

No details are provided of the operations of the facility in terms of staffing numbers and qualifications (including staff who will be there at all shooting times), security staff or management arrangements. It is insufficient to say that this is a matter for the clubs.

Inadequate Consideration of Capacity

The capacity of the facility is not clearly stated. In this regard, plans provided by the proponent of pistol range location plans and layouts available on the DOP website indicates a capacity of the pistol ranges of 110 shooting places. Plans of the 200 metre range and the 500 metre range indicates the provision of a minimum of 20 and 50 firing points respectively. There are 20 firing points at the shotgun range and an estimated 20 firing points at the existing 800 metre range. This gives a total of at least 220 firing points. It is noted that formal parking spaces for 180 cars is proposed. The average weekend use is only approximately 60% of the capacity even if it is assumed that shooters stay all day. If the average shoot is half a day, then the predicted average weekend use would reach only about 30% of the available capacity. The capacity of the facility in terms of firing points will increase by 1000% over the current range. It is considered that the EA underestimates the utilisation of the facility and thus the impacts. Impact assessment should be based on the capacity of the facility.

No arrangement is made for bus parking or for bus transport to the facility. This is highly likely to be required to provide access to larger groups who would use the facilities such as the pistol ranges.

Inadequate Controls over Major Events

Section 8 of the EA proposes changes to the planning controls applying to the site.

The following development is also exempt development if it is carried out on land within the Special Activities Zone and is of minimal environmental impact:

- (a) the temporary use of the land for community events that are open to the general public, including public gatherings, ceremonies, sporting events or outdoor exhibitions.*
- (b) the erection and use of temporary structures, having minimal visual impact, for the purposes of, or in connection with, any such community event.*

This provides the potential for major shooting events and gun shows to be staged at the facility without the need for further approval. This is considered unacceptable.

6. Analysis of Alternatives is Inadequate

The application was lodged in August 2006 with the DG's environmental assessment requirements issued in August 2007 which included a requirement for the consideration of alternatives to the proposal as a key assessment requirement.

The decision to locate the facility at this site has already been made with the gazettal of the National Parks and Wildlife (Adjustment of Areas) Act 2006. The site was already excised from the State Conservation Area and thus the out-come of the consideration of alternative locations in the EA has been predetermined.

The consideration of alternatives is limited and does not justify the why 1,000 hectares of State Conservation Area adjoining a site listed on the World Heritage Register and available for use by the public of New South Wales was excised and handed over for the use of a few.

There is no reference to a site selection process or referenced to any recognised site selection criteria. There is no assessment of whether this site meets any recognised site selection criteria for the location of a regional shooting complex.

No serious consideration has been given to alternatives, including alternatives closer to the main population base for the clubs whose shooting activities will be based at the facility – being Wollongong and the Illawarra.

The proponent operates under the Sporting Venues Management Act 2002. Section 7 of this Act requires the proponent to take into consideration, where relevant, the principles of ecologically sustainable development within the meaning of the Local Government Act 1993 in carrying out its functions. There is no evidence that these principles were taken into consideration in the identification of alternative sites or locations.

7. Impacts on Flora and Fauna

7.1 Impacts on Vegetation and Vegetation Communities

The assessment of the impacts of the project on vegetation has been reviewed by Anne Clements & Associates (Appendix 1). This review concludes that the flora assessment of the proposed development is inadequate in:

- area investigated (restricted to proposed clearing);
- use of data presented in DECC (2004);
- sampling effort (5.5 hours for searches of threatened plant species);
- data recorded in quadrats (lower number of species recorded per 0.04 ha than expected from data presented in DECC 2004);
- insufficient quadrat sampling with only 47% of species recorded in the four quadrats;
- no comparison with Final Determinations or community descriptions in DECC (2004);
- no assessment of significance addressing the factors of assessment in the 7 part test;
- no adequate mitigation measures;
- no details of the vegetation in the areas proposed as offsets. The offset sites may be already highly flora constrained with little or no future development potential.

In terms of the Director General's Environmental Assessment Requirements for the project, the EA does not:

- adequately demonstrated that the proposed clearing of vegetation will not have a significant effect on any threatened species, populations or ecological communities, or their habitats, communities or populations;

- clearly stated whether it meets each of the key thresholds identified in Step 5 of the draft Guidelines;
- adequately described the actions that will be taken to avoid / mitigate impacts or compensate for unavoidable impacts of the project on threatened species and their habitats, including an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented; or
- consult with the Commonwealth Department of Environment and Water Resources to confirm whether the proposal is a controlled action under the Environmental Protection and Biodiversity Conservation Act 1999.

Furthermore no account is taken of the impacts on vegetation of any additional clearing required to implement appropriate bushfire management strategies to mitigate the escape of wildfires off the onto adjoining lands which include a world heritage listed site.

7.2 Impacts on Fauna

The assessment of the impacts of the project on fauna has been reviewed by Dr Stephen Ambrose of Ambrose Ecological Services Pty Ltd (Appendix 2). This review finds that

The GHD Fauna Assessment is grossly inadequate. It is based on an inadequately performed fauna habitat assessment, with rudimentary fauna surveys which are not in accordance with the Draft Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities [Department of Environment & Climate Change (DECC), 2005].

The study area has a high conservation value for native fauna, as evidenced by the presence of at least one threatened fauna species (Yellow-bellied Glider) and an extremely high incidence of tree hollows that are suitable for use by a range of hollow-dependent fauna species. Therefore, it is essential that a comprehensive fauna survey be conducted, rather than just a fauna habitat assessment.

There have been no systematic surveys for threatened amphibians, reptiles, ground-dwelling mammals or bats, listed under the schedules of the NSW Threatened Species Conservation Act, 1995 (TSC) and Commonwealth Environment Protection and Biodiversity Act, 1999 (EPBC Act) despite these species occurring in the locality and the authors recognition that they are likely to occur in the study area.

Survey efforts associated with targeted nocturnal surveys for Yellow-bellied Gliders and threatened owl species are inadequate and do not meet the minimum survey efforts that are recommended in DECC (2005). For instance, targeted surveys were conducted for only two threatened owl species (the Powerful Owl and Masked Owl), whereas two other threatened owl species (the Sooty Owl and Barking Owl) are likely to occur in the study area. Owl surveys (call playbacks) were conducted for only one hour in total (30 minutes for the Powerful Owl and 30 minutes for the Masked Owl, on one night). DECC (2005) recommends call playback trials to be conducted for at least three consecutive nights for Powerful, Sooty and Barking Owls and four consecutive nights for Masked Owls.

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Only 20 fauna species were recorded in the study, all of them except the Yellow-bellied Glider, were listed as incidental sightings. Such a list is useless in assessing the value of the subject site as habitat for native fauna. Sites (such as this one) which contain threatened fauna species, are usually rich and diverse in fauna species. I would expect to find at least 150 protected fauna species in the study area if a systematic survey of fauna was conducted. Consequently, the richness and diversity of fauna on the subject site, important environmental attributes that must be considered in assessing the potential impacts of development, have not been considered in the report.

Hollow-bearing trees have only been mapped in less than 7% of the area that has been proposed for habitat clearance. Tree hollows should have been mapped and described across the entire 16 ha of land to be cleared, rather than along transects. More detailed data about tree hollows should have been collected and presented in the ecological report (see detailed comments below).

*Key data for the SEPP-44 (Koala Habitat) Assessment are not presented in the report. For instance, there are no flora quadrat data presented in the report that demonstrate that one food tree species of Koalas, *Eucalyptus punctata*, constitute less than 50% of the trees the canopy and mid-canopy.*

The authors say that the study area is not Potential Koala Habitat under SEPP-44. However, members of the Hilltop Resident's Action Group have collected scats from the study area and have taken photographs of scratchings on tree trunks, which Associate Professor Robert Close of the University of Western Sydney has identified as belonging to Koalas. Associate Professor Close is a recognised expert on Koalas.

No seven-part tests of significance for Threatened NSW Fauna species (under the EP&A Act) have been conducted. These tests are not required for a Part 3A project, but most ecological consultants do perform them for such projects, and it would have been prudent for GHD to have included them in the report, given the high conservation value of the study area.

The authors have only considered the areas to be cleared (16 ha) when assessing the impacts of habitat clearance and modification on the status of fauna species and their habitats. There is likely to be a requirement for the establishment of an Asset Protection Zone (APZ) for bushfire management purposes, meaning that the total area to be cleared or modified would be greater than 16 ha. The creation and maintenance of the APZ and its likely impacts on fauna and their habitats have not been considered by the authors.

There has been no assessment of the impacts of the proposed development on migratory species listed under the schedules of the EPBC Act and regionally-significant fauna species. Therefore, the report is in violation of the requirements of assessment under the EPBC Act.

The authors of the report indicate that there is potential habitat in the study area for at least four nationally-threatened fauna species listed under the EPBC Act (Giant Burrowing Frog, Broadheaded Snake, Swift Parrot and Spotted-tailed Quoll).

Therefore, it is a requirement for the applicants to seek approval from the Commonwealth Minister for the Environment, for their proposal, which has not been done. It is not correct for the authors to claim in the report that such a referral to the Commonwealth is not required.

The study area is near the Blue Mountains World Heritage Area. It is very likely that native fauna (e.g. bird species, bats, and arboreal and ground-dwelling mammals) move between the Blue Mountains World Heritage Area and the study area. The authors of the report have not assessed the impacts of the proposal on world heritage properties, a requirement under the EPBC Act.

Proposed mitigation measures are generally sound, but additional measures are very likely to be realised once a comprehensive fauna survey and assessment has been completed.

Ambrose Ecological Services Pty Ltd concludes:

As a result of the inadequacies of the fauna impact statement, especially in relation to the absence of crucial fauna and habitat data, and insufficient referral to the EPBC and TSC Acts, no reasonable person would approve the development application.

8. Acoustic Impacts

A technical review of the noise assessment contained in the EA has been conducted by Wilkinson Murray (Appendix 3). It has been determined that the assessment is inadequate for the following reasons.

Director General Requirements (DGR)

The DGR noise requirements for the project are: "Noise impacts associated with the future proposal (e.g. noise from gun fire) should be assessed against NSW DECC (EPA) guidelines and other relevant legislation."

The assessment has been limited to ECNM construction and shooting range guidelines, which are no longer endorsed by the NSW DECC. Whilst these guidelines are of relevance, consideration has not been given to other relevant shooting range guidelines, including:

- NSW DECC - Noise Guide for Local Government - 2007*
- NSW DECC – Industrial Noise Policy – 2000*
- National Acoustics Laboratory (NAL) - Community Response to impulsive noise – A survey around Holsworthy Army Range - National Acoustics Laboratory 1981*
- Victorian EPA - Interim Gunshot Noise Guidelines - 1991*
- International Standards Organisation - ISO - 17201-4:2006 Acoustics - Noise from Shooting Ranges Part 4: Prediction of shooting range sound.*

Noise Impacts Assessed in the Environmental Assessment

No assessment of traffic noise has been conducted at residences along the access route.

In addition there is no assessment of the impact of noise on recreational activities (including bushwalking) or fauna.

Noise from mechanical plant, including diesel generators, on the site has also not been assessed.

Adequacy and Appropriateness of Data Sets

A review of data indicates the following:

- Monitoring of background noise is considered acceptable.*
- The presented distances from site to the nominated measurement locations are incorrect.*
- Operator-attended measurements of gunshot noise in surrounding receiver areas are questionable. The results lack consistency, which raises the question of their validity in any assessment.*
- No site meteorological data is provided to describe the prevailing wind and temperature inversion conditions to be used in any assessment.*
- Noise levels of construction equipment are provided, and are considered acceptable.*

Assessment Methodology and Conclusions

A review of the noise assessment and associated conclusions has found the following.

Construction noise criteria appear acceptable. However, predicted noise levels are considered unacceptable as the stated distances to surrounding receivers are incorrect and hence the resultant noise levels predicted at residences are low. Therefore the conclusions based on the construction noise predictions cannot be considered reliable. Construction noise levels should be recalculated based on actual distances, so the magnitude of any impact can then be determined.

In the case of shooting noise, the criteria in the assessment have not taken account of all relevant guidelines, particularly the issue of cumulative noise impact. Further, no prediction of shooting noise has been conducted.

The measured noise level of gunshots would be acceptable provided the results were consistent and reliable. However there is an inconsistency in the measured results which calls into question the validity of the noise measurements.

It is considered that any noise assessment should be taking into account distances, topography and meteorological conditions.

Therefore, as a result of the above findings, the conclusions of the assessment are considered invalid as there is no adequate demonstration that future gun noise has been addressed.

Mitigation Measures

No specific noise mitigation measures have been recommended. Recommendations to measure noise once the facility is operational and then implement noise control measures where necessary are considered inappropriate, as the purpose of any assessment is to determine mitigation measures or risk prior to approval and construction of a facility.

The proposal to mitigate after completion is not considered practical as construction machinery will have left the site.

Recommendations and Conclusions

It is reasonable to conclude that there is insufficient information presented in the noise section to warrant approval of this facility on acoustic grounds. Based on this review, Wilkinson Murray recommends that approval for this development should not be granted in the absence of a more comprehensive assessment.

Therefore it is recommended that the issues identified in this review be addressed by further assessment by the proponent. In particular the following issues need to be addressed.

- Distance irregularities;*
- Assessment of the noise traffic and mechanical services at surrounding residences;*
- Assessment of construction and operation on recreational activities and fauna; and*
- The cumulative noise impact of shooting based on relevant guidelines and taking into account topographical and prevailing weather conditions.*

9. Traffic Impacts

McLaren Traffic Engineering was commissioned to review the traffic and parking impacts of the proposed regional shooting complex at Hill Top (Appendix 3). This review finds as follows.

The findings of the review indicate that the assessment undertaken lacks independency and sufficient detail of the variable use of the complex in terms of traffic generation forecasts and peak period parking demands during peak events and the range of weekday and weekend day use during an entire year.

Insufficient assessment has been undertaken of the traffic generation effects on the main access route provided by Wattle Ridge Road, as well as through the township of Hill Top.

Given the current condition of Wattle Ridge Road, an independent road safety audit of this road is necessary that outlines current deficiencies and hazards that need correction prior to permitting increased traffic flows along it. The audit needs to also extend to the route

through the township of Hill Top due to the presence of restricted sight lines at road junctions and the narrow road bridge for two way traffic.

The full range of the types of vehicles that will use the shooting range needs to be outlined. Whilst standard cars and 4WD's are expected, the effect of mini-bus / coach access to the site needs to be evaluated in both road safety and road carriageway capacity terms.

Construction vehicle access effects and traffic management plans for both the construction and operational stages of the development need to be outlined in detail.

The statement by the applicant's consultant that Wattle Ridge Road does not need any upgrade fails to acknowledge current conditions and hazards along the route.

The current consent indicates that less than 50 vehicles per day would use the unsealed section of Wattle Ridge Road. The subject proposal will give rise to an additional 370 vehicles per day along the unsealed section of Wattle Ridge Road which exceeds the 1000 vehicles per day threshold limit above which the road should be sealed, particularly in view of the variable traffic generated by the development.

A further annualised maintenance cost for the access road should be included over a design period of 30 years, particularly if the road is classified by Council as an "unformed" road which are not maintained by Council as per their policy.

Existing access to the facility is grossly inadequate for the potential increase in traffic associated with a tenfold increase in firing points and in parking spaces. Safety issues should be paramount particularly as munitions will be driven in for each shoot with nothing stored on site.

As detailed in Appendix 3, the analysis is deficient in that there is:

- No assessment of seasonal variations in traffic.
- No assessment of night time impacts.
- No assessment of parking demand on weekdays and weekend days, nor seasonal variations in that demand. Proposed 180 sealed spaces significantly in excess of current consent limit of 15 vehicles. Equates to an increase 11 times in excess of current approval.
- No justification statement with regard to the non compliance of existing consent conditions, particularly in relation to the sealing of access road.
- No justification of the 200m separation within access roads for passing bay provision.
- No assessment of the ability of large trucks / Fire Brigade appliance vehicles ability to access the site. The report states that articulated vehicles (i.e. semi-trailers) to move material around the site during construction.
- No assessment of the proportion of additional traffic generated that are unfamiliar with access roads to the site. No accident rate assessment compared against relevant road standard that exists.

The following findings are relevant:

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1. *That no independent assessment of the existing traffic generation and parking demands has been undertaken.*
2. *No sensitivity testing of the of generated traffic levels has been undertaken.*
3. *The parking levels have on the site have increased from a maximum of 15 vehicles under the 1986 consent to 39 derived from s96 application, representing a 260% increase, to 180 spaces under the subject proposal, representing a significant increase of 1,240% or an 11 fold increase compared to the 1986 consent.*
4. *Traffic generation impacts underestimated on Wattle Ridge Road due to the inadequate sensitivity testing with regard to peak events on the site, car driver percentages and night time generation.*
5. *The traffic impacts on the gravelled section of Wattle Ridge Road should include an independent road safety audit of current conditions, highlighting deficiencies that need corrective action and measures to improve the night time use of the road corridor. The road safety audit should extend through township of Hill Top to address restricted sight line locations and narrow bridge condition.*
6. *The traffic impacts on the gravelled road access should be based upon the 30th highest traffic generation effect over a full year of operation, not the average effect adopted by the applicant's traffic consultant.*
7. *The 30th highest effect would result in at least a tripling of current traffic flows on the gravelled road, based upon the applicant's own figures. The tripling resulting in at least 194 vehicles per day, which would increase its priority for sealing the road, based upon Council's assessment criteria. However, given that the majority of traffic using the corridor, particularly at night will be associated with the subject proposal with a proportion of patrons unfamiliar with the access conditions, the access road should be sealed to the entrance of the site and guide posts plus pavement markers installed to Council standards, funded by the applicant. An annual maintenance fee should also be negotiated with Council. Without a sealed road, the existing corrugations / rutting of the road would further deteriorate and potentially become hazardous or inaccessible after significant rain periods.*
8. *The cost of grading of the road and application of prime and two coat seal to the access route is in the order of \$25 per m² of road construction, plus guide post and retro-reflective raised pavement markers and / or edge line treatment to assist use of the corridor during night time / rain / fog conditions.*
9. *Maintenance of road within terms negotiated with Council. Sealed roads in rural environments should be re-sealed every 5 to 6 years, typically.*

Given that the assessment is inadequate and fails to address road safety conditions along the gravelled road access, the application should be withdrawn. If the application should proceed, the applicant should fully finance all mitigating measures, including sealing of the access route to the site and regular maintenance.

10. Bushfire Impacts

Australian Bushfire Assessment Consultants have reviewed the bushfire risk assessment in the EA and finds that the bushfire assessment in the EA does not adequately address the environmental assessment requirements (Appendix 4).

The bushfire assessment states that the application is for development on land mapped as bush fire prone land and that the NSW Rural Service guideline entitled Planning for Bush Fire

Protection 2006 (PBP) does not apply to the proposed ranges.

Section 1.1 (Introduction) of the PBP states that PBP applies to all “development applications” on land that is classified as “bush fire prone land” (BPL), identified on a council’s BPL map. The assessment in the EA is based on an erroneous basis and thus is fundamentally flawed.

The interface of this development with the bushfire threat is significant, amounting to the perimeter of the ranges and the world heritage listed place and, indeed, the vegetation contained within the site itself. Logically, the bushfire assessment should consider the interface of the main elements of the development, that is, the proposed ranges, and identify any additional bushfire protection measures that may be necessary as a result.

No measures are identified or assessed to mitigate the escape of wildfire off the site onto adjoining lands from sources associated with the use of the facility. No management strategies have been provided which would enable ignitions to be controlled within the capability of the NSW Rural Fire Service. No wildfire protection or asset protection is proposed other than for the clubhouse.

The bushfire assessment makes no mention of the relationship between the overall proposal – including the proposed ranges – and the broad aim and objectives of PBP.

Section 3.1.5 (Use as a shooting complex) of the bushfire assessment notes that there may be a concern with respect to use of the shooting complex on days of high fire danger. Importantly, given the nature of the project, the bushfire assessment does not take into account the potential for ignitions to occur due to ricochets from rock formations, targets etc. The potential for this to occur should be addressed. Also, measures to limit the use of the facility on extreme fire warning days should be incorporated into the management of the facility. This is important also from an emergency management point of view, where emergency services intervention may be required to evacuate the complex.

The bushfire assessment does not take into account the adequacy of Wattle Ridge Road to provide satisfactory access to, and egress from, the site in the event of a bushfire emergency. This should take into account a scenario where emergency services may need to access the site via Wattle Ridge Road at the same time that people using the shooting facility are seeking escape from the complex in the event of a bushfire. The width of Wattle Ridge Road would be critical under such circumstances and the bushfire assessment should identify any upgrading works that may be necessary to facilitate access to and egress from the site in a bushfire emergency as discussed above.

Also the assessment does not take account the lack of all utility service such as electricity, water and communications to assist in the fire fighting effort.

Section 4.5 of the bushfire assessment (Bush Fire Hazard Remaining on the Site) identifies that 985 hectares of the site will remain as native vegetation. The management of this vegetation is one of the key issues identified in the DGRs. The bushfire assessment notes that the proposal is consistent with the existing use of the land and the existing identification under the Bushfire Risk Management Plan as “Land Management” so it will not alter the hazard.

The hazard that will remain on the site is significant and the DGRs imply a level of assessment and management for this hazard with consideration of the current proposal and contemporary management practices. Furthermore, the DGRs indicate that it is important that a Bushfire Management Plan to be established for the hazard remaining on the site to enable its satisfactory management by the proponent, in this case, the NSW Department of Sport & Recreation. Any bushfire management plan should also, importantly, take into account issues such as:

- Impacts on flora and fauna;
- The elements of the use of the site that may give rise to potential ignitions such as the risk of arson arising from increased access to areas adjacent to vegetation and the potential for ignitions to occur due to ricochets from rock formations, targets etc.; and
- The range of measures to be implemented to mitigate the escape of wildfire off the site onto adjoining lands in the event of ignition of a bushfire (within the site).

Section 4.7 (Emergency Plan and procedures manual) of the bushfire assessment states that an emergency plan and procedures manual is to be prepared and approved by the NSW RFS prior to utilisation of the clubhouse and range. The discussion in the bushfire assessment of this aspect of the DGRs lists a number of generic elements to be included in the (proposed) emergency plan and procedures manual. In this regard, the bushfire assessment does not satisfy the scope of the relevant DGR as the assessment does not identify evacuation measures/strategies to be implemented in a bushfire event.

Australian Bushfire Assessment Consultants are of the opinion that the bushfire assessment aspect of the project should be revisited to address the issues that have been identified above as being of concern. The issues of concern relate to key aspects of the DGRs with respect to the bushfire assessment.

Unless and until the above matters are addressed, Australian Bushfire Assessment Consultants are of the opinion that no reasonable person would approve the application.

11. Contamination and Water Quality Impacts

The EA's assessment of the impacts of the project on water quality and contamination of the site has been reviewed by Environmental Earth Sciences (Appendix .

This is a major issue given the location of the site within Sydney's water supply catchment draining via Waterholes Creek into the Nattai River and then into Lake Burragorang and the location of the site adjoining National Park and a world heritage listed site. Shooting Ranges have been found to cause significant contamination from lead and other disposables used in the shooting process. Significant contamination problems have been experienced at other ranges such as Wakehurst on Sydney's northern beaches.

The Environmental Earth Sciences review found significant deficiencies in the analysis. One major deficiency is the lack of any samples of water from the ephemeral creeks on the site draining into Sydney's water supply. Despite an investigation period of over 12 months, no water samples from the creeks were taken for analysis making it impossible to conclude that there is no contamination of water leaving the site. Other inadequacies include:

Inadequate methodology

- soil and sediment sampling density (spatially, laterally and to depth) does not comply with AS4482.1 (2005) or similar;
- 'background' locations were not assessed;
- water sampling during run-off events in the ephemeral streams about the site has not been undertaken; and
- a risk-based approach has not been considered, including identification of potential receptors and receptor pathways.

Inadequate data-sets

- the soil, sediment and water analytical suite does not include other chemicals of potential concern (CoPC) such as polycyclic aromatic hydrocarbons (PAHs) associated with coal tar pitch in clay pigeon targets;
- the analytical suite does not include additional soil data requirements to allow solubility and bioavailability assessment (such as clay content, soil mineralogy, soil phosphorous, iron and manganese content);
- leach testing has not considered methodologies to assess potential impacts on human health or plant ecology (particularly solubility and bioavailability); and
- lead (and other heavy metal) analysis did not consider concentrations in varying soil particle size ranges to assess ingestion potential.

Inadequate impact assessment

A risk-based strategy should have been adopted for assessment of potential impacts on ecology and human health from soil contamination in particular, with the aim of developing site specific criteria that are more relevant to the exposure scenarios developed and potential receptors and beneficial uses identified.

Inadequate monitoring and mitigation measures

- the most significant inadequacy of the SWMP is the lack of recommendation for further, more detailed, assessment of the potential for lead (in particular but not exclusively) impacts on potential receptors and beneficial uses (primarily the ecosystem including flora and fauna and human health);
- the above point is however likely to be addressed by the recommendation by GHD that a Site Audit Statement be prepared by a site auditor. Such undertaking is likely to result in a significant amount of additional assessment and monitoring works at the site and surrounds being required;
- establishment of sediment control ponds, and stormwater and wastewater management is considered appropriate from a contaminated sediment and water potential migration perspective (but may or may not comply with regional run-off requirements). Such factors should be considered as part of a detailed site assessment.

Environmental Earth Sciences have a number of concerns as to the extent of assessment undertaken to date, relating particularly to:

- lack of compliance to the Environmental assessment requirements under Part 3A of the Environmental Planning and Assessment Act 1979; and
- lack of an in-depth, risk-based, scientifically justifiable, site-specific approach to assessment.

As such, further assessment as a minimum is required. This assessment should be risk based and therefore follow the following steps:

- issue identification and engage stakeholders: the local community should be engaged at an early stage so as to ensure their concerns are addressed;
- exposure assessment: identify all potential exposure pathways (e.g. for human health via soil ingestion, dust inhalation, dermal absorption, and drinking water from Warragamba catchment) to all potential receptors and beneficial uses;
- hazard and dose response assessment: assess the potential for the identified CoPC that are exposed to potential receptors to be accessible and available to those receptors, and their potential toxicity to those receptors;
- risk characterisation: quantify the risks to the identified receptors based on exposure, toxicity, hazard and dose-response assessments; and
- manage the risk.

Environmental Earth Sciences believe that no reasonable person or consenting authority would approve the application without the additional data and analysis, and subsequent site- and region specific risk-based assessment, recommended above. It is Environmental Earth Sciences VIC considered opinion that the information currently existing that has been reviewed as relates to contamination issues associated with the current and proposed Hill Top shooting complex, is not adequate to allow consent to be granted for the development proposed.

The EA does not include the results of any discussions with the Sydney Catchment Authority. It is considered that a neutral or beneficial effect analysis as referred to in Drinking Water Catchments Regional Environmental Plan No 1 should have been undertaken, notwithstanding that this plan does not have force under the Part 3A process. Clause 26 of the REP1 states:

*26 Development consent cannot be granted unless neutral or beneficial effect on water quality
A consent authority must not grant consent to the carrying out of development under Part 4 of the Act on land in the hydrological catchment unless:
(a) it has considered whether the proposed development will have a neutral or beneficial effect on water quality, and
(b) it is satisfied that the carrying out of the proposed development would have a neutral or beneficial effect on water quality.*

All consultation and analysis required under this REP specifically introduced by the State Government to protect Sydney's water supply catchment and all requirements of the REP should be satisfied.

Parking areas are unsealed and are not provided with any water quality control measures. Parking for 180 cars is provided with no pollution controls of runoff except for the 'pond' adjoining the car park and club house. Runoff from parking areas for the 100 spaces behind the ranges appears uncontrolled. This, together with the inadequate controls of run-off from the area within which bullets and other debris (such as clay) would fall has the potential for significant adverse impact on water quality on the site and in the catchment.

12. Inadequate Range Danger Area

Section 7.4.6 of the EA deals with range danger areas. The EA states:

In the case of the new ranges at Hill Top and to provide the safest range layout, double lateral ricochet safety templates have been used in place of single lateral ricochet safety templates. The use of this option allows for the use of hard targets and firing on ground containing crystalline (Igneous/Metamorphic) rock formations.

The layout configurations have taken into account the required range danger area to capture stray bullets. The range danger area layout is such that it would be accommodated within the site boundary.

No such analysis was undertaken for the existing 800 metre range. This is the longest range and one that would appear to have the greatest potential for expansion to a 1,100 metre range. The template shown for this range does not appear to be a double lateral ricochet safety template. A much narrower template has been used, presumably on the grounds that this is an existing range. This is a fundamental flaw in the methodology of the EA. The use of the 800 metre range is a key element of the project. Its use as part of a regional shooting complex is not the continuation of the existing use. It is a totally different use and should be assessed as a new facility and should comply with all current design and safety standards.

Were such a template to be used the range danger area layout is such that it would **not** be accommodated within the site boundary. This indicates that the site is unsuitable and that occupants of adjoining lands (including bushwalkers and Energy Australia staff maintaining the transmission lines) and assets (such as the transmission lines) would be placed at risk.

13. Compliance of Existing Range with Current Design Standards

The EA contains no assessment of the extent to which the existing 800m range complies with current design and operational standards. The use of this range forms part of the project and no works are proposed to upgrade this range to current design standards. This is considered to be a major flaw in the EA methodology. As discussed above it is highly likely that the existing range does not meet the same range danger area templates being applied to the new ranges notwithstanding that the use of the existing range is a new use as part of a regional shooting complex.

The compliance of the existing range with current design and operating standards has not been assessed and therefore the application should be refused on this ground alone.

14. Social and Economic Impacts

Inadequate consideration has been given to the social impacts of the facility including:

- impacts on the safety and security of the community of Hill Top;
- impacts on the future growth of Hill Top;
- impacts related to the stigma of being known as a rifle range town; and
- impacts on local property values.

The project is located in close proximity to a small village and has the potential to significantly affect the safety and security of the residents and the quality of life and lifestyles. The size of the facility is such that there is a real risk that Hill Top will be stigmatised by being known as the shooting complex town.

Because the site adjoins a world heritage listed site and Wattle Ridge Road is a primary access point to the Nattai National Park, the area is used by a large number of bushwalkers and nature lovers. No assessment has been made of impacts of the project on these user groups.

15. Inadequate Security Arrangements

The only request of the NSW Police Service was that fences around the property are high enough and very sturdy to keep out trespassers and animals knocking holes in fences as a means of crime prevention (Appendix 1 of the EA). The only fencing proposed as part of the project is along part of the Wattle Ridge Road frontage. This is because of the concern for impacts on flora and fauna.

The regional shooting facility will have a high profile and a high level of security is required and should be provided. Then impacts of such security measures on flora and fauna and wildlife movement corridors should be assessed and if considered unacceptable, as inferred in the EA, the project should not proceed. The inability to provide adequate security to meet the requirements of the NSW Police is a major inadequacy of the project and is indicative that the site is simply not suitable for the proposed facility.

It is ironic that the EA makes extensive references to compliance with the NSW Police Force Range Users Guide but ignores the only request of the NSW Police when consulted by the DOP.

16. Inadequate Provision of Utilities and Lighting

The site has no utility services available. There is no water, sewerage, electricity, gas or communications (other than less than desirable mobile phone cover). No lighting is proposed at the ranges including the pistol range and the ranges that will be used at night. No lighting is proposed along internal road ways or parking areas for the safe movement of shooters from parked cars to ranges and the clubhouse at night (including disabled shooters). No lighting is proposed on the Wattle Ridge Road.

This is considered a major inadequacy. A regional sport and recreation facility would be expected to be located at a site that had these basic utility services available. The lack of

such facilities hinders the effective and safe operation of the facility and limits the ability to respond to emergencies.

The lack of utility services indicates that the site is not suitable for the proposed use.

17. No Hazard Risk Assessment

No assessment of hazard risks associated with a regional shooting complex has been undertaken. This is considered to be a major failing of the EA. The site is located in a relatively inaccessible location with users with ammunition having to drive through an existing village along roads not designed for the traffic associated with a regional shooting complex.

A comprehensive hazard risk assessment should be undertaken by a recognised expert in accordance with accepted hazard risk methodologies.

18. Site is Inadequate

Requirements of Range Users Guide

Chapter 2 of the NSW Police Range Users Guide contains some site selection criteria relevant to the selection of sites for rifle ranges. These are highlighted below

Users Guide Requirement	Compliance	Comment
Wherever possible, ranges should be constructed so that the range danger areas are contained fully within the area closed to public use.	No	It would appear that the safety templates applied to the new ranges would not be satisfied by the existing range.
Sites should be studied to select the best two or three options on the basis of access, shape of terrain, availability of services, direction of fire, multiple usage etc.	No	<ul style="list-style-type: none"> • The site has poor access and is virtually inaccessible. • There are no services available at all. • The shape of the terrain is hilly and unsuitable.
As a general rule, sites should be level or slightly hollow (concave), and preferably dry and above flood lines.	No	The site is not level and is not concave. the ranges are located on a convex slope
Sites on rocky, marshy, uneven, rising or falling terrain create difficulties in both construction and use.	No	As indicated in the EA the site contains Igneous/Metamorphic rock formations.
Rocky ground should be avoided because of the increased danger of ricochets and the cost of removing exposed rocks.	No	As indicated in the EA the site contains Igneous/Metamorphic rock formations.

None of these locational requirements are met.

Other Inadequacies of the Site

- it is located within the catchment of Sydney's water supply and the existing and potential impacts of the range on water quality and contamination has not been fully identified, measured, assessed or considered;
- there are no utility services available to the site;
- the site adjoins a world heritage listed site;
- the site is in an area frequented by bushwalkers and others accessing the national park for recreational purposes;
- the site is close to an existing small township and the facility will have a significant detrimental impact on the image of the town and the lifestyle of the residents;
- the topography is unsuitable and the geology rocky making it inappropriate for a shooting range;
- the site is in an area of high fire risk with increased potential for the ignition of a wildfire capable of spreading throughout the adjoining national park systems;
- the existing access via a dirt road is totally inappropriate.

19. Objection to State Significant Site Listing

Having regard to the provisions of clause 8 of the Major Projects SEPP, the listing of the site as a site of State significance is objected to for the following reasons:

1. Clause 8(2)(a) - The site has no regional or State significance as a regional shooting facility. The existing facility is not a regional shooting facility and has no regional or State significance. The NSW government has identified the need for a regional shooting facility and while such a project may be a project to which Part 3A of the Act relates, the site does not have any such significance. The only State and regional significance the site has is as a State Conservation Area adjoining a World Heritage listed site. This is reflected in the E1 Conservation zoning of the land as proposed in the Draft Wingecarribee LEP certified for exhibition by the Director General and as discussed in greater detail in correspondence in Appendix 7.
2. Clause 8(2)(b) – The site is not suitable for the proposed use in that:
 - a. site locational requirements in the NSW Police Range Users Guide are not satisfied as discussed in Section 18 of this submission;
 - b. it is located within the catchment of Sydney's water supply and the existing and potential impacts of the range on water quality and contamination has not been fully identified, measured, assessed or considered;
 - c. there are no utility services available to the site;
 - d. the site adjoins a World Heritage listed site;
 - e. the site is in an area frequented by bushwalkers and others accessing the national park for recreational purposes;
 - f. the site is close to an existing small township and the facility will have a significant detrimental impact on the image of the town and the lifestyle of the residents;

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- g. the topography is unsuitable and the geology rocky making it inappropriate for a shooting range;
 - h. the site is in an area of high bush fire risk with increased potential for the ignition of a wildfire capable of spreading throughout the adjoining national park systems;
 - i. the existing access via a dirt road is totally inappropriate.
3. Clause 8(2)(b) – No consideration has been given to the regional planning strategies contained in Drinking Water Catchments REP No 1 including the aims objectives and principles in this REP and the preparation of a neutral or beneficial effects analysis.
 4. Clause 8(2)(b) - There is no available evidence to suggest that an assessment under Section 7 of the Sporting Venues Management Act 2002 has been undertaken. This section requires the proponent to take into consideration, where relevant, the principles of ecologically sustainable development within the meaning of the Local Government Act 1993 in carrying out its functions. There is no evidence that these principles were taken into consideration in the identification of the site contrary to the provisions of Clause 8.
 5. Clause 8(2)(c) - The site has no utility services at all and has poor access and will make it difficult for service delivery in the form of electricity, water access and communications and for bush fire services and other emergency services (ambulance and police). It represents poor natural resource planning by necessitating the revocation of a State Conservation Area designation. There is no evidence that the provision of offsets to compensate for this loss cannot be achieved by other means.

Having regard to the criteria in the draft Guidelines for State Significant Sites, it is considered that the site does not satisfy the listed criteria other than as a site of natural significance worthy of protection as a State Conservation Area protected with the E1 Conservation zoning as proposed in the exhibited Draft Wingecarribee LEP.

Notwithstanding any importance attributed to a regional shooting complex by the State government, the site does not appear to meet any of the criteria required for a State significant site.