I have submitted the (S96) modification to have the following conditions reviewed. All of the concerns raised are from functionality or site specific point of view. I feel the following justification has enough merit for council to reconsider the conditions below. I would really appreciate if a favorable decision could be reach in a reasonable time frame so the facility could be finished and therefore resolve any current compliance issues.

Condition 2: *This consent is limited to a period of 12 months from the commencement of operation /issue of an Occupation Certificate. Prior to the expiry date of this consent, the applicant will be required to submit a new development application for any continuance of the use.*

As discussed at length I do not like the way this condition is worded. Obviously there is a substantial amount of money and time that needs to be spent to set up the greyhound establishment including chain wire fencing and noise barriers, with no certainty whether the facility can operate longer than the 12 month trail. I request this condition be re worded more inline with how council have explained its intended purpose to be. This will help provide some assurance to me if the facility complies with the conditions of consent it will be able to operate indefinitely before a significant investment is made to install the sound barriers. It is my understanding complying with the conditions of consent was council's main concern and reason for implying the 12 month period. I am confident the facility will be managed in accordance with the conditions, however I would like some commitment from council if the facility is managed appropriately then continuance use will be permitted. i.e modification application can be lodged to seek deletion of the trial period at the end of the 12 months. If the facility is appropriately managed and complies with the conditions of consent during the trial period the continuance use of the facility will be granted. I feel with the numerous consultant reports submitted there is enough evidence to suggest the facility will comply with all required legislation if the conditions are followed. Throughout this DA process I believe I have been more than willing to assist council with any concerns and take time off work to attend site visits. I do not believe council should have any concerns regarding the incorrect management of the facility.

Condition 7: *The greyhound boarding, training and breeding establishment can board, breed and train a maximum of twelve (12) adult greyhounds and eighteen (18) pups based on the findings of the Acoustical Assessment Report prepared by Noise and Sound Services dated February, 2013, ref nss21895 - Final. Greyhound pups reaching twelve (12) months of age eligible for full registration with Greyhound Racing NSW will be considered as adult dogs.*

This issue I have with the condition is the restriction that is placed on the number of pups in the yards. As I'm sure you can imagine there is no guarantee on how many pups a dog will have in a litter. Therefore I can not guarantee there will be less than 18 pups in the yards at any one time and comply with the current conditions of consent which I am concerned about. Please see extract from the acoustic report. 'Sound figures were based on 75 dogs and it clearly states a restriction on the number of pups is not warranted'. If a restriction has to be placed on the number of pups can you consider increasing this to 30. Since there are 3 brood bitches there is a possibility that there may be 30 pups in the yards at any one time. I would be much more confident that the facility can comply with this condition if the number was increased. This is still much less than the acoustic data used (75 dogs) and therefore still complies with the noise goals. As stated previously the expected number of pups typical will be less than 30, however on certain occasions this may occur.

Condition 28: *A noise barrier is to be provided as recommended in the acoustic report entitled Acoustic Assessment prepared by Noise and Sound Services (ref nss21895 and dated Feb 2013) with the exception of the barrier location. The barrier is to be timber and constructed as per the stamp approved site plan numbered 1.*

As discussed previously due to site conditions (termites and bushfire risk) I am reluctant to erect a timber fence. Please see email from acoustic consultant confirming that the noise barrier will only achieve a 12dB reduction in noise independent of the material used (wood, steel or concrete) due to the 1.8m height restriction. I believe a colourbond noise barrier is a much more viable option considering the extended life span of the fence compared to timber and reduced bushfire threat. I believe the colourbond fence will also minimize the impact to adjoining residences and from the street by having an extensive colour range which will enable the fence to blend in with the natural surrounding. The VMP area will also assist with reducing the impact to neighboring properties. It is also noted the adjoining property also has a lot of vegetation present which will help reduce the visual impact. Considering the property is at the end of Keech Road I do not believe there is any real visual impact from the street compared the other properties (60 Keech Road) that have colourbond fencing extending right up to the front property line.
I am also proposing to extend the colourbond fence up to the dwelling as indicated in original plans submitted to council (refer to site plan attached). Again due to the large set back of the house (25m) and location of the property I do not believe there is any concerning visual impacts. To assist with reducing any perceived impact from the street I will be erecting a post and rail fence with native vegetation across the front boundary line and down the southern boundary. This along with the positioning of the dwelling should block out the majority of the colourbond fence visible from the front boundary.

Condition 37: *A minimum area of* ***1284m^2*** *with 4m^3 of wet weather storage is to be designated as an Effluent Management Area and disposed of via subsurface irrigation. Treated effluent is to be distributed evenly over the irrigation area/s in accordance with the "Environmental and Health Protection Guidelines On Site Sewage Management for Single Households" and AS1547:2012 and the approved plan.*

Can council please review this condition in particular the requirement to have subsurface irrigation. The original dwelling was approved with surface irrigation and as a result a system was purchased to comply with these conditions. Councils own OSSM policy clearly states surface/sub surface irrigation has no impact on the EMA area. Therefore I would like council to consider the current OSSM currently on site with surface irrigation and determine whether this is adequate rather than what was suggested in the report. Subsurface irrigation would require a high pressure pump and a total new irrigation system with filters and underground pipe. All this equipment could have been purchased up front if council thought subsurface irrigation was required rather than surface irrigation when the original DA for the dwelling was approved. It is also noted the EMA area calculated (1284m2) is much larger than the figures council use in table 3 of the Penrith OSSM policy (1048m2). Council should be comfortable that the EMA area is more than adequate independent of the irrigation method.

Condition 7- Supporting Information

evening and sleep within the kennels during the night. The opening to the kennels will be orientated towards the north.

A 1.8 metre high fence is required along the western and southern sides of the yards (see Figure 4 below). With the inclusion of the fence $L_{Aeq,\ 15\ minute}$ noise levels are predicted to not exceed 5 dB below the noise goal of 38 dBA and 4 dB below the night time $L_{A1,\ 1\ minute}$ noise goal of 50 dBA. The predicted noise levels are based on measured noise emissions from 75 dogs, which exceeds the predicted 12 to 18 number of pups for the yards. Additionally the predicted noise levels are 5 dB below the noise goal. With the recommended fences installed, a restriction to the number of pups is not warranted.

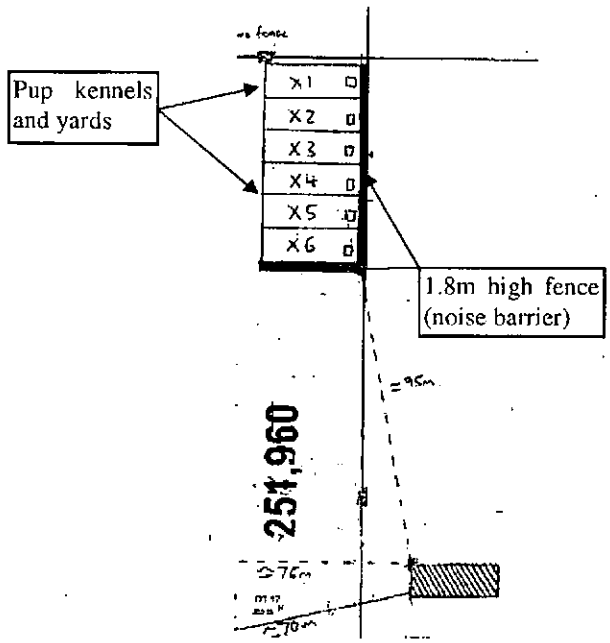

Figure 4: Location of 1.8 metre high fence for pup yards.

6.6 Exercise Tracks

One dog will exercise along the 175 metre track at any one time. Occasional short term barking of less than 1 minute may occur as the dog finishes the run beside the handler.

The nearest measurement or noise goal location is the southern residential boundary, 30 metres from the residence, which is approximately 130 metres from the end of the exercise track. The $L_{Aeq,\ 15\ minute}$ noise level predicted to the boundary, without a fence along the southern boundary is 40 dBA. We recommend the 1.8 metre high fence on the southern side of the Kennels 1-6

Condition 28 - Supporting Information

6.7 Late Night Return of Racing Dogs

As previously mentioned dogs returning from late night race meetings would typically occur two to three times a month and would involve two to three dogs. The returning dogs would not typically bark between the trailer and the barn as they are accompanied by the handler. Dogs within the barn may bark at the arrival of the returning dogs, however, the returning dogs will enter through the single door on the southern façade into the grooming area which is separated from the kennels by a plasterboard partition wall. Barking from the barn has been assessed in section 6.3 and is predicted to comply with the noise goals for day, evening and night.

6.8 Mechanical Ventilation and/or Air Conditioning to the Barn

Ventilation to the kennels within the barn will typically be provided by natural ventilation through the windows which may remain open without exceeding the noise goals. Extreme weather conditions may require mechanical ventilation or air conditioning. Air conditioning if provided would consist of a split system domestic type unit with outdoor condenser unit. The condenser unit or mechanical fan would be located on or against the eastern facade of the barn.

Noise emissions ($L_{Aeq,\ 15\ minute}$) from mechanical equipment should not exceed 38 dBA at the most affected point on or within the neighbouring residential property unless that residence is more than 30 metres from the boundary. The nearest residential boundary is at a distance of 42 metres to the south. Outdoor mechanical equipment should not exceed a sound power level of 75 dBA re 10^{-12} watts (combined total if more than one noise source).

6.9 Fences (Noise barriers)

The barrier effect of the fences has been calculated in accordance with the International Standard ISO 9613-2 1996(E). Fences may be constructed of *'Colorbond'* or timber. Timber fences should be constructed of not less than 15 mm thick lapped and capped timber provided such thickness can be maintained to prevent warping. The fences must not contain any acoustically untreated holes or gaps. Occasional small gaps at the base of the fence to allow drainage may be necessary but should be kept to a minimum and not provide a line of sight from the noise source to the receiver. Fences must be constructed using a safe and secure method to ensure total stability in all predictable wind and weather conditions.

Coalition 28 - Supporting Information

Hi Matt

Unfortunately this is a common misconception that people, who know little or nothing about acoustics, seem to have. 15 mm thick pine has a weighted sound reduction index (Rw) of 24 dB, 6 mm steel also has a weighted sound reduction index (Rw) of 24 dB. The profile of Colorbond may reduce the Rw by 1 or 2 dB but stops any resonance effect which, compared to plain sheet steel, may in highly unlikely circumstances, amplify the noise. Nevertheless a 1.8 metre high barrier is dominated by diffraction. This means the sound that goes over the top of the barrier. It this case this is 12 dB, so wether the material used is Colorbond with an Rw of 22 dB, timber with an Rw of 24 dB or even 250 mm thick concrete with a Rw of 54 dB you will still only get 12 dB reduction for a height of 1.8 metres.

Perhaps you should suggest that the relevant council members come on one of my two-day seminars I run for the EPA. The next one is on 19 and 20 March 2014 at the EPA laboratories, on the corner of Weeroona Road and Joseph Street, Lidcombe.

Contact:

Amiette Wakenshaw
Head EPA Training Unit | **NSW Environment Protection Authority** |
☎: (02) 9995 5520 | Mobile ☎: 0428 678 794 | 🖷: (02) 9995 5918 | 🖱:
amiette.wakenshaw@epa.nsw.gov.au

Best regards

Ken Scannell MSc MAAS MIOA

Noise and Sound Services
Specialists in Noise and Vibration Assessments, Control and Training

Spectrum House, 3, Cassandra Avenue, St Ives, NSW 2075
Tel: (02) 9449 6499.. Mob: 0411 648 153
E-mail noiseandsound@optusnet.com.au
A Member Firm of the Association of Australian Acoustical Consultants
ABN : 7277 134 9599. See our NEW Website: www.noiseandsound.com.au

---

From: Mathew Pryce
Sent: Monday, February 17, 2014 7:10 PM
To: Ken Scannell
Subject: RE: Acoustic Report for Greyhound establishment

Hi Ken,

I am having some arguments with council regarding the noise barrier material in the report you carried out for me. In the report it mentions that the either colourbond or wood would comply with the noise goals. However council are of the opinion colourbond would amplify the noise rather than reduce it. Can you please shed some further light on this subject. Do to site conditions (termites and bush fire threats) I am reluctant to install a wood noise barrier. Which material do you believe is best at mitigating noise? Is there a standard reduction in dB applied for colourbond and wood barriers? If they are more or less the same I would much rather install the colourbond.

Regards,

Matt

Condition 37 - Supporting Information

Sizing of AWTS Disposal Areas

If an AWTS proposal complies with Table 2 and Table 3, a detailed Site and Soil Assessment will not be required. However, a detailed Site and Soil Assessment will be required if:

- The proposed system does not comply with the buffer distances outlined in Table 2 in section B3.
- Smaller irrigation/disposal areas are being proposed then those provided in the following table.
- Slope of the land exceeds 20%.
- The property has an existing system and additional systems are proposed.
- The proposal is part of a subdivision application.
- Systems are proposed within identified high risk areas.

The following disposal area sizes can also be utilised when upgrading to an AWTS or improving an existing system.

Table 3. Sizing of AWTS Effluent Management Areas and Effluent Disposal Areas.

Sizing of AWTS Effluent Management Areas and Effluent Disposal Areas					
Unsewered Penrith Suburbs	**No. of Bedrooms**	**Surface and Sub-Surface Irrigation Areas (m2)**			
		Reticulated Water		Tank Water	
Sandy Soil Types		**EDA**	**EMA**	**EDA**	**EMA**
e.g. Agnes Banks - east of Castlereagh Road. Castlereagh - north of Devlin Road and east of Castlereagh Road.	**4 or less**	524	1048	408	815
	5	629	1258	489	978
	6	734	1467	571	1141
Clay Soil Types					
Most other areas	**4 or less**	420	833	327	648
	5	504	1000	392	778
	6	588	1167	457	907

Notes: *(1) The Effluent Disposal Area (EDA) is the primary disposal area for the system, this area is to be located within the overall Effluent Management Area (EMA). The EMA provides further area for nutrient management and a possible reserve EDA.*

(2) EDA's for sandy soil types is half the EMA.

(3) Figures are based on:

- *180 litres per person/day, and 140 litres per person/day (for tank water areas)*
- *One person per bedroom and two for a master bedroom*
- *TN output value of 25 mg/L and a Critical Loading Rate of 27 mg/m²/day*
- *TP output value of 12 mg/L*
- *P sorption capacity - 600,000 mg/m²/depth for clay soil types and 400,000 mg/m²/depth for sandy soil types*
- *Design irrigation rate of 15 mm/week for clay soil types and 35 mm/week for sandy soil types.*