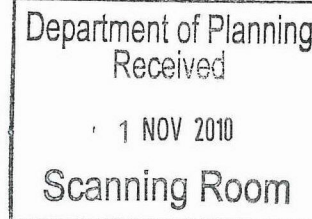


PHO M2799



The Director-General
Department of Planning
PO Box 39
SYDNEY NSW 2001



Attention: Michael Young

PACIFIC HIGHWAY UPGRADE – KEMPSEY TO EUNGAI PROJECT – REQUEST FOR ADDITIONAL INFORMATION

Dear Michael,

As requested in correspondence received from the Department of Planning on 27 October 2010, the Roads and Traffic Authority (RTA) provides the following information/clarification regarding the request to modify the conditions of approval.

1. Will the modified conditions apply to the whole project or restricted to the Kempsey Bypass (Stage 1) section of the project?

Whilst detail design has yet to be undertaken for Stage 2 of the Kempsey to Eungai project, it is anticipated that blasting would be required as a result of the road cuttings, particularly in the Barraganyatti area. As such, the modified condition would apply for the whole Kempsey to Eungai project.

2. The letter states that the modification would result in best practice management measures being able to be applied to the project – please demonstrate how this will be achieved/occur?

The reference to best practice management measures related to the combination of both modification requests, ie blasting and altering hours of construction. This was considered in terms of adopting more recent Part 3A approval or Environmental Protection Licence conditions than those provided in the original Kempsey to Eungai project approval.

Specifically to blasting, the allowance to exceed blasting criteria, provided a negotiated agreement was in place with a sensitive receiver, is considered an application of best practice management. Negotiated agreements are considered to be a best practice management measure, particularly where excessive noise impacts occur as described in the *Interim Construction Noise Guideline* (DECC 2009). As such, to adopt this process which may allow blasting criteria (which is set at human comfort levels) to be exceeded to the benefit of the broader community and road users, is considered to be an application of best management practice. It demonstrates an adoption of an industry accepted method to effectively achieve a project-specific objective of managing impacts on the community.

Roads and Traffic Authority

3. The letter states that negotiated agreements have been widely adopted on the Hume Highway duplication projects – have these agreements applied to blasting limits or apply to noise levels only? What process has RTA followed in making agreements with sensitive receivers?

The negotiated agreements adopted on the Hume Highway duplication projects were predominantly to do with increased noise levels and out of hours work. The process that the RTA followed was consistent with that presented in Chapter 8 '*Negotiated process*' of the *NSW Industrial Noise Policy* (EPA 2000). Individual sensitive receivers were consulted in instances where high noise impacts were predicted and/or out of hours work was required. The consultation explained the need for the activity, likely impacts and the long-term benefits of undertaking the activity (eg a saving in program and thus length of exposure to impacts). An agreement was then reached between the sensitive receiver and the contractor acting on behalf of the RTA to allow for the activity to proceed.

It is anticipated that a similar process would be adopted for negotiating agreements for the Kempsey to Eungai project. However, it would also be included that any structural damage that resulted from allowing the blast criteria to be exceeded would be rectified to the satisfaction of the property owner to the pre-condition level or similar.

4. The letter states KBA has undertaken community consultation for blasting – individual briefings and community information session. Was the matter of written agreements with individual landowners to allow exceedance of blasting limits raised/discussed at the landowner and community information session? What is the result of community consultation on this matter?

The potential for negotiated agreements have been discussed in individual briefings with landowners, targeted to those in close proximity to where blasting activities are currently being undertaken (Cut 3, approximately 750 m south of Crescent Head Road). These discussions have been very positive. The landowners understand that the exceedances potentially being requested would remain below that which would result in damage to structures but is greater than that recommended for human comfort levels. However, they appreciate the long-term benefits to amenity in allowing an exceedance.

Whilst the potential for negotiated agreements to allow for exceedances was not discussed at the community information session held in late September 2010, the feedback received was similarly positive. The community appreciated the information provided and the proactive approach KBA have implemented in managing the blasting program and engaging the community.

5. The following additional information on blasting agreements is required:
a) Number of blast locations

There are four road cuttings on the Kempsey Bypass that require blasting (refer to Attachment A).

- b) Number of sensitive receivers in each blast location
c) Distance of receivers from blast location and predicted compliance with blast criteria

The following table describes the number of sensitive receivers associated with each road cutting and the distances to the blast location.

Cut	Receiver	Approximate distance
1	627 Pacific Highway	200 m
1	600 Pacific Highway	50 m
2	497 Pacific Highway	190 m
2	487 Pacific Highway	120 m
2	477 Pacific Highway	90 m
2	471 Pacific Highway	130 m
2	465 Pacific Highway	200 m
2	27 Shannon Close	100 m
2	443 Pacific Highway	280 m
3	Trappaud Road	190 m
3	108 Crescent Head Road	280 m
3	19 Bingis Lane	190 m
3	124 Crescent Head Road	270 m
4	19 Bingis Lane	160 m
4	124 Crescent Head Road	250 m
4	144 Crescent Head Road	160 m
4	142 Crescent Head Road	170 m
4	2 Yabsleys Lane	250 m
4	151 Crescent Head Road	220 m
4	155 Crescent Head Road	220 m
4	159 Crescent Head Road	210 m

The predicted compliance with peak particle velocity from the blast is:

- Limit of 25 mm/s is 85 m.
- Limit of 10 mm/s is 160 m.
- Limit of 5 mm/s is 260 m.

As airblast overpressure is to some extent dependent on the meteorological conditions at the time of blasting, it can only be approximately predicted. However, based on above peak particle velocity predictions, the airblast overpressure would not exceed 125 dB(Lin Peak) for the limit of 25 mm/s.

d) Comparison of blasting criteria and predicted blast limits with agreements in place

Based on initial discussions with landowners at Cut 3, the predicted blast limits that would be negotiated across the project would be to never exceed 125 dB (Lin Peak) and 25 mm/s. It is noted that levels above these limits may result in damage to structures (Australian Standard AS 2187.2 – 2006). Notwithstanding, the blast limits would be dependent on the negotiation process described above and it would not be precluded for individual landowners to request a lower blast limit.

e) Number of blasts required to comply with blast criteria and number proposed if agreements in place

The following table describes the predicted number of blasts required to comply with blast criteria and number proposed if agreements in place.

Cut	No. of blasts for 5 mm/s	No. of blasts for 25 mm/s
1	10	7
2	30	18
3	52	30
4	15	8

As such, there is a potential to reduce the number of blasts from 107 to 63.

f) Blast monitoring program

All blasts are monitored electronically for airblast overpressure and peak particle velocity at the closest sensitive receivers. In addition, weather conditions are also recorded at the time of blast, including cloud cover and wind speed and direction. For recent blasts at Cut 3, monitoring has included five locations covering the sensitive receivers and the Main North Railway approximately 700 m to the south. Should negotiated agreements be able to be applied, monitoring at the closest sensitive receiver would still be undertaken to confirm that negotiated limits are not exceeded.

The instrumentation being used meets the requirements of Australian Standard AS 2187.2-2006. As such the monitoring program developed meets the licence conditions of the EPL for the Kempsey Bypass.

The results of the blasts will be presented within the six monthly compliance tracking report required by Condition of Approval 4.1 of the Kempsey to Eungai project.

6. What are the positive amenity impacts for the local community?

The benefits of allowing private agreements to be negotiated to the local community and road users would be a considerably shortened blasting program (up to three months). The positive amenity impacts associated with this would be a reduced exposure to potential noise and vibration impacts and a reduction in the disturbance with being required to be evacuated. In addition, as traffic would be temporarily delayed due to road closures, the shortened blasting program would thus result in fewer times that this would be required. Additionally, with a reduction of three months in the blasting program and the ability to run the construction of the project more efficiently (eg use of larger plant and equipment due to the ability to undertake larger blasts), the community would derive a long-term benefit from having the project completed earlier, thus reducing the exposure to construction impacts and allowing them to utilise the upgraded highway earlier than anticipated.

7. The agreements will need to apply to all sensitive receivers.

All sensitive receivers listed in the table above (in response to 5 b) and c)) would be consulted with in regards to a negotiated agreement. For all other locations, the existing criteria described in the project approval would be complied with (ie 5mm/s and 110 dB (Lin Peak).

Please do not hesitate to contact Andrew Cook (02 6560 2508) should you require any additional information or require clarification on any of the above.

Yours sincerely


 Robert (Bob) Higgins
 General Manager, Pacific Highway

29/10/10



Attachment A
Location of road cuttings
requiring blasting