

**Appearance before the Joint Select Committee on the Cross City Tunnel prepared
by Narelle Thirkettle 2 February 2006**

We would like to give one example of how the community has been let down by DIPNR, Dept of Health, DEC, the regulation process, and sadly the parliamentary process in relation to the CCT. Despite the hundreds of supposedly stringent Conditions of Approval, so often referred to by the proponent, regulator and other agencies, this is only one of many examples of how they can be ineffective.

The example relates to condition 250 which states "the tunnel ventilation system shall be designed, constructed and operated to avoid, to the greatest extent practical, tunnel air emissions from the portals. Portal emissions are not permitted except in the following circumstances". It goes on to outline emergencies, maintenance, break downs etc.

Portal emissions refer to pollution being let out of the tunnel entrances, which concentrates the pollution a lot more than when it is pushed out of the stack at a height, a bit like the difference between water coming out of a hose as opposed to a sprinkler.

In this one example we can demonstrate-

- DIPNR and its advisors at DEC and DOH failed us in framing the conditions of Approval because-
 - a) there is no penalty for portal emissions, should they occur, or a requirement for the public to know it has occurred.
 - b) there is no requirement for pollution monitoring equipment at each portal
 - c) there is no requirement for the audit of portal emission or instack monitoring data
 - d) there is no requirement to publish these results on the website, let alone in real time
- Dept of Planning and DEC are still failing us by being prepared to accept only unaudited "portal pressure readings" after the fact, as the sole health protection
- The regulation process is flawed in that DIPNR has no power to instigate and enforce any changes required if not thought of at the time of framing the conditions of approvals
- The parliamentary process accepted misleading information provided by the CEO of the RTA which was accepted without challenge

Each of the tunnels have large numbers of people living and/ or working near the unfiltered emission stack, and/or the many portals. In the case of the CCT, we have what the planning documents refer to as "sensitive receptors", that is humans living and working in Darling Harbour and the Western CBD, who are subjected to the effects of both the unfiltered stack and of the portals.

From the outset at public meetings major concerns continually raised were-

- a) the effect upon local air quality and health from an unfiltered stack
- b) the effect upon local air quality and health from portal emissions

We were continually reassured that this would not be a problem because in answer to a) the emissions would be released at a high level under pressure and b) simply would not occur because all emissions would go up the stack.

(Note: this advice still continues with RTA representative making similar statements about the 292 stringent conditions in place to protect us and to ensure compliance at the Lord Mayors forum in Ultimo 18 July 2005. He also denied the occurrence of the M5 East portal emissions as now detailed in draft DUAP audit report 28/10/04))

1) 10 Dec 2005, Paul Forward, CEO of the RTA, informed the General Purpose Standing Committee No 4, when asked if monitoring results of portal emissions will be made available publicly, he replied "We have put a number of monitoring stations that we believe will pick up any impact on the ambient air levels. The results of those monitoring stations will be made public. He went on to say that "the reading sites are very close to the portals anyway."

Note: The ambient monitoring stations as required by conditions 263 and 264 are required to be "associated" with the ventilation stack so are therefore not positioned to monitor portals near Darling Harbour. There are some 6 six portals for the CCT located up to 4 kilometres away from the monitoring stations. (eg. Rushcutters Bay)

Note: In privileged document dated 11 May 2005, Holmes Air Sciences supports Dr Manins conclusion "Emissions from the eastern portals would not be detectable at either of the monitoring stations. We agree with these conclusions."

It would seem that misleading evidence was given by the CEO, and this went unchallenged, because MPS can't be expected to be across all the details, and the devil is always in the detail!

2) 10 Dec 2005, Paul Forward further explained to the committee "we are not a regulator, we are a road provider. DIPNR is the regulator. It takes advice from the Department of Health and the Department of Environment and Conservation. If the regulator asks us to do something, we will do it."

3) In March 2005 a draft DUAP M5 East audit report, 28/10/04, obtained under parliamentary call for papers, revealed in the executive summary, "portal emissions have been a relatively common occurrence, and the audit has identified 8 examples of where portal emissions have been inconsistent with the approval and with the proponents design commitment to avoid portal emissions as far as is practical. "

"The proponent's monitoring or ambient air quality impacts from portal emissions has been inadequate, inhibiting the proponent's ability to assure compliance with ambient air quality goals."

Note:- this information, was coincidentally made public the date prior to the delivery of documents to the parliamentary clerks office. The public would not have been told, if the call for papers had not been made.

4) Community representatives continually raised this issue at AQCCC seeking RTA, CCM or DIPNR to install monitoring equipment at all CCT portals to publish real time results on the website. Such publication is necessary in order to enable the public to be able to make informed lifestyle conditions, and protect themselves, for example whether to sleep with windows open. We were informed that as this is not a Condition of Approval requirement, DIPNR cannot now impose it. Despite Paul Forward's comments to the standing committee no 4 discussed earlier). Similarly the RTA would not agree because it was not in the Conditions of Approval. Community representatives jointly wrote to all major CCM shareholders and received a similar response.

5) AQCCC community representatives formally requested mediation under the AQCCC charter with the RTA and CCM to attempt to resolve the issue. Both the RTA and CCM declined to participate stating that they cannot mediate because they have no room to negotiate. Yet the documents released to parliament show that there are literally hundreds of changes that RTA and CCM have negotiated on, without any public knowledge or input when it has suited them.

6) AQCCC community reps sought a meeting with the DG DIPNR (Jennifer Westacott), and instead were granted a meeting with Sam Haddad. and Mark Hather

7) This meeting took place with all CCT AQCCC community representatives present on the 27 April 2005.

8) Mark Hather 6 may 2005 and Sam Haddad, 30/5/05, wrote to the RTA seeking " a) real time publication of portal pressure readings b) monthly reporting to AQCCC of instack data against limits, c) inclusion of portal and instack data within the audit process under COA 278.

9) Sam Haddad corresponded with community reps, 27/5/05, 28/6/05 and 22/9/05 (ours 6/5/05, 22/6/05 and 19/9/05) DIPNR had agreed at least the measurement of pressure at portals should be made public on the

website, real time. They also asked that instack monitoring results be added to the web and that both these, and portal pressures be included in the portal process.

Note:- We note Page 21 of the uncorrected transcript from your committee, 7/12/05, Lisa Corbyn emphasises "active public reporting process on air quality".

10) Meanwhile, Lord Mayor Clover Moore had met with Jennifer Westacott on a similar issue, DIPNR responded with letter, early June, to COS General Manager, Peter Seamer, with a similar response.

11) At 26 July AQCCC meeting, we were informed that the RTA had responded to DIPNR stating that they would not publish portal emission data on the website. They proposed to provide AQCCC with "operational information on portal emissions, monthly. This has since been interpreted to be a simple statement to the AQCCC that portal emissions have/ have not occurred during the month.

Note:- This simple statement is unacceptable, especially in view of the repeated denials of portal emissions in the M5 East, and does not provide any evidence.

Note: The AQCCC only has a life of 3 years, during which time we need to ensure that all relevant inform is accurately, reliably and understandably recorded on a user friendly website

Note-Further, the RTA response ignores the request to publish instack data and ignores the auditing issue

Note- the uncorrected transcript from your committee 7 December 2005, notes that whilst Sam Haddad seemed to recall having instigated discussion with the RTA on these matters, he took on notice the question on outcomes

12) December 2005 AQCCC was advised that first legal portal emissions had occurred in the cross city tunnel between 9:33 and 10:30am of the 23 November 2005, due to a small vehicle fire, this necessitated portal emissions at Bourke St, as well as both the Eastern and Western main tunnels. In addition the Eastern Distributor was required to reverse smoke out through louvers at the open space between CCT and Eastern Distributor.

13) Despite assurances from day 1, and the tenuous nature of the regulatory protection we are horrified to see recent media reports (Daily Telegraph 24 January) that the RTA and its contractors (who also work on the CCT) do not maintain or check their pollution monitors, that the equipment regularly breaks down, and a report only last week suggesting that Minister Sartor is considering allowing portal emissions as a normal part of operating Sydney's road tunnels.

So instead of a supposedly stringent condition protecting residents and workers, we have:

- No way of knowing that monitoring is actually happening
- No way of finding out in real time what the impacts are so we can protect ourselves
- No knowledge of or penalty for breaches
- Refusal of the RTA and the operator to address the issue despite requests by the community, the council and directives by DIPNR
- DIPNR seemingly powerless to enforce compliance
- Assurances by the DG of DEC of 'active public reporting process on air quality', the CEO of the RTA of doing what the regulator, DIPNR asks, and deathly silence from NSW Health
- Evidence of the system regularly breaking down in the M5 East and RTA/operator denials of this happening
- Proposal by Min Sartor and the RTA for the conditions of approval to be watered down to allow for regular portal emissions in the M5 East.

That is the situation with one condition of approval. Multiply that by 292, and you can see the extent of the problem. It is effectively self-regulation that would not be allowed of any other enterprise, factory or mine, and that leaves local communities anxious, unprotected, angry and wondering who is really protecting who here?

249. Any change to the location and/or height of the ventilation stack as a result of Condition 248 shall be approved by the Director-General following consultation with the EPA and DoH and shall require the Proponent to undertake a comprehensive air quality assessment to the requirements of the Director-General in consultation with the EPA, to demonstrate that the predicted air quality impacts are no greater at sensitive receptors than those predicted for the proposed location shown on Figure 5.1 of the Director-Generals Report (dated September 2001). The assessment must be independently verified to the satisfaction of the Director-General.
250. The tunnel ventilation system shall be designed, constructed and operated to avoid, to the greatest extent practical, tunnel air emissions from the portals. Portal emissions are not permitted except in the following circumstances:
- a) emergency situations and/or where emergency personnel are involved,
 - b) accidents and genuine breakdowns inside the tunnel;
 - c) maintenance which involves maintenance of the ventilation system and where it can be shown that the in-tunnel CO requirements specified in Tables 5 and 6 cannot be met; and
 - d) any other situation approved by the Director-General in consultation with the DoH, EPA and the AQCCC.
- If portal emissions are required as a result of any of the above events occurring, all practicable measures shall be taken to minimise air quality impacts and the period of portal emissions shall be limited to that necessary until normal traffic operations resume.
251. The tunnel shall be designed and constructed so as to make provision for future installation of an appropriate pollution control system to treat air emissions from the tunnel as may be required by the Director-General. The Proponent shall provide evidence to this effect during the design and construction phases to the satisfaction of the Director-General.
252. All plant and equipment associated with the ventilation stack including possible pollution control systems shall be located below the existing surface level unless incorporated into an existing, proposed or newly constructed building as identified in Condition of Approval No. 248 or otherwise agreed by the Director-General following consultation with the relevant local Councils.
253. The Proponent shall install stack emission sampling points and associated safe access thereto, during construction of the ventilation stack. The sampling points shall be designed and located in accordance with TM-1 of the EPA's Approved Methods for the Sampling and Analysis of Air Pollutants in NSW, 2001.
254. The Proponent shall develop a Pre-commissioning Tunnel Ventilation, Incident Response and Traffic Management Systems Integration Protocol (TMSIP) to the satisfaction of the Director-General and in consultation with the RTA's Traffic Management Centre. The TMSIP must be reviewed by an appropriate experienced person/firm to confirm to the satisfaction of the Director-General, before the tunnel is open to traffic, that the systems would operate together to ensure that the primary objective of satisfying Conditions 258 and 259 is achieved. The TMSIP should include a pre-commissioning procedure to be completed before the tunnel is opened to traffic.

Total Solar Radiation @ 10 m	W/m ²	1-hour	Continuous	AM-4
Other	Units of measurement	Averaging Period	Frequency	Method ¹
Siting ³	NA	NA	NA	AM-1 & AM-4

Note: ¹NSW EPA, 2001, Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales
² Standards Australia, 2001, AS3580.9.3-2001, Methods for the Sampling and Analysis of Ambient Air - Determination of Suspended Particulate Matter - PM₁₀ Continuous Direct Mass Method using Tapered Element Oscillating Microbalance Analyser.
³ Location for meteorological monitoring at IMAX station to be at the top of the building or otherwise approved by the Director-General.
⁴ Appropriately modified to include size selective inlet for PM_{2.5} or as otherwise approved by the Director-General.

♦ Community Based Monitoring Station

263. The Proponent shall establish one (1) community based monitoring station (CBMS) associated with the ventilation stack to monitor ambient air quality consistent with the requirements in Table 7, the locations to be agreed to by the AQCCC, at least two (2) years prior to the opening of the Project to traffic. The Proponent shall meet all operating costs associated with the stations.

The CBMS shall be operated independently of the Proponent and all other authorities and its establishment and operation shall be overseen by the AQCCC on behalf of the community. The establishment and operation of the stations is to be undertaken in accordance with recognised Australian standards and undertaken by a consultant accredited by NATA for this purpose. The quality of the monitoring results shall be assured through a NATA accredited process prior to the data being considered as a basis for compliance/auditing purposes.

Monitoring results shall be made publicly available and shall be subject to audit at 6 monthly intervals or at a longer interval if approved by the Director-General by an independent auditor agreed by the AQCCC, whose report shall be directly provided to the Proponent and the AQCCC.

The Proponent, following consultation with the AQCCC, shall review the need for the continuation of the CBMS after a period of three (3) years after the Project is opened to traffic. Any recommendation to close the CBMS shall require the approval of the Director-General in consultation with the EPA. The Director-General shall approve the independent auditor.

♦ Operation Stage Monitoring Stations - Residents in High Rise Apartments (Elevated Receptors)

264. Subject to the agreement of the owners and occupiers, the Proponent shall install two (2) monitoring station at the top or most affected point at the nearest residential high rise apartment buildings to the ventilation stack and unless otherwise agreed by the Director-General following consultation with the EPA, in accordance with Condition of Approval No. 262 to monitor for pollutants identified in Table 7. Monitoring shall be undertaken over a period of at least 12 months from opening of the Project to traffic to correlate and verify impacts with the air quality modelling predictions. The results of the monitoring program shall be made available to the Body Corporate and owners of the apartments as applicable and the AQCCC.

♦ Operation Stage Monitoring Stations - Ground level Receptors

265. The Proponent shall install two (2) ground level monitoring stations (including the CBMS), in accordance with Condition 262 to assess ambient ground level impacts. The location of the stations and pollutants to be monitored shall be developed in consultation with the AQCCC and be approved by the Director-General and shall include the pollutants specified in Table 7 unless otherwise agreed by the Director-General in consultation with the EPA. The location of the ground level monitoring stations shall meet the siting requirements for a background ambient monitoring station in accordance with AS2922-1987.

The monitoring reports must be made available at six (6) monthly intervals from the date the Project commences operation. The reports must be made available to the Director-General, the EPA, relevant Council(s) and the AQCCC and must be made publicly available.

Summary

- 1.1 Emissions from the western portals of CCT, if sufficiently large, may be measurable at the Tumbalong monitoring station but not the Mary Ann Park monitoring station.
- 1.2 Emissions from the eastern portals of CCT would not be discernable at the monitoring stations due to the distances involved.
- 2.1 RTA-sponsored work in the M5 tunnel demonstrates that the PIARC turbidity conversion factor underestimates particle concentrations for a set visibility by a factor of over two times in that tunnel. This has led to an under-prediction of particle emissions from the Vent by a smaller factor only because diesel vehicle counts in the tunnel are substantially lower than designed for.
- 2.2 The consequence for the Cross City Tunnel will also be an under-prediction of particle emissions from the Vent.
3. Plume rise is under-predicted in the various air quality impact assessments for CCT because account has not been taken of the excess temperature of emissions. The beneficial resulting plume rise will reduce ground level concentrations.
4. Over the next ten years air pollution emissions from vehicles in Sydney will fall substantially, as the benefits from more stringent emission controls, better fuel quality and better traffic management all go to reducing the fleet average emissions from motor vehicles. This observation takes into account the growth in vehicle usage, particularly for light commercial vehicles and trucks.
- 5.1 Fleet-average vehicle emission factors used by the designers for CCT construction are: for CO perhaps slightly too low, but much lower than past unrealistically high values used for RTA-sponsored designs; for NOx the factors used are much more realistic than the substantial overestimates of past designs; for PM10 the emission factors follow the past trend of being too low, by as much as a factor of two. The consequence will be that these under-estimates will lead to higher ambient pollution levels of PM10 than designed for.
- 5.2 Traffic levels in the CCT will, if the M5 East is a guide, grow much more rapidly than planned. Being a toll road, however, the rate of growth will be lower.

The final traffic projections by the CCT designers are substantially different to those used in RTA-sponsored designs. Morning peak traffic in the Tunnel is predicted to be almost twice earlier design levels. Thus pollution emissions, all else being equal, would be twice as high.

Into the rest of the morning and afternoon, predicted high traffic levels are much the same as in past designs. But these levels are predicted to occur for many hours more than in past designs—so much so that daily traffic volume is expected to be about twice RTA-sponsored designs. The consequence is that daily average and annual average pollution concentrations will be substantially higher, all else being equal. Thus 24-hour levels of PM10 due to the CCT will be higher and chronic exposure to toxic pollutants also will be higher.

It is very important that the Report from CCM to the Director General in satisfaction of Condition of Approval 271 be carefully studied. This is the ONLY Report that does an Environmental Impact Assessment of the Cross City Tunnel in the form that is actually being constructed.

GENERAL PURPOSE STANDING COMMITTEE No. 4

Thursday 10 February 2005

Examination of proposed expenditure for the portfolio area

ROADS

The Committee met at 9.30 a.m.

MEMBERS

The Hon. J. A. Gardiner (Chair)

The Hon. J. C. Burnswoods
The Hon. K. F. Griffin
Ms S. P. Hale

The Hon. D. T. Harwin
The Hon. D. E. Oldfield
The Hon. E. M. Roozendaal

PRESENT

Roads and Traffic Authority
P. J. Forward, *Chief Executive Officer*

unregistered vehicles being involved in accidents. Can you advise the Committee how many unlicensed drivers the RTA estimates are driving unregistered vehicles?

Mr FORWARD: Our surveys suggest that it is about 1 per cent to 2 per cent of drivers.

CHAIR: What does that translate to in terms of the number of drivers in New South Wales?

Mr FORWARD: It is probably about 40,000. It should be remembered that more than four million people drive in New South Wales. There are about 4.2 million licence holders and in excess of four million registered vehicles.

CHAIR: That is a fairly sobering statistic.

Ms SYLVIA HALE: I refer to the cross-city tunnel. Consent condition No. 269 for the tunnel requires public access to hourly, updated real-time ambient monitoring from ground-level monitoring locations, in-tunnel carbon monoxide and relevant meteorological data. Given that people live and work next to the eastern and western portals of the tunnels, ~~will monitoring results of portal emissions also be made available publicly?~~

Mr FORWARD: ~~We have put in a number of monitoring stations that we believe will pick up any impact on the ambient air levels.~~ The results of those monitoring stations will be made public.

Ms SYLVIA HALE: Yes, but given the history of the M5 East, where portal emissions were directly prohibited, and that under the conditions for consent for the cross-city those portal emissions must be avoided, will the RTA make public readings of the emissions at the portal entrances and exits?

Mr FORWARD: We will make public readings from the monitoring stations. If additional monitoring stations are required we will put them in.

Ms SYLVIA HALE: Are you saying that the RTA will be prepared to install monitoring stations at the portals?

Mr FORWARD: Let us wait and see where they might be required. If they were required there, we would put them in.

Ms SYLVIA HALE: How will people know whether they are required if readings are not available from the portals?

Mr FORWARD: ~~The reading sites are very close to the portals anyway.~~ If there were any suggestion of concern, additional monitoring could be put in place.

Ms SYLVIA HALE: The readings people are getting from the M5 East are causing very real concerns about health effects of emissions from the portals.

Mr FORWARD: I do not accept that.

Ms SYLVIA HALE: So, you will be monitoring what happens at those portals to keep a check on whether stations will be established.

Mr FORWARD: No, I said that we will be monitoring at the monitoring stations. If there is any evidence to suggest we need to do more monitoring, we will do more monitoring. If there is no evidence to suggest that, we will not do it unless DIPNR, which is the consent authority, asks us to do more.

Ms SYLVIA HALE: Will you make that evidence public?

Mr FORWARD: If they ask us to do it we will.

Ms SYLVIA HALE: But you will not do that voluntarily; you will make that evidence public only if another government department asks you to do so.

Mr FORWARD: We are not a regulator; we are a road provider. DIPNR is the regulator. It takes advice from the Department of Health and the Department of Environment and Conservation. If the regulator asks us to do something, we will do it. I will not do things that the regulator does not require us to do that are nice to do but expensive. If they are required, we will do them.

Ms SYLVIA HALE: However, you are operating or constructing a facility that could have very immediate and grave impacts upon the health of people living in the vicinity.

Mr FORWARD: I do not accept that.

Ms SYLVIA HALE: Do you not agree that you have some sort of public responsibility, not only an obligation to stick to the strict letter of the law as you interpret it?

Mr FORWARD: I do not accept your initial premise. This project will have a major positive effect on air quality through the city. We are eliminating traffic going through the city and stopping at numerous sets of traffic lights. We all know that vehicles stopping at traffic lights cause the pollutants. Avoiding that will in fact improve air quality in the city. I do not accept the honourable member's initial premise that it will be a health problem. It will be a major benefit to Sydney's health.

Ms SYLVIA HALE: An interagency working party was established in September 2003 because of the quality of the emissions from the M5 East. One of the purposes of that working party was to agree on warning signs or literature to ensure the safety of drivers in the M5 East and to investigate the need for better in-tunnel air quality standards, particularly nitrogen dioxide emissions. What decisions or outcomes have resulted from that working party into the tunnel management and regulations?

Mr FORWARD: We are working with a number of agencies to look at standards for NO₂. My understanding is that there are no standards throughout the world for NO₂. This is path-breaking research. Once again, this is not a simple matter. We are looking at what is happening around the world and trying to get an understanding of the impact of NO₂. Work is going on in that area. We are working on a brochure for the cross-city tunnel that will give people commonsense advice about driving through tunnels.

Ms SYLVIA HALE: Why are there still no warnings or information provided to drivers entering the M5 East tunnel about the potential ill effects on their health?

Mr FORWARD: I do not accept that there is an ill effect; I do not accept the honourable member's basic premise. We meet the standards, and if we did not, the Department of Health, as the regulator, would have some concerns. No motorist has been exposed to any adverse impacts after travelling through the M5 East tunnel.

Ms SYLVIA HALE: In December 2001, your department entered into a legal agreement with the residents against polluting stacks, known as the Tapered Element Oscillating Microbalance Committee. That committee included representatives from the RTA, the resident group and the Department of Environment and Conservation. Part of its brief was to investigate and agree on the need for correction factors related to the monitoring of pollution levels. How often has that committee met?

Mr FORWARD: I do not have that detail with me. I know that our people have been involved and they have briefed me on it, but I cannot provide the details of meetings.

Ms SYLVIA HALE: Will you provide that information on notice?

Mr FORWARD: Is the question how many times that committee has met?

Ms SYLVIA HALE: Yes. I understand that other members of the committee have been frustrated because the RTA keeps cancelling meetings. How many meetings of this committee has the RTA cancelled or postponed?

Mr FORWARD: Once again, I will take that question on notice.

Ms SYLVIA HALE: Can you also confirm or otherwise that on one occasion the RTA claimed that a suitable time could not be found for a meeting over a five-month period?

Mr FORWARD: I will check that.

Ms SYLVIA HALE: If the RTA was unable to convene a meeting of the committee during that five months, do you think that is an adequate discharge of its responsibilities and its adherence to a legal agreement with the resident group?

Mr FORWARD: That is a hypothetical question. I do not know whether it is true. I will investigate it first.

Ms SYLVIA HALE: You have been briefed on it by J. Stricker, who sent you a briefing note about it on 8 February 2004. There seems to have been some concern for quite a time. I refer again to the cross-city tunnel. Condition No 251 states that the tunnel should be designed and constructed so as to make provision for future installation of an appropriate pollution control system to treat air emissions. It also states that the proponent—namely the RTA—shall provide evidence to this effect during the design and construction phases to the satisfaction of the director-general. Please outline what evidence has been provided to you during the design and construction phase.

Mr FORWARD: At the western end of the project—the connection between the tunnel and the ventilation system—a cavity space has been provided in which pollution control equipment could be installed if required.

Ms SYLVIA HALE: Are you satisfied that the provisions that have been made are adequate?

Mr FORWARD: Yes.

Ms SYLVIA HALE: The design of the tunnel has led to the demolition of a direct walkway from Fig Street, Ultimo, into the city. I understand that it has been replaced with several indirect walkways that run through Darling Harbour and that the journey is now longer, less direct and takes more time. Given that more residential development is planned for this area and that Pyrmont already has one of the highest proportions of residents who walk to work, will the RTA be taking any steps to reinstate that direct walkway?

Mr FORWARD: We have had a lot of discussion with the Sydney Harbour Foreshore Authority. I believe that the new route from that area is far more pleasant, quieter, safer and enjoyable.

Ms SYLVIA HALE: That may be fine unless one is running late for working and wants to get there as quickly as possible.

Mr FORWARD: It takes pedestrians away from the motorway traffic through a very pleasant environment in Darling Harbour. It is safer because there is video surveillance through the area. It is a far more enjoyable walk. It might add one or two minutes to the walking time, but I would have thought it would be a far more enjoyable route. That was the general position that the Sydney Harbour Foreshore Authority discussed with the RTA. We reached a very amicable arrangement for the walkway.

Ms SYLVIA HALE: I am sure you can reach amicable arrangements with other authorities. However, it is a question of what the residents are saying, and they are finding it extraordinarily inconvenient that this direct walkway has been removed. Do you not think it is time to talk with them to ensure their needs are met?

Mr FORWARD: The walkway would be an add-on to the viaduct through Darling Harbour. If I had a choice of walking along a busy freeway or through a very scenic area of Sydney, I know which way I would rather go. Many of the residents are delighted with that approach.

Ms SYLVIA HALE: Are you saying that you will not reinstate the walkway?

Mr FORWARD: We are not required to reinstate it.

Ms SYLVIA HALE: No, but will you?

Mr FORWARD: I do not see any need to do so. People do not like change and there has been a change in arrangements. I believe that residents will grow to love the new walkway through Darling Harbour.

Ms SYLVIA HALE: I turn to the question of compulsory land acquisition. I understand that an increasing number of claims against the RTA in the Land and Environment Court relating to just compensation for compulsory acquisition of land for the motorways have been successful. How many cases and what compensation has been awarded by the court or agreed as part of a settlement following or as a result of litigation under the Land Acquisition (Just Terms Compensation) Act against the RTA?

Mr FORWARD: I will take that on notice. It is a very complex question.

Ms SYLVIA HALE: What were the legal costs of unsuccessfully defending the RTA's offers of inadequate compensation in respect to compulsory acquisition during this period, including indemnity costs and costs for any matters ultimately settled out of court?

Mr FORWARD: I will take that on notice as well.

Ms SYLVIA HALE: What is the dollar value of costs associated with compulsory acquisition costs and legal costs to defend such offers, successful or otherwise, that have been passed on to tollway operators?

Mr FORWARD: Sorry, you will have to explain that last question.

Ms SYLVIA HALE: What is the dollar value that has been passed on to tollway operators of costs associated with compulsory acquisition and legal costs to defend such offers of compensation that have been made?

Mr FORWARD: Could you explain that again? The costs that have been passed on to toll road companies?

Ms SYLVIA HALE: How much of the costs associated with compulsory acquisition have been picked up by tollway operators? So the costs associated with the compulsory acquisition of land have moved from the department on to the tollway operators.

Mr FORWARD: The contractual arrangements between the RTA and the motorway companies are that the RTA and the Government actually acquires the land. We are responsible for all land acquisition.

Ms SYLVIA HALE: There were no costs for land acquisition or compensation costs passed on to tollway operators?

Mr FORWARD: That is correct.

Ms SYLVIA HALE: The Government bears the entire costs?

Mr FORWARD: We always have bore the cost of land acquisition. It is government land at the end of the day. When the concession is handed back the toll road companies do not retain the ownership of the corridor. The Government has ownership of the corridor.

MUNRO John F

From: Thomas, Nick [nthomas@claytonutz.com]
 Sent: Wednesday, 11 May 2005 9:15 AM
 To: MUNRO John F
 Cc: Poulos, Andrew
 Subject: CCT (confidential and privileged)
 Importance: High
 Sensitivity: Confidential

Dear John

We attach, for your consideration, a copy of a report from Kerry Holmes, which we have just received.

Kind regards

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<<CCT_Manins_report.doc>>

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11 May, 2005

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SYDNEY NSW 2000

Dear Andrew,

In response to your email of 21 February, we are pleased to provide a review of the letter report prepared by Dr Peter Manins of CSIRO Atmospheric Research dated 19 February 2005. The report has been prepared by Dr Manins in his capacity as an air quality resource to the AQCCC for the Cross City Tunnel. It covers a range of issues relating to air emissions from the CCT ventilation system.

The report opens with a summary of each section of the report. The report discusses the following issues:

- ***Detecting portal emissions***
- ***Turbidity and particle concentrations in the Cross City Tunnel***
- ***Plume rise and CCT vent***
- ***Urban traffic and vehicle emission projections***
- ***Emission projection for CCT***
 - Vehicle emission factors***
 - Traffic estimates for CCT***

I will comment on the conclusion from each section

Detecting portal emissions

Dr Manins concludes that emissions from the western portal, if sufficiently large may be measurable at the Tumbalong station but not at the Mary Ann Park station. Emissions from the eastern portals would not be detectable at either of the monitoring stations. We agree with these conclusions.

Turbidity and particle concentrations in the Cross City Tunnel

Dr Manins has drawn some conclusions based on particle concentration measurements made in the M5 East tunnel which have implications for other tunnels in Sydney. In summary, he notes that the relationship between turbidity and PM₁₀ concentrations in the M5 East tunnel is not consistent with PIARC. Specifically the conversion factor in the M5 East tunnel is

CCT_MANINS_REPORT.DOC 1

$$1000 \mu\text{g}/\text{m}^3 = 0.00025 \text{ m}^{-1}$$

compared to the PIARC factor which is:

$$1000 \mu\text{g}/\text{m}^3 = 0.00045 \text{ m}^{-1}$$

Dr Manins argues that the PIARC factor underestimates the particle concentrations by a factor of approximately two, and that if the ventilation system for other tunnels such as the CCT are designed according to PIARC, this will result in higher concentrations in the tunnel than designed for. Dr Manins makes the comment that the underprediction of particle emissions from the vent is made smaller in the case of the M5 East only because diesel volumes in the tunnel are substantially lower than designed for. In fact, the estimated PM₁₀ emissions in the M5 East tunnel under congested conditions were 52.7 kg/day, slightly higher than the current emissions of approximately 51 kg/day.

We note also that in a recent paper at the CASANZ conference in Hobart, Dr Mark Hibberd of CSIRO presented a paper with a related theme, that is that the PM₁₀ emissions from the M5 East stack were higher than predicted by current emission factors.

The PIARC 2004 document provides useful information on the relationship between turbidity and particle concentration. The relationship is dependent on the type of particle. Diesel dust which consists of smaller particles is much more efficient at light scattering than road dust. The particulate matter in a tunnel environment will be a combination of fine diesel particles and coarser road dust and the PIARC correlation coefficient assumes a mixture of the two. It may well be the case that the M5 East tunnel is unusual in that it has a higher proportion of coarse particles, possibly not from diesel exhaust but from surface dust. This is supported by measurement of total vent emissions where the proportion of PM_{2.5} in PM₁₀ was approximately 35%. If all PM₁₀ were diesel exhaust this proportion would be expected to be closer to 100%.

This is an important issue. Before the information from the M5 East is used to recalculate emissions from the CCT, there needs to be much more confidence that the emissions are predominantly diesel exhaust. Further analysis of size distribution, and chemical and elemental composition could assist with this.

Plume rise and CCT vent

Dr Manins note that the plume rise is under-predicted in the various impact assessments undertaken for the CCT. We agree that is the case and that this results in an over-prediction ground level. As the exact temperature differential will not be known until the tunnel is operational, it is appropriate to err on the side of conservatism.

Urban traffic and vehicle emission projections

This deals with urban fleet emissions in Sydney and refers to information from the BTRE 2003 and a study by Coffey Geoscience (2003). These show that estimated emissions per vehicle are expected to decrease strongly over the next 15 years for all pollutants except VOCs. Dr Manins concludes that the vehicle emissions in Sydney will fall over the next ten years, despite the growth in traffic. We agree with this.

Emission projection for CCT

Vehicle emission factors

This section discusses emission factors and presents some quite critical comments on the way in which emissions have been calculated for the M5 East and the Cross City Tunnel both in the EIS stage and the design stage. The basic claim is that the EISs have exaggerated the CO emission factors and therefore overestimated the emission of CO and through the use of the PIARC methodology have underestimated the emission of PM₁₀. The arguments he presents are incomplete and he does not go back to the original work to explain why these differences arise. In fact it was a requirement of the regulators that the CO levels in the CCT be assessed very conservatively. Further, the M5 East PM₁₀ concentrations are open to various interpretations and as discussed above require further investigations.

Traffic estimates for CCT

This section deals with the projected and observed traffic in the M5 East and the various projections of traffic for the Cross City Tunnel. The point made by Dr Manins is that the traffic volumes have generally, in the real world, increased faster than the projections and in the case of the M5 East, that the percentage of estimated heavy duty vehicles was much lower than the actual amounts. The projections for the Cross City Tunnel have not yet been tested and so all data remains speculative. We do not have any special expertise to comment on the assessment in this section except to note that the arguments put forward appear to be reasonable but nevertheless speculative.

There are however implications for the air quality impacts for the CCT, in that if peak hour is extended, the average pollution levels may be higher, all else being equal. Again this is speculative, and is not the experience on the M5 East, where there has been no readily discernible change in air quality since the tunnel opened, despite the higher than predicted usage of the tunnel.

Further report on CCT modelling

We have received a letter further report from you undertaken by Dr Manins regarding modelling for MCoA 271. We have not assessed this in detail yet but have some preliminary comments

- ***Dr Manins again raises issues related to plume rise and particle emissions from M5 East which he considers should be incorporated into the modelling. These are still speculative/unresolved***
- ***There is an expectation on the part of the regulators that there will at least be an "apples with apples" comparison of the EIS/approved project assessment and the new design. Therefore the use of the original model and meteorological data is appropriate.***

I have been asked to attend a presentation of the modelling report next week. I will provide more comments when I have had an opportunity for further review.

Yours faithfully,
Holmes Air Sciences

Kerry Holmes PhD
Environmental Chemist

GENERAL PURPOSE STANDING COMMITTEE No. 4

Thursday 10 February 2005

Examination of proposed expenditure for the portfolio area

ROADS

The Committee met at 9.30 a.m.

MEMBERS

The Hon. J. A. Gardiner (Chair)

The Hon. J. C. Burnswoods
The Hon. K. F. Griffin
Ms S. P. Hale

The Hon. D. T. Harwin
The Hon. D. E. Oldfield
The Hon. E. M. Roozendaal

PRESENT

Roads and Traffic Authority
P. J. Forward, *Chief Executive Officer*

unregistered vehicles being involved in accidents. Can you advise the Committee how many unlicensed drivers the RTA estimates are driving unregistered vehicles?

Mr FORWARD: Our surveys suggest that it is about 1 per cent to 2 per cent of drivers.

CHAIR: What does that translate to in terms of the number of drivers in New South Wales?

Mr FORWARD: It is probably about 40,000. It should be remembered that more than four million people drive in New South Wales. There are about 4.2 million licence holders and in excess of four million registered vehicles.

CHAIR: That is a fairly sobering statistic.

Ms SYLVIA HALE: I refer to the cross-city tunnel. Consent condition No. 269 for the tunnel requires public access to hourly, updated real-time ambient monitoring from ground-level monitoring locations, in-tunnel carbon monoxide and relevant meteorological data. Given that people live and work next to the eastern and western portals of the tunnels, will monitoring results of portal emissions also be made available publicly?

Mr FORWARD: We have put in a number of monitoring stations that we believe will pick up any impact on the ambient air levels. The results of those monitoring stations will be made public.

Ms SYLVIA HALE: Yes, but given the history of the M5 East, where portal emissions were directly prohibited, and that under the conditions for consent for the cross-city those portal emissions must be avoided, will the RTA make public readings of the emissions at the portal entrances and exits?

Mr FORWARD: We will make public readings from the monitoring stations. If additional monitoring stations are required we will put them in.

Ms SYLVIA HALE: Are you saying that the RTA will be prepared to install monitoring stations at the portals?

Mr FORWARD: Let us wait and see where they might be required. If they were required there, we would put them in.

Ms SYLVIA HALE: How will people know whether they are required if readings are not available from the portals?

Mr FORWARD: The reading sites are very close to the portals anyway. If there were any suggestion of concern, additional monitoring could be put in place.

Ms SYLVIA HALE: The readings people are getting from the M5 East are causing very real concerns about health effects of emissions from the portals.

Mr FORWARD: I do not accept that.

Ms SYLVIA HALE: So, you will be monitoring what happens at those portals to keep a check on whether stations will be established.

Mr FORWARD: No, I said that we will be monitoring at the monitoring stations. If there is any evidence to suggest we need to do more monitoring, we will do more monitoring. If there is no evidence to suggest that, we will not do it unless DIPNR, which is the consent authority, asks us to do more.

Ms SYLVIA HALE: Will you make that evidence public?

Mr FORWARD: If they ask us to do it we will.

Ms SYLVIA HALE: But you will not do that voluntarily; you will make that evidence public only if another government department asks you to do so.

Mr FORWARD: We are not a regulator; we are a road provider. DIPNR is the regulator. It takes advice from the Department of Health and the Department of Environment and Conservation. If the regulator asks us to do something, we will do it. I will not do things that the regulator does not require us to do that are nice to do but expensive. If they are required, we will do them.

Ms SYLVIA HALE: However, you are operating or constructing a facility that could have very immediate and grave impacts upon the health of people living in the vicinity.

Mr FORWARD: I do not accept that.

Ms SYLVIA HALE: Do you not agree that you have some sort of public responsibility, not only an obligation to stick to the strict letter of the law as you interpret it?

Mr FORWARD: I do not accept your initial premise. This project will have a major positive effect on air quality through the city. We are eliminating traffic going through the city and stopping at numerous sets of traffic lights. We all know that vehicles stopping at traffic lights cause the pollutants. Avoiding that will in fact improve air quality in the city. I do not accept the honourable member's initial premise that it will be a health problem. It will be a major benefit to Sydney's health.

Ms SYLVIA HALE: An interagency working party was established in September 2003 because of the quality of the emissions from the M5 East. One of the purposes of that working party was to agree on warning signs or literature to ensure the safety of drivers in the M5 East and to investigate the need for better in-tunnel air quality standards, particularly nitrogen dioxide emissions. What decisions or outcomes have resulted from that working party into the tunnel management and regulations?

Mr FORWARD: We are working with a number of agencies to look at standards for NO₂. My understanding is that there are no standards throughout the world for NO₂. This is path-breaking research. Once again, this is not a simple matter. We are looking at what is happening around the world and trying to get an understanding of the impact of NO₂. Work is going on in that area. We are working on a brochure for the cross-city tunnel that will give people commonsense advice about driving through tunnels. Awww

Ms SYLVIA HALE: Why are there still no warnings or information provided to drivers entering the M5 East tunnel about the potential ill effects on their health?

Mr FORWARD: I do not accept that there is an ill effect; I do not accept the honourable member's basic premise. We meet the standards, and if we did not, the Department of Health, as the regulator, would have some concerns. No motorist has been exposed to any adverse impacts after travelling through the M5 East tunnel.

Ms SYLVIA HALE: In December 2001, your department entered into a legal agreement with the residents against polluting stacks, known as the Tapered Element Oscillating Microbalance Committee. That committee included representatives from the RTA, the resident group and the Department of Environment and Conservation. Part of its brief was to investigate and agree on the need for correction factors related to the monitoring of pollution levels. How often has that committee met?

Mr FORWARD: I do not have that detail with me. I know that our people have been involved and they have briefed me on it, but I cannot provide the details of meetings.

Ms SYLVIA HALE: Will you provide that information on notice?

Mr FORWARD: Is the question how many times that committee has met?

Ms SYLVIA HALE: Yes. I understand that other members of the committee have been frustrated because the RTA keeps cancelling meetings. How many meetings of this committee has the RTA cancelled or postponed?

Mr FORWARD: Once again, I will take that question on notice.

Ms SYLVIA HALE: Can you also confirm or otherwise that on one occasion the RTA claimed that a suitable time could not be found for a meeting over a five-month period?

Mr FORWARD: I will check that.

Ms SYLVIA HALE: If the RTA was unable to convene a meeting of the committee during that five months, do you think that is an adequate discharge of its responsibilities and its adherence to a legal agreement with the resident group?

Mr FORWARD: That is a hypothetical question. I do not know whether it is true. I will investigate it first.

Ms SYLVIA HALE: You have been briefed on it by J. Stricker, who sent you a briefing note about it on 8 February 2004. There seems to have been some concern for quite a time. I refer again to the cross-city tunnel. Condition No 251 states that the tunnel should be designed and constructed so as to make provision for future installation of an appropriate pollution control system to treat air emissions. It also states that the proponent—namely the RTA—shall provide evidence to this effect during the design and construction phases to the satisfaction of the director-general. Please outline what evidence has been provided to you during the design and construction phase.

Mr FORWARD: At the western end of the project—the connection between the tunnel and the ventilation system—a cavity space has been provided in which pollution control equipment could be installed if required.

Ms SYLVIA HALE: Are you satisfied that the provisions that have been made are adequate?

Mr FORWARD: Yes.

Ms SYLVIA HALE: The design of the tunnel has led to the demolition of a direct walkway from Fig Street, Ultimo, into the city. I understand that it has been replaced with several indirect walkways that run through Darling Harbour and that the journey is now longer, less direct and takes more time. Given that more residential development is planned for this area and that Pyrmont already has one of the highest proportions of residents who walk to work, will the RTA be taking any steps to reinstate that direct walkway?

Mr FORWARD: We have had a lot of discussion with the Sydney Harbour Foreshore Authority. I believe that the new route from that area is far more pleasant, quieter, safer and enjoyable.

Ms SYLVIA HALE: That may be fine unless one is running late for working and wants to get there as quickly as possible.

Mr FORWARD: It takes pedestrians away from the motorway traffic through a very pleasant environment in Darling Harbour. It is safer because there is video surveillance through the area. It is a far more enjoyable walk. It might add one or two minutes to the walking time, but I would have thought it would be a far more enjoyable route. That was the general position that the Sydney Harbour Foreshore Authority discussed with the RTA. We reached a very amicable arrangement for the walkway.

Ms SYLVIA HALE: I am sure you can reach amicable arrangements with other authorities. However, it is a question of what the residents are saying, and they are finding it extraordinarily inconvenient that this direct walkway has been removed. Do you not think it is time to talk with them to ensure their needs are met?

Mr FORWARD: The walkway would be an add-on to the viaduct through Darling Harbour. If I had a choice of walking along a busy freeway or through a very scenic area of Sydney, I know which way I would rather go. Many of the residents are delighted with that approach.

Ms SYLVIA HALE: Are you saying that you will not reinstate the walkway?

Mr FORWARD: We are not required to reinstate it.

Ms SYLVIA HALE: No, but will you?

Mr FORWARD: I do not see any need to do so. People do not like change and there has been a change in arrangements. I believe that residents will grow to love the new walkway through Darling Harbour.

Ms SYLVIA HALE: I turn to the question of compulsory land acquisition. I understand that an increasing number of claims against the RTA in the Land and Environment Court relating to just compensation for compulsory acquisition of land for the motorways have been successful. How many cases and what compensation has been awarded by the court or agreed as part of a settlement following or as a result of litigation under the Land Acquisition (Just Terms Compensation) Act against the RTA?

Mr FORWARD: I will take that on notice. It is a very complex question.

Ms SYLVIA HALE: What were the legal costs of unsuccessfully defending the RTA's offers of inadequate compensation in respect to compulsory acquisition during this period, including indemnity costs and costs for any matters ultimately settled out of court?

Mr FORWARD: I will take that on notice as well.

Ms SYLVIA HALE: What is the dollar value of costs associated with compulsory acquisition costs and legal costs to defend such offers, successful or otherwise, that have been passed on to tollway operators?

Mr FORWARD: Sorry, you will have to explain that last question.

Ms SYLVIA HALE: What is the dollar value that has been passed on to tollway operators of costs associated with compulsory acquisition and legal costs to defend such offers of compensation that have been made?

Mr FORWARD: Could you explain that again? The costs that have been passed on to toll road companies?

Ms SYLVIA HALE: How much of the costs associated with compulsory acquisition have been picked up by tollway operators? So the costs associated with the compulsory acquisition of land have moved from the department on to the tollway operators.

Mr FORWARD: The contractual arrangements between the RTA and the motorway companies are that the RTA and the Government actually acquires the land. We are responsible for all land acquisition.

Ms SYLVIA HALE: There were no costs for land acquisition or compensation costs passed on to tollway operators?

Mr FORWARD: That is correct.

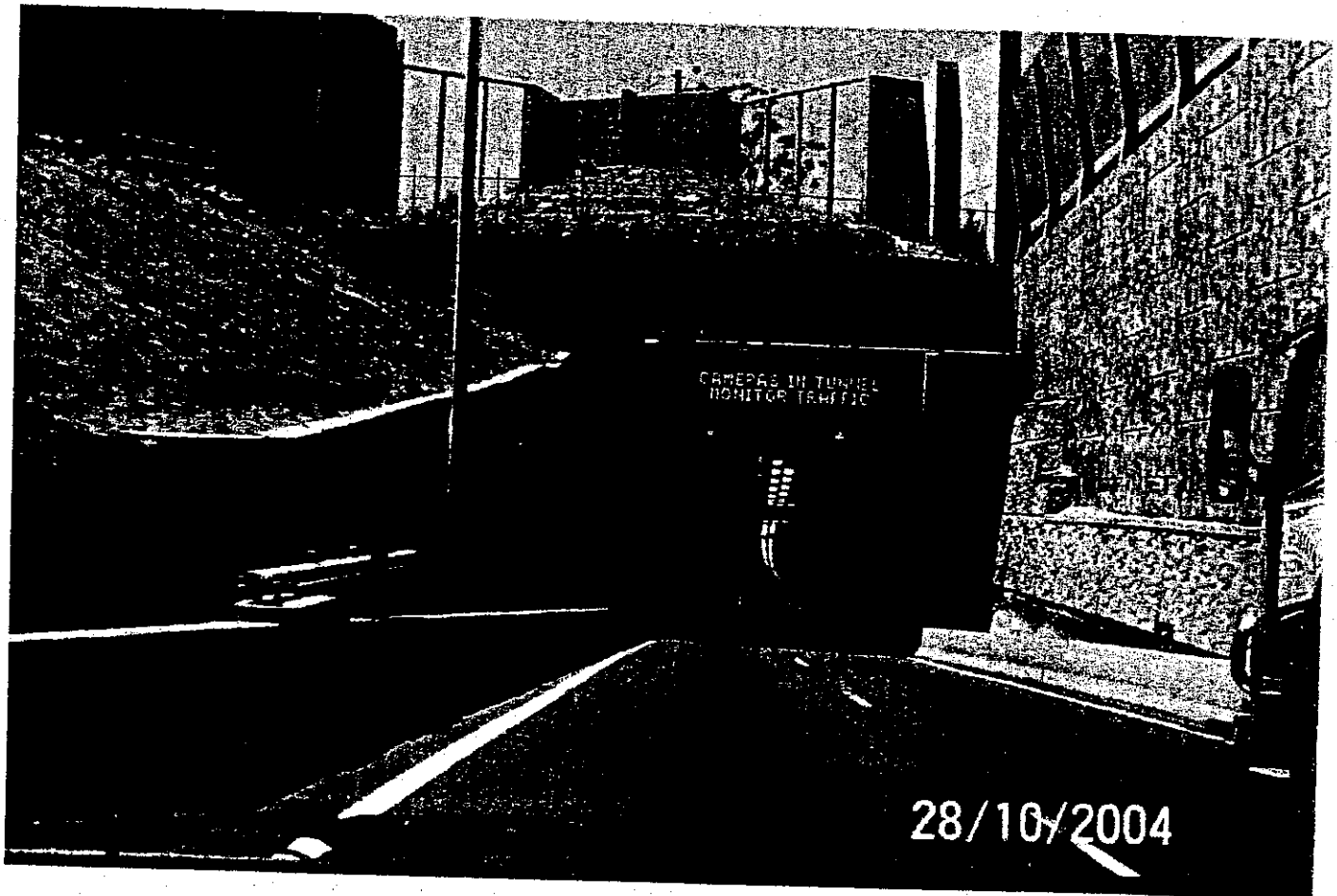
Ms SYLVIA HALE: The Government bears the entire costs?

Mr FORWARD: We always have bore the cost of land acquisition. It is government land at the end of the day. When the concession is handed back the toll road companies do not retain the ownership of the corridor. The Government has ownership of the corridor.



Department of
Infrastructure, Planning and Natural Resources

Office of Sustainable Development Assessments & Approvals



Compliance Audit Report
Draft for proponent's comments

M5 East Motorway

May 2005

EXECUTIVE SUMMARY

A compliance audit of the air quality aspects of the operation of the M5 East Motorway has been conducted by the Department of Infrastructure, Planning and Natural Resources (DIPNR).

The activity, by the Roads and Traffic Authority (the "proponent"), was approved by the then Minister for Planning on 9 December 1997 and commenced operation in December 2001.

The key findings of the audit are:

In-tunnel air quality

- Condition 70 requires the tunnel ventilation system to be designed and operated so that the WHO 15-minute CO goal of 87ppm is not exceeded under any condition.
- The proponent demonstrated compliance with the CO limit except during one incident in August 2002 involving the exposure of the proponent's staff and contractors.
- The proponent has designed the tunnel ventilation system to maintain in-tunnel air quality for average traffic speeds of 20 km/h or greater. For average speeds less than 20 km/h, when data provided by the proponent demonstrated peak airflow was required to maintain acceptable in-tunnel CO levels, the design relies on *traffic management* to assist the tunnel ventilation system in maintaining air quality.

Environmental Management Plan (Operations)

- A procedure in the DG-approved EMP(O) specified a *traffic management* approach in response to elevated in-tunnel CO at low traffic speeds, consistent with the verified design. However the procedure was changed in August 2002, against the written advice of the Department, to a *portal emissions* approach which the audit found was incompatible with the Minister's approval.

Portal emissions

- Condition 71 requires that the tunnel ventilation system be *designed* to avoid air emissions through the portals as far as is practical. The proponent's portal design (to avoid air recirculation between portals) commits the proponent to avoid portal emissions as far as is practical during the *operation* of the tunnel.
- Portal emissions have been a relatively common occurrence, and the audit has identified eight examples of where portal emissions have been inconsistent with the approval and with the proponent's design commitment to avoid portal emissions as far as is practical.
- As a consequence of the portal emissions, the tunnel has not been operated to avoid air recirculation between the portals.
- Any proposal to conduct routine portal emissions would need to be subject to a formal modification application.
- The proponent's monitoring of ambient air quality impacts from portal emissions has been inadequate, inhibiting the proponent's ability to assure compliance with ambient air quality goals.



Cross City Tunnel

CrossCity Motorway Pty Ltd ABN 45 098 445 839
131 Cathedral Street, WOOLLOOMOOLOO NSW 2011
Ph 61 2 9033 3800 Fax 61 2 9033 3801 Locked Bag 8500 POTTS POINT NSW 1535

15 March 2005
Ref: (CRO6-01S14967) PRS: is

Ms Elizabeth George
Ms Narelle Thirkettle
Ms Margaret Claren
Ms Jane Anderson
Community Representatives, AQCCC
c/o 71/8 Birtley Place
Elizabeth Bay NSW 2011

Dear Mesdames

Cross City Tunnel – Air Quality Monitoring

We refer to your letter dated 25 January 2005 concerning Cross City Tunnel air quality monitoring and specifically your request that portal emission data be publicly available. The Directors of CrossCity Motorway have requested that I respond on their behalf.

You would be aware through your involvement with the project that the ventilation system is designed to be operated so as to ensure air inflow at all portals. However, I do acknowledge that PMA Condition 250 will allow portal emissions should emergencies, accidents or specific maintenance be required to be undertaken.

Should a portal discharge occur due to an emergency or accident situation the occurrence would require active intervention by Cross City Tunnel's operators who will immediately provide notifications as required by the Project Deed. CCM's incident management plans address safety of motorists and community potentially affected by an incident. This would include communication as appropriate.

May I assure you that the Board of CrossCity Motorway recognises its obligations to the community and will continue to actively monitor and as appropriate, report on issues of public health. However, CCM does not have at its disposal (nor is it required to have) a monitoring station to measure portal air quality and therefore cannot accede to your request.

Yours sincerely

Peter Sansom
Chief Executive Officer
CrossCity Motorway Pty Ltd

25 January 2005

To Directors of CCM

We write to you as community representatives on the Cross City Tunnel Air Quality Community Consultative Committee (AQCCC).

The approval conditions for the Cross City Tunnel require details of any discharge from the portals to be reported only to DIPNR and the EPA. We have indicated to CCM representatives that it is in the community's best interest that real time results from these monitoring stations be made publicly available. CCM have refused our requests citing that they are only required to comply with approval conditions.

We are not sure at what level within CCM this decision has been made, and we appeal to the board to overturn this decision. We consider that it is vital that such information, relevant to health be made available to enable people to take steps such as closing windows, balcony doors, or not lingering on balconies during periods of portal emissions. The high density of population surrounding these portals makes it essential that this information is available. The eastern portals are surrounded by the most densely populated area in Australia, and on the western end, the portals sit next to a building, described within the approval conditions as also housing the "closest highrise receptors" to the plume. These residents would therefore be exposed to stack emissions and any portal emissions that occurred.

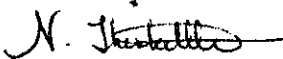
Community concerns are heightened by the experience of the M5 East, also operated by Baulderstone Hornibrook/Bilfinger Berger Joint Venture. Confirmation of portal emissions only occurred following representations from community groups to the EPA. Despite discussions between the BHBB, EPA, RTA, and DIPNR between January and June 2004, this knowledge was only made publicly available the weekend of 14 June, the weekend prior to delivery of documents to NSW Parliament on 15 June, which would have disclosed this information anyway. The explanation given was that there was equipment failure however the documents suggest that the emissions occurred over a much long period of time.

We note that on Baulderstone Hornibrook's website, Lee Price, CCT Project Director is headlined saying, in the context of "in sharing knowledge and building strong relationships with our communities, that **Community responsibility goes beyond consultation, it's about recognising and respecting the stake the community has in every project.**" The community stake in this instance is enormous as it is basic health protection and beyond merely physical amenity.

In the corporate world post ENRON, HIH etc good corporate citizens go to great lengths "to be seen" to be beyond reproach in corporate governance and provision of public information. The James Hardie case demonstrates tragic community impacts as well as adverse long term financial implications for the company. For example Arnotts and Herron were commended by customers and shareholders for their public announcements over possible product tampering.

We ask you to take the same level of commitment towards the community and the project by agreeing to go beyond the minimum reporting requirements contained in the approval conditions and make real time portal emission data publicly available on the website. The community and the general public should be provided with as much information as possible in order to make informed choices about whether they, for example, choose to visit the locale or sit on a balcony, when high readings are being experienced. Non disclosure can only lead to a public perception of their being something to hide- whether or not this is the case.

Yours sincerely

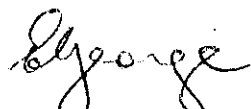


Narelle Thirkettle

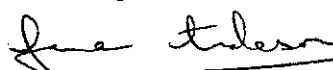


Margaret Clarence

AQCCC community reps, Western End



Elizabeth George



Jane Anderson

AQCCC reps, Community reps, Eastern end.

Minutes of a meeting of Community Representatives of the AQCCC for the CCT and DIPNR on April 27, 2005

AQCCC: Narelle Thirkettle, Elizabeth George, Jane Anderson, Margaret Clarence

DIPNR: Sam Haddad, Mark Hather, Sam Haddad's Assistant
Location: Lands' Dept. building, Bridge Street, Sydney.

Meeting commenced: 9.35am

1 Publication of Portal Emissions Data

1.1 Background to our concerns:

E.G.: This meeting was requested because DIPNR is the regulator for the CCT. Community members believe the regulatory standards are not sufficient to protect the public. First, we wish to raise the issue of portal emissions in the light of some seven months of portal emissions in 2003/2004 from the M5 East tunnel where portal emissions were used as a tunnel management strategy. In relation to the CCT any portal emissions would not have to be publicly notified, and the area that would be affected is the densest residential area in Australia. We therefore rate the issue of portal emissions a vital health matter.

S.H.: The M5 East is different to the CCT and the potential issue for portal emissions would not be replicated in the CCT; the same system would not be implemented.

M.H.: The difference in the CCT is the provision of a separate air tunnel where vehicle emissions could if required be put in the air tunnel and then sent up the stack to be dispersed.

N.T.: The storage of emissions in the ventilation tunnel has not been explicitly stated in an EIS and put out for comment. BHBB have held that there will be no storage in the tunnel, but dispersion.

M.H.: In the CCT, the ventilation tunnel is designed to manage CO.

N.T.: If so, good.

E.G.: Our concern is principally not with the ventilation tunnel but with portal emissions.

1.2 Frustrations to action that is needed:

N.T.: We have experienced on-going frustrations re this issue. Portal emissions will be monitored but if they occur the results will not be issued publicly. For this to occur it must be initiated by the proponent – the RTA. If Condition 269 requires an hourly update from the ground level monitoring stations and in-tunnel CO to be recorded and released to the public via the website, then the portal emissions should also be made public.

At January 05 AQCCC meeting Jan Parsons, representing DIPNR stated that any change to the condition would need to be proposed by RTA, yet Paul Forward told Budget Estimates Committee on 10.2.05 "we are not the regulator; we are a road provider. DIPNR is the regulator ... If the regulator asks us to do something, we will do it." He further incorrectly stated "we have put in a number of monitoring stations that we believe will pick up any impact on the ambient air levels." This is simply not possible as the Darling Harbour AQMSs are located as per Conditions 263 and 264 which correctly require them to bear a relationship to the stack not a relationship to the portals. In addition, the 6 portals at the Eastern end are approx. 4 kms away! Further, Jan Parsons stated "that it is DIPNR's position that AQCCC be presented with monthly reports on portal emissions. This could be under Condition 276." However, RTA/CCM do not agree as this is not explicit in the written condition.

M.H.: We would support Jan Parsons statement.

S.H.: Yes, that is as we see it. We can request the RTA and the RTA can then decide whether to do this. We can make the case and communicate it to the RTA; a response will come via their monthly report to DIPNR.

N.T.: Through the AQCCC we requested mediation regarding this matter – it was turned down. We wrote to each of the CCM directors – Peter Samson's response demonstrated a lack of understanding. The M5 portal emissions were repeatedly denied. The community has necessarily been involved in a long, circular and repeated debate with the relevant authorities. Regulators seem not to be able to monitor or enforce conditions as evidenced by both Auditor General and draft DIPNR compliance audit reports.

1.3 What we are asking for:

J.A.: We are asking for: C.O.A. 269 to be modified to include portal emissions, and for air quality monitors to be installed at all portals by the RTA and the data to be made publicly available in real time on the website

E.G.: Not just monthly but in real time on the website.

N.T.: What we request is reasonable and achievable. We make an understandable request for the assistance of DIPNR in this context for the protection and safety of tens of thousands of city residents. Given the sorry saga at M5E, nothing less will allay community fears.

M.H.: Monitoring including real time data is a costly matter. We would expect at least portal flow velocities in the monthly reports and if we see irregularities and high volumes of emissions in the early CCT reports we would then have greater justification for seeing strengthening of reporting in this area. However the key issue would then be about compliance with the condition of no portal emissions rather than necessarily whether this was having a health impact.

E.G.: We are asking for real time reporting on the website of portal emissions. The RTA is difficult for all parties to deal with. The RTA is the dominant, unresponsive party in this whole process of our operations through the AQCCC.

Their representatives are something of a changing feast. Steve Faulkner, a junior spokesman, is usually their representative; sometimes Peter Lardner-Smith.

2 Publication of in-stack data

N.T.: A second issue centres on publication of in-stack data. Condition 272 deals with the reporting of in-stack exceedances but does not require the monitoring data to be published. In-stack MONITORING, in-tunnel, ambient and portal emissions should all be reported under COA 276. In-stack data is not required to be notified to the AQCCC; it is not specified that it must come to the AQCCC according to the RTA and CCM. We need this clearly, explicitly put in writing.

S.H.: A formal, full letter listing what must be released to the AQCCC will be sent to the RTA. Give us a list of what should be included.

EG: I suggest that DIPNR list the data that should come to the AQCCC and provide the list to us for comment. (It is noted that DIPNR has since provided a list to Narelle)

SH: OK

3 Final DIPNR sign-off on CCT

N.T.: We wish to discuss the final DIPNR sign-off on the CCT. The stack design is of concern as we have just discovered that there are apparently two chambers separated by a 'dampner' with 'sampling' only installed to monitor half the pollutants. This is not adequate. Full, constant and continuous monitoring of both chambers is required. So this is a very questionable proposition seeing that we requested to see full design specifications and consequences at many AQCCC meetings. This double shaft only becomes known to us via parliamentary call for papers and so close to finalisation of the project. Did DIPNR accept EPA suggestion and "require ventilation stack be operated with both shafts fully opened except as approved by D.G."?

S.H.: Will need to check into this to respond.

N.T.: Thank you we would appreciate that. On the reporting question, public access to monitoring data must be made clear under Condition 276. We were assured by you that you had tight conditions in place for CCT which would allay our fears but just as with the reporting mentioned, we are poorly served by Condition 271 which is the only condition to assess the environmental impact of what has actually been built as opposed to the concept as per E.I.S. This final review process is not at all transparent and there is no mechanism for public comment.

Throughout construction, we have sought details of design, velocity, vehicle numbers, modelling speeds etc. and have continually been told such information is "commercial in confidence". Our independent Technical Expert on AQCCC offered to sign confidentiality clause but was refused access. Reports under Condition 271 should be robust studies which should consider air quality impacts at all sensitive receptors, not just stating with a tick better/worse than EIS/DG Report. Despite now having nearly

2 years meteorological data from Tumbalong Park, they still use old short term data from Goat Island! Material tabled at AQCCC by Downer Engineering clearly indicates higher vehicle numbers – are these used for the submission? Are PM10 emission factors learned at M5E incorporated? Similarly, the increased velocity? The Report must justify why the method of modelling used is the most appropriate to the unique Cockle Bay geography, tall buildings etc. We require a far better understanding of the design and modelling particularly when considering the “downwash” effect that it is acknowledged will affect both stack emissions and the discharge velocities from the stack.

S.H.: Part A have an independent review process. Part B has an independent review by DEC and DIPNR. DIPNR needs to review it if the governance and regulation of future tunnels is to have any veracity. That independent consultant should be able to present and answer questions from the AQCCC. DIPNR can stipulate the parameters for such a completely independent assessor. We can organise a meeting for you on this issue at the AQCCC meeting.

E.G.: At that AQCCC meeting the community members ask that all key players are present. Mark Hather, EPA, DOH and Dr. Peter Maninis.

SH: Or we can request a special meeting if timing is an issue with final approvals now underway.

N.T.: Another shortcoming is that although Conditions 263 and 264 require a Community Based Monitoring Station and 2 elevated Monitoring Stations, Condition 274 fails to protect them. Whilst requiring an air quality assessment be developed for DA's for new buildings which may be affected by the stack, or may themselves impact upon the plume, there is no requirement to consider any impacts upon the collection or continuity of data from the mandated Monitoring Stations.

S.H.: We would think this was inherent in the condition and will look at this.

4 Cumulative exposure

M.C.: We wish to flag an issue no-one is looking at yet, which is the multiple and cumulative exposures people are being exposed to as the number of tunnels increase in Sydney. A document was tabled at an AQCCC meeting by the DOH representative. It was a scenario we asked DOH to investigate for people who travel through multiple tunnels during a day. This reveals a person travelling with windows open to be exposed to Carbon Monoxide well beyond WHO guidelines.

Regular tunnel users such as taxi and truck drivers are considered by O.H. & S. to be very fit members of the community. Consequently the figures that rates their danger to exposure is held to be significantly higher than that of ordinary drivers. This is unacceptable.

SH: Yes. We will look at this.

5 DIPNR attendance at AQCCC meetings

E.G.: We have reluctantly accepted that the DIPNR representative will only attend for specific issues notified prior to a meeting. We have requested attendance re the

issues we have raised today and have received written advice that DIPNR will not be attending.

SH I apologise for that. Let me know personally and I will ensure that a DIPNR representative attends for specific issues on an as required basis. When we should be there we will be. The Chair of the AQCCC should notify me personally when it would seem appropriate for a DIPNR representative to be there.

6 Outcomes from this meeting

E.G.: To summarise, we understand that you will both brief Jennifer Westacott who will formally respond in writing to agenda items 1, 2, and 3. You will arrange the meeting with the independent consultant of Condition 271 and we will provide a list of queries. Margaret has been taking minutes and we will get a copy to you for comment.

Meeting closed at 11.am.

Margaret Clarence - Minutes



Department of
Infrastructure, Planning and Natural Resources

Mr Paul Forward
Chief Executive Officer
Roads and Traffic Authority
PO Box K198
HAYMARKET NSW 1238

Dear Mr Forward

Subject: CROSS CITY TUNNEL- PUBLIC ACCESS TO AIR QUALITY MONITORING INFORMATION

As you may be aware, the Department has had a number of discussions with the RTA, DEC and community representatives including the Lord Mayor of Sydney Council (Ms Clover Moore) on public access to air quality information associated with the operation of the Cross City Tunnel.

The Department supports making as much information available to the public as possible and encourages the RTA to do so even if this may go beyond a strict interpretation of the conditions of approval. I note and support the fact that the RTA has already done so with respect to in-tunnel, elevated and ground level monitoring.

However in view of the extent of community concerns regarding portal emissions, I seek your agreement that this information be provided on a real time basis and subject to review following experience with tunnel operations. I would also seek your co-operation in providing the AQCCC with more regular (ie monthly) access to in-stack monitoring information. Monitoring of in-stack data alone could in the long term (and subject to further evaluation and community consultation) be appropriate for tunnels in NSW consistent with the monitoring undertaken for the Burnley and Domain tunnels in Victoria.

In view of the community concerns about portal emissions and in-stack limits I would also seek your agreement to include them in the audit process required under Condition 278.

If you or any of your officers would like any clarification on the issues raised, please contact myself on 9228 6192 or Mark Hather on 9228 6346.

Yours sincerely

Sam Haddad
Deputy Director General

30/5/2005



Cross City Tunnel Air Quality Monitoring Requirements

Parameter	Real Time (Internet)	Regular Internet (Monthly) Reporting of data	Periodic (6-monthly) reports	Independent Audit (6 monthly)	Compliance Reporting to AQCCC meetings
Portal Emissions	Yes*	Yes*		(Yes)*	(Yes)
Ground Level	Yes	Yes	Yes	Yes	(Yes)
Elevated	(Yes)	Yes	Yes	Yes	(Yes)
In-Stack			(Yes)	(Yes)*	Yes*
In-tunnel	Yes	Yes	(Yes)	Yes	Yes

+ Provided to the AQCCC on a monthly basis regardless of the frequency of AQCCC meetings.
 Yes As required under the Conditions
 (Yes) Additional requirements as adopted by the RTA and provided to the AQCCC by the RTA at a meeting on the 24 May 2005.
 (Yes)* Subject to agreement by RTA



Technical Matters Raised by the Cross City Tunnel Air Quality Consultative Committee

1. Portal Emissions

The AQCCC raised concerns about portal emissions, their impact on the community and believes that monitoring should be located at all portals. Real time monitoring as well as monthly reporting has been requested.

~~The Department is aware that there is not an explicit requirement in the conditions for monitoring of air quality around portals and that air quality goals relate to ambient conditions which would not be reflected by monitoring close to the portals.~~ Whilst it is outside the scope of the conditions to make portal emission information available to the public, the Department considers it reasonable and consistent with the intent of Condition 258 that consolidated reports are provided to the AQCCC on a regular basis. ~~Access to any additional data would be a matter for the RTA.~~ Should monitoring indicate frequent and high volume portal discharging, the more significant concern would be compliance with Condition 250. **The Department requests confirmation of the RTA's commitment to providing information on portal emissions to the AQCCC.**

2. Publication of In-stack Data

The AQCCC believes that this information should be made publicly available. The Minister's conditions (270-272 inclusive) are silent on this matter and it is understood that the RTA has declined to provide the information on this basis. As stated above, the Department considers that it is reasonable and consistent with Condition 256 that consolidated reports are provided to the AQCCC on a regular basis. **The Department requests confirmation of the RTA's commitment to providing information on in-stack data to the AQCCC.**

Split Stack Design

The AQCCC has raised a concern that monitoring only one chamber of the stack could result in misleading air quality data. The Department notes that the conditions require continuous monitoring of in-stack mass pollutant concentrations. **The Department requests advice from the RTA about how it intends to comply in the situation where the shaft with the monitoring equipment installed is closed (e.g. for maintenance) and the tunnel is in operation.**

3. Ventilation Stack Limits

Condition 271 states the mass pollutant concentrations which must not be exceeded from ventilation stack discharge. An independent person/organisation, approved by the Director General is required to verify compliance with this condition. The AQCCC has expressed concern regarding compliance with this condition and has requested that the independent verifier approved by the Director General present the findings of the verification at the next AQCCC monthly meeting. The Department has also requested that the Department of Environment and Conservation attend the next AQCCC meeting and present its review of the energy optimisation report. DIPNR would also attend. The Department has also suggested that given the approach of the proposed opening date for the project that an extraordinary meeting of the AQCCC might be appropriate. **The**

Department requests that RTA arrange for Air Noise Environment, as the approved independent organisation, to attend the next AQCCC meeting and to advise the Department of the proposed date of that meeting.

4. Local and Sub-regional Air Quality Improvements

The AQCCC stated that Condition 274 does not stipulate the need to update air quality monitoring if any new buildings are erected which affect the plume from the ventilation stack. The intent of the condition is to ensure that the health of building occupants located around the stack is protected as well as to assess the effects of any new buildings on the plume dispersion including implications for the continued validity of the air quality monitoring stations. **The Department requests the RTA to confirm that its interpretation of the condition is consistent with the above.**

GOLDSMITH Paul

From: PENN Howard G
Sent: Friday, 6 May 2005 10:21 AM
To: FAULKNER Steve
Cc: ONGGO Eka
Subject: FW: AQCCC - Information

Steve,
 Does this require CCM to do additional tasks?
 Howard

-----Original Message-----

From: Mark Hather [mailto:Mark.Hather@dipnr.nsw.gov.au]
Sent: Friday, 6 May 2005 08:46 AM
To: PENN Howard G
Cc: Lisa Mitchell; Sarah Joyce
Subject: AQCCC - Information

Howard

The AQCC has sought advice from DIPNR about what information DIPNR expects the RTA to provide the AQCCC.
 Advice as follows was provided:

Dissemination of Information to the AQCCC

The Departments interpretation of the conditions regarding what information would be expected to be disseminated to the AQCCC in accordance with the conditions of approval and/or intent would be as follows:

- (1) Reporting at AQCCC meetings of any portal emissions including frequency and duration- **Condition 250.**
- (2) Hourly updated real time monitoring of in-tunnel CO as required under **Condition 257.** See also **Condition 269.**
- (3) Reporting at AQCCC meetings of any notification to DIPNR/DEC of any single point monitoring for CO above the limits of 87ppm (15 min) and 200ppm (3 minute) - refer **Condition 260.**
- (4) Reporting at AQCCC meetings of any exceedances of in-tunnel CO, as identified in **Condition 261**, including consultation on the Strategy
- (5) Hourly updated real time monitoring of PM10, PM2.5, NO2 and CO at the approved ground level monitoring stations as required under **Condition 262.**
- (6) CMBS monitoring as required under **Condition 263.**
- (7) Reporting at AQCCC meetings of the results of monitoring at elevated monitoring stations as required under **Condition 264.**
- (8) Notification of any exceedances in accordance with the approved Protocol as required under **Condition 268.**
- (9) Reporting at AQCCC meetings of the results of monitoring of in-stack limits as required under **Condition 271.**
- (10) Reporting at AQCCC meetings of any notifications of any exceedances of in - stack limits as is required under **Condition 272.**
- (11) Reporting at AQCCC meetings of any notifications to DIPNR/DEC of any emergency discharges as is required under **Condition 273.**
- (12) Reporting at AQCCC meetings of the results of investigations required under **Condition 276.**
- (13) Copies of audit reports as required under **Condition 278.**

1103

I also note that the Director-General following discussions with the Lord Mayor of Sydney City Council Clover Moore, has
 22/10/2005

Actions from November AQCCC

1. Provide an answer to the question – Why does RTA consider it necessary to filter the M4East but not necessary to filter the CCT?

{This action was given further to the short answer provided by RTA at the November meeting which essentially stated that the CCT had not been precluded from the filtration trial as the decision on which tunnel was going to host the trial had not yet been made. It was requested that RTA provides an answer that indicates why filtration is considered to be vital on the M4E; but not so on CCT}

2. Condition 274 – DCP Protocol. Kerry Holmes has been requested to provide an explanation of how the protocol works with respect to the modelling carried out to define the protocol boundary levels. The RTA has an obligation to assist Council in developing the process. The reply to AQCCC should be limited to advice that RTA, in conjunction with Holmes Air Science is providing council with a suggested process based on modelling of the CCM Ventilation design. Once Council adopts a protocol it will become public.
3. Condition 274 – RTA was requested to confirm that the modelling carried out for CoA 274 was based on the latest CCT ventilation system design. Confirmed
4. Condition 274 – RTA was requested that the protocol include a section stating that should any building be proposed to be located near the Tumbalong park AQMS, that the following actions will occur:
 - a. An air quality assessment be carried out to confirm whether the AQMS would be compromised due to interference from the proposed building (reference to AS2922).
 - b. If the AQMS is compromised, then any requirement of the development approval would require that such compromises be addressed (such as relocation of the AQMS etc)

RTA will consider potential affects when commenting on development proposals

5. A scenario was presented by V Sheppard of DoH re the cumulative effect of multiple tunnel trip showing the predicted CO exposure levels for "windows up" and "windows down" scenarios. This lead to the AQCCC requesting that RTA reconsider its previous advice in regards the provision of road signage at tunnel portals to warn drivers to "wind windows up".
6. AQCCC also requested that they be provided with updates re the inter agency NO2 working party. DoH suggested that RTA should address this issue.

Other items of interest

- AQCCC asserted that despite the CBMS monitoring station operating for almost 2 years, because the percentage of valid data was low (around 60%); this would mean that the intent of CoA 263 (for the station to be established 2 yrs prior to tunnel opening) – had not been met. This was referred to DIPNR
- AQCCC requested that the ILR (Denise Wilson) mediate (under AQCCC terms of reference) re AQCCC's request to CCM that all occurrences of portal emissions be included on the CCM CCT web site. CCM denied this request,



Department of
Infrastructure, Planning and Natural Resources

Office of the Director General

44652077

Ms Elizabeth George
71/8 Birley Place
ELIZABETH BAY NSW 2011

S99/00836 Y05/1273

ATTN: JANE ANDERSON
NAREIIE THARKETLE
MARGARET CLARENCE

Dear Ms George,

Subject: Cross City Tunnel – AQCCC Issues

Thank you for meeting with the Deputy Director General, Mr Sam Haddad on 27 April 2005. I understand from this meeting that the AQCCC has a number of concerns regarding the RTA and the air quality impacts of the Cross City Tunnel.

Please find following a response to each of the issues raised at the meeting. As identified, the Department has also written to the RTA to ensure it addresses the AQCCC's concerns as a matter of priority.

1. RTA Responsiveness

The Department appreciates and acknowledges the concerns of the members of the AQCCC about the lack of responsiveness by the RTA to issues raised by the AQCCC. The Department has written to the RTA to request co-operation in addressing the AQCCC's concerns as a matter of priority.

2. Publication of Portal Emissions

Condition 250 of the Minister's approval provides that no portal emissions are allowable except in exceptional circumstances. Accordingly there is no explicit requirement in the conditions for monitoring of air quality around portals.

Whilst it is outside the scope of the Conditions for DIPNR to require the RTA to make portal emission information available to the public, the Department considers it reasonable and consistent with the intent of Condition 256 that consolidated reports including information as to whether portal emissions are occurring are provided to the AQCCC on a regular basis. Access to data beyond that would be a matter for the RTA. Should monitoring indicate a high frequency and high volume of portal discharge then, whilst there may be justifiable grounds for access to real time information, there would be a higher degree of concern regarding compliance with Condition 250. The Department has written to the RTA to ensure it will comply with this requirement.

3. Publication of In-Stack Data.

Similar to the issue of portal emission data, the Department considers it reasonable and consistent with the intent of Condition 256 that consolidated reports including information on in-stack data are provided to the AQCCC on a regular basis. The Department has written to the RTA to ensure it will comply with this requirement.

4. Split Stack Design

The Conditions of approval require continuous monitoring of in-stack mass pollutant concentrations. The Department has written to the RTA to highlight this concern. Advice has also been sought from the RTA as to how it intends to comply with this condition in the situation where the shaft with the monitoring equipment installed is closed (i.e. maintenance) and the tunnel is in operation.

5. Condition 271

The Department confirms that it will organise representation from the independent verifier and the DEC to discuss technical aspects associated with the assessment of the reports required under Condition 271(a) and 271(b) with the AQCCC.

6. Dissemination of Air Quality Information to the AQCCC

The Department considers that the requirements for information to be disseminated to the AQCCC are explicitly expressed in the Conditions of approval and in accordance with the terms of reference approved by the Director General. It would also include portal emission data and in-stack data as previously discussed. Should the AQCCC consider further data is required then in the first instance it should raise the matter with the RTA and if not satisfied may seek the Director General's opinion as to the extent such request is consistent with the intentions of the conditions of approval.

I am advised that a list of information expected to be disseminated to the AQCCC under these conditions has been e-mailed to you.

7. Condition 274

The intent of this condition, as expressed in the Director General's report, is to protect the health of occupants of any new buildings located around the ventilation stack. It is also intended that this condition provide a process to assess the extent of affectation of any new buildings on plume dispersion from the ventilation stack. It is noted that the Condition explicitly states "or affect the dispersion of the plume from the ventilation stack". The Department has written to the RTA to ensure this interpretation is understood.

8. Cumulative Exposure

The Department acknowledges the concerns about the potential for cumulative air quality impacts. The community should be assured that such matters are being considered in a broader context, and for example were raised in the Director General's requirements for the M4 East project.

If you have any further queries please contact Sam Haddad on 92286192 or Mark Hather on 92286346.

Yours sincerely


Jennifer Westacott
Director General

27. 5. 2005

26 June 2005
71/8 Birtley Place
Elizabeth Bay 2011

Mr Sam Haddad
Deputy Director General
Department of Infrastructure Planning and Natural Resources
GPO Box 3927
Sydney 2001

Dear Mr Haddad

Your Ref: S99/00836 Y05/1273

Thank you for your letter dated 27/5/05.

Community members of the CCT AQCCC hold the view that a number of important issues still require further attention as outlined below:

1. Publication of Portal Emissions

We appreciate DIPNR's assistance to ensure consolidated AQCCC reports include advice as to whether portal emissions are occurring. However we hold the view that this is an inadequate response given the large potentially affected population and the proven poor track record at the M5East.

It is simply not acceptable for the notification to be reliant upon the Operator reporting unaudited air pressure readings after the fact.

At a minimum we believe that there should be a requirement for an ongoing audited record of air pressure at **each** portal, both in and out, to be made available. The actual data on air flow rates and concentrations must be included so that the volume of any portal emissions can be calculated. It would not be acceptable to receive only a report that has interpreted monitoring data. Audit reporting should confirm that no portal emissions have occurred or otherwise as the case may be. In addition, we ask that the auditor comment on the appropriateness of the location of each sensor.

2. Publication of In Stack Data

We thank DIPNR for assistance in this regard however we would need confirmation that what is to be provided is the actual in-stack data.

If what is being offered is a 6 monthly periodic report, with an independent 'audit' and 'compliance' reporting, we regard this as unsatisfactory. All these are matters of opinion or someone else's idea of what compliance is and is open to manipulation.

We also ask that you confirm that the consolidated reports referred to will contain the actual calculation of hourly stack emissions for PM 10 and PM 2.5

in kg/hr at a minimum.

3. Split Stack Design

We ask that DIPNR follow up on the RTA response and inform AQCCC Community Representatives of the outcome please.

4. Condition 271

We thank you for arranging this matter to be discussed at the May AQCCC meeting. Community Representatives were dismayed to hear Holmes Air Sciences acknowledge the incorrect use of a Gaussian plume model in a situation with a strong vertical wind shear. Similarly EPA Representatives acknowledged the failure to use relevant meteorological data collected for the purpose and accepted Dr. Manins assessment of a likely underestimate of particle emissions.

We cannot accept the DIPNR/EPA assertion that only a "like with EIS like" analysis is required because the consequences for our communities is that we have no knowledge of the areas of impact; the small impacts referred to may in fact be twice as high as predicted and the total emissions are likely to exceed the Minister's Conditions imposed on the tunnel design and operation.

Further, since modified traffic data was incorporated into the modeling so too should modified wind data have been incorporated in the place of the irrelevant and erroneous wind readings from Goat Island.

As requested of Mark Hather at the AQCCC meeting, we ask the Director General to urgently request an independent full environmental reassessment at all sensitive receptors of the tunnel and stack as built utilising Darling Harbour wind data and appropriate modelling methodology.

5. Dissemination of Air Quality to the AQCCC

Does the letter from DIPNR to the RTA mentioned in the opening paragraph of your correspondence contain the list of requirements discussed at item No. 2 of our Minutes? If so, does this incorporate our comments 5/5/05, 6/5/05 and 9/5/05?

We request a copy of the letter please.

6. Condition 274

Our question related to protection of the collection and continuity of both air quality (pollution) and wind monitoring data at all AQMS's - not mentioned in your response. Or are the words "affect the dispersion of the plume" to be interpreted to include AQMS etc.? If so, would you please communicate this to RTA, SHFA and COS as soon as possible, and confirm to us that this has occurred. Your comment on page 4 of the minutes of our meeting suggests a far clearer response should have emerged.

7. Omission from Director General's letter

Unfortunately your letter fails to address the following issue raised via email on 18th May:

"We have been advised that between 1st October 2004 and March 31st 2005 the stack fans in the M5East were turned off for 'essential maintenance' on almost 100 nights for periods of 5-7 hours. During the majority of these times the tunnel was not closed and emissions occurred through the portals. It goes without saying that this would be a disaster for the thousands of people living near the portals if this were to happen in the CCT.

We find the prospect of this absolutely unacceptable and ask that this be included in your briefing to the DG.

It needs to be in writing to the tunnel operator that the tunnel always be shut down in such circumstances."

This issue is not resolved by the CCT design which incorporates an extra ventilation tube. While air flow may be maintained in the eastbound tunnel during maintenance of the cross over fans, portal emissions will be required at least from the westbound tunnel during work on the main fans - or can you confirm that the individual fans have been installed to operate independently?

We ask that the outstanding items highlighted be given your prompt attention with either written confirmation to us, or if necessary, through convening a further meeting.

8. Briefing of Ms Jennifer Westacott

We had been assured through Ms Westacott's assistant that Ms Westacott would personally respond to us about all the issues raised at our meeting with you. We appreciate that the demands of her position might make this difficult however we ask that you confirm to us that she has in fact been made aware of the issues through a comprehensive briefing from yourself and Mark Hather.

We would appreciate it if your further response to us would address each of the eight points above.

Yours sincerely

Elizabeth George for all community members of the AQCCC for the CCT

Cc Mr Brian Elton, Chairman, AQCCC for the CCT



Ms Elizabeth George
71/8 Birley Place
ELIZABETH BAY NSW 2011

Dear Ms George

Subject: CROSS CITY TUNNEL

I refer to your letter of 26 June 2005 regarding the Cross City tunnel and issues relating to air quality. In response to the 8 points raised the following response is provided:

Publication of Portal emissions.

Since the letter sent to you on the 27 May 2005, the Department has advised the RTA that information on portal emissions must be made public on a real-time basis (ie Internet). I am also advised that the RTA will be providing monthly reports on portal emissions to the AQCCC regardless of meeting frequency.

Publication of In-Stack Data.

The RTA has indicated that it will be providing information on in-stack data monthly to the AQCCC.

Ventilation stack limits under Condition 271 relates to PM10, of which PM2.5 is a component. The monitoring required under Condition 270 would enable the particle fractions and corresponding mass of PM2.5 to be determined.

Split Stack Design

The issue was raised at the recent AQCCC and as indicated, the DEC is satisfied that the split-stack design would not compromise compliance with the in-stack limits.

Condition 271

As indicated at the meeting, the purpose of Condition 271 was not to reassess the stack. Its primary purpose was to compare the EIS with the final design, holding all other things constant as far as practicable. Notwithstanding, Condition 266 requires that the modelling be validated using actual monitoring data following 12 months of tunnel operation.

Dissemination of Air Quality to the AQCCC

The Department wrote to the RTA on the 30 May 2005 (subsequent to its earlier letter of 27 May 2005), requesting that it makes as much information available to the public as possible. This included access to portal emissions on a real-time basis, access to monthly in-stack data and auditing of portal emissions and in-stack limits. Attached is a summary of the information the RTA has been asked to disseminate to the public.

Condition 274

I confirm that DIPNR's interpretation relates also to the monitoring stations. That is, any development in or around the stack will need to take into account the impacts/validity of the monitoring stations.

Omission from the Director General's letter

As any major maintenance periods would occur during periods of very low traffic flows, the assertion that any portal emissions during this period "would be a disaster for the thousands of people living near the portals" is very difficult to support. It is noted that Condition 250 allows portal emissions during maintenance during circumstances where protection of maintenance workers (with respect to CO exposure levels) cannot be guaranteed.

Briefing of Ms Jennifer Westacott

You may be assured that the Director-General has been fully briefed on the issue.

If you or any of your officers would like any clarification on the issues raised, please contact myself on 9228 6192 or Mark Hather on 9228 6346.

Yours sincerely



Sam Haddad
Deputy Director General

28.6.2005.

Cross City Tunnel Air Quality Monitoring Requirements

Parameter	Real Time (Internet)	Regular Internet (Monthly) Reporting of data	Periodic (6-monthly) reports	Independent Audit (6 monthly)	Compliance Reporting to AQCCC meetings
Portal Emissions	(Yes)*	(Yes)*		(Yes)*	(Yes)
Ground Level	Yes	Yes	Yes	Yes	(Yes)
Elevated	(Yes)	Yes	Yes	Yes	(Yes)
In-Stack			(Yes)	(Yes)*	Yes+*
In-tunnel	Yes	Yes	(Yes)	Yes	Yes

+ Provided to the AQCCC on a monthly basis regardless of the frequency of AQCCC meetings.
 Yes As required under the Conditions
 (Yes) Additional requirements as adopted by the RTA and provided to the AQCCC by the RTA at a meeting on the 24 May 2005.
 (Yes)* Subject to agreement by RTA

19 September 2005
71/8 Birtley Place
Elizabeth Bay 2011

Mr Sam Haddad
Deputy Director General
Department of Infrastructure Planning and Natural Resources
GPO Box 3927
Sydney 2001

Dear Mr Haddad

Re: Cross City Tunnel
Ref: Your letter dated 28 June 2005

We are unsure which department you are currently in following the restructure of DIPNR, but trust this letter will find you.

Thank you for your letter of 28 June and your attempts to address the important air quality issues that we have been forced to raise with you. Unfortunately several matters remain unresolved and now that the tunnel is open, further delay cannot be tolerated.

1) Publication of portal emissions- ~~we note that DIPNR has "advised RTA information on portal emissions must be made public on a real time basis (ie internet)".~~ However RTA have so far failed to confirm that this will occur and informed the July AQCCC meeting that they were finalising a response to the DIPNR letter. This situation cannot be permitted to continue and we draw your attention to two recent press articles which highlight our very real concerns regarding possible portal emissions. (see below)

2) Publication of in-stack data- We thank DIPNR for assistance in this regard however we still do not have confirmation that what is to be provided is the actual in-stack data.

If what is being offered is a 6 monthly periodic report, with an independent "audit" and "compliance" reporting, we regard this as unsatisfactory. All these are matters of opinion or someone else's idea of what compliance is and is open to interpretation.

We also ask that you confirm that the consolidated reports referred to will contain the actual calculation of hourly stack emissions for PM10 in kg/ hour at a minimum.

3) Split stack design- we ask the outcome of the advice from the RTA referred to in your letter to us of 27/5/05 relating to "how RTA intends to comply in the situation where the shaft with the monitoring equipment installed is closed (ie for maintenance) and the tunnel is open". In addition, how will the annual in-stack limit take into account emissions leaving from the portals?

4) Dissemination of air quality information to the AQCCC- similar to point number 1, the RTA have yet to confirm portal emissions and in-stack limit monitoring data will

be subject to the audit process, again stating they were finalising a response to DIPNR. We would appreciate information on the advice from the RTA to you.

5) Condition 274- we have drawn this matter to the attention of City of Sydney, SHFA and the RTA and understand the drafting of a protocol continues. Does DIPNR provide any oversight in the formulation of the resultant planning controls?

We feel sure that you will appreciate our extreme frustration at the lack of progress on these critical issues and we would appreciate a response from you at your earliest convenience.

Yours sincerely

Elizabeth George for all community members of the AQCCC for the CCT

Cc Mr Brian Elton, Chairman, AQCCC for the CCT
Clover Moore, Lord Mayor, Council of the City of Sydney



NSW GOVERNMENT
Department of Planning

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Phone 9228 6189
Fax 9228 6366

Contact: Mark Hather
Phone: 02 9228 6346
Fax: 02 9228 6366
Our ref: Y05/3243
File: S99/00836

Ms Elizabeth George
71/8 Birley Place
Elizabeth Bay NSW 2011

Dear Ms George

Subject: Cross City Tunnel

I refer to your letter dated 19 September 2005 regarding air quality issues and the Cross City tunnel.

In general, I note the following provisions (many of which have been made beyond the strict requirements of the conditions of approval):

- real time access to monitoring of elevated locations;
- periodic (6 monthly) reports on in-stack and in-tunnel monitoring;
- monthly reports to the AQCCC on portal emissions and in-stack monitoring; and,
- compliance reports to the AQCCC on ground level and elevated ambient monitoring.

Regarding the specific issues raised in your letter, I can provide the following response:

Publication of Portal Emissions

The requirement to provide real time access (ie Internet) to portal emissions information is not specified in the Conditions of Approval and it is not something that the Department can legally require. Notwithstanding, the RTA has indicated that it will be providing monthly summaries of portal emissions to the AQCCC. I am happy to consider your views further but will need to involve the RTA in future discussions.

Publication of in-stack data

Again the requirement to provide real time access (ie Internet) to in-stack data is not specified in the Conditions of Approval and it is not something that the Department can legally require. The RTA has indicated that it will provide monthly reports to the AQCCC on compliance with in-stack limits. Following advice from the DEC, the Conditions require that PM10 levels be reported as ug/m3 for the 1 hour averaging period and in tonnes/annum for the annual averaging period.

Split stack design

Major maintenance to the stack would be undertaken during periods of very light traffic volumes. The options available to the RTA would be to either close the tunnel, or based on monitoring history, undertake estimates on the likely pollutant loads. It is not considered to be an issue that cannot be effectively managed; however, I will be prepared to pursue the matter further if you wish.

Auditing of in-stack limits and portal emissions

Condition 271(c) requires an independent organisation approved by the Director-General to audit stack limit compliance. With regard to portal emissions, the requirement to undertake an audit is not specified in the Conditions of Approval and it is not something that the Department can legally require. Notwithstanding, the RTA has indicated that it will be providing monthly summaries of portal emissions to the AQCCC.

Condition 274- Drafting of Protocol

Whilst the Department has no statutory role in the development of land under the responsibility of SHFA, it nonetheless can ensure issues are addressed through its representation on the Board of SHFA. The Department also has a potential role in enforcement of the conditions of approval.

Thank you again for your active and continued interest in this matter. Please call Mr Mark Hather on 9228 6346 should you wish to discuss these matters further.

Yours sincerely



Sam Haddad
Deputy Director General

22/9.

UNCORRECTED TRANSCRIPT

SIMON ARTHUR YARWOOD SMITH, Deputy Director General, Department of Environment and Conservation, 59-61 Goulburn Street, and

ELIZABETH CORBYN, Director General, Department of Environment and Conservation, 59-61 Goulburn Street, affirmed and examined:

SAM HADDAD, Director General, Department of Infrastructure, Planning and Natural Resources, Bridge Street, Sydney, and

JOE WOODWARD, Executive Director Operations, Department of Environment and Conservation, 59 Goulburn Street, sworn and examined:

CHAIR: In what capacity does each of you appear before the Committee?

Mr SMITH: As the Deputy Director General of the Department of Environment and Conservation.

Ms CORBYN: As Director General of the Department of Environment and Conservation.

Mr HADDAD: As Director General of the Department of Planning.

Mr WOODWARD: As Executive Director of Operations in the Department of Environment and Conservation.

CHAIR: Is each of you familiar with the Committee's terms of reference?

Mr SMITH: Yes, I am, briefly.

Ms CORBYN: Yes, I am.

Mr HADDAD: Yes, I am.

Mr WOODWARD: I am.

CHAIR: If any of you should consider at any stage that certain evidence you wish to give or documents you may wish to tender should be heard or seen only by the Committee, please indicate that fact and Committee will consider your request. Do you wish to make a brief opening statement?

Ms CORBYN: Yes, I do. The Department of Environment and Conservation incorporates the Environment Protection Authority, often known as the EPA, which had an environmental regulatory role in relation to the construction of the cross-city tunnel. I understand that the terms of reference for the parliamentary Committee focus particularly on the role of agencies in negotiating the contract with the cross-city tunnel consortium, so I thought it was relevant for me to start by indicating that the Department of Environment and Conservation had no involvement in contract negotiations relating to the cross-city tunnel. The Department of Environment and Conservation's main role as a regulator is twofold: First, advising the Department of Planning on air quality, noise and water quality issues, on the environmental assessments and on the conditions of consent. Second, issuing the environment protection licence for the construction of the cross-city tunnel.

The legislative powers for licensing only cover construction; not operations, so we had a role in regulating the environmental impacts of the construction process. Primarily this covers dust, noise, water runoff, waste and spoil management. As I mentioned, we had no involvement in contract negotiations. Our role is to identify the environmental outcomes as appropriate and the air quality standards that need to apply. We do not make decisions about the design or the technology that is used in achieving outcomes, but we do assess whether we think the proposal can meet the outcomes specified. In relation to community liaison, we liaise with community through meetings and through

UNCORRECTED TRANSCRIPT

consideration of submissions in the environmental impact statements, and our environment protection licences are publicly available through public registers.

Of course, there are many environmental issues that we have dealt with, but the main one of concern during the approval stage was air quality. I wanted to just give a few comments on that. How key strategies to improve Sydney's air quality are set out in Action for Air, which is a 25-year in quality management plan. That involves working towards cleaner vehicles and fuel programs, which are important from any quality prospective, and also regulating industrial emissions and controlling multiple sources, such as wood heaters, but we do consider carefully the contributions that new proposals like a cross-city tunnel might have on air quality because of their obvious relationships with motoring vehicle emissions.

We did spend a significant amount of time working on the ambient and other air quality standards that would apply to the cross-city tunnel—they are applied through the development consent—and on modelling, monitoring and reporting programs that would be required. Generally, ambient air quality impacts from road tunnels and associated stacks are very small compared with industrial sources, but they do cause community concern and it is important that the standards are clear and that they are credible. The cross-city tunnel has stringent but necessary air quality standards at both stack and in-tunnel; and the ambient standards are derived from national standards, which are regularly reviewed. We also work with New South Wales Health, which has the lead on advising on in-tunnel standards.

There also is an active public reporting process on air quality, which we have been involved in, including information from monitoring stations. There are four ambient monitoring stations that provide real-time data to the local community on local ambient air. So the Department of Environment and Conservation [DEC] provides technical advice on monitoring and reporting to the Department of Planning. That is just a brief overview of our role and we are happy to answer questions later.

Mr HADDAD: I will just make a brief statement on behalf of the Department of Planning. We are pleased to assist the Committee. Just in terms of clarifying the role of the Department of Planning, we administer the Environmental Planning and Assessment Act and our role is essentially in terms of the environmental impact assessments of the cross-city tunnel and its myriad infrastructure and development projects; and in advising the Minister for Planning in relation to the granting of approval. With the cross-city tunnel, as with other projects, we do not nor did we deal with the contract negotiations at any stage but we deal with the RTA's performance directly. The consent approval is issued to the RTA and the obligation to comply with conditions of approval is with the RTA.

If I may briefly outline the process of the assessment and the approval process of the cross-city tunnel project. The statutory process of assessment started with the issuing of the director-general's requirements of the project. The director-general's requirements identify the broader issues that the proponent ought to cover, and we issued those requirements in June 1999. We issued them to the RTA and we issued them subsequent to discussions with other specialist government agencies. We incorporated their requirements into the consolidated director-general's requirements.

The RTA prepared an environmental impact statement and exhibited the environmental impact statement, and consistent with the law that applied at the time the RTA exhibited an environmental impact statement and received submissions, and examined the submissions and reported on those submissions publicly, and that is where the actual development application process started. That is when the proposal is submitted to the department. The department undertook an assessment and issued director-general requirements with conditions with the director-general's assessment report. That report was put on, and is still on, the web site and was made publicly available.

The then Minister for Planning approved the project after consultation with the proponent Minister, which was the Minister for Roads at the time. There is a statutory requirement for both Ministers to consult before issuing the final approval. That is basically an outline of the assessment process. If I may just cover two key factors for the Committee's consideration which guided the thinking and the intention and the outcomes of the final assessment process. Essentially, in undertaking the assessment of the cross-city tunnel we have based our assessment on two factors.



Department of
Infrastructure, Planning and Natural Resources

Mr Peter Seamer
General Manager
City of Sydney Council
PO Box 1591
SYDNEY NSW 2001

Dear Mr Seamer

Subject: CROSS CITY TUNNEL- PUBLIC ACCESS TO AIR QUALITY MONITORING INFORMATION

As you may be aware, the Department has had a number of discussions with the RTA, DEC and community representatives including the Lord Mayor of Sydney Council (Ms Clover Moore) on public access to air quality information associated with the operation of the Cross City Tunnel.

The Department supports making as much information available to the public as possible and has encouraged the RTA to do so even if this may go beyond a strict interpretation of the conditions of approval. It is noted the RTA has already committed to providing public access to air quality information beyond that required of the conditions of approval.

~~Notwithstanding, and in view of the extent of community concerns about portal emissions, I have also sought that the RTA provide the following additional information accessible to the public:~~

- ~~• Real time monitoring of portal emissions~~
- ~~• Monthly portal emission and in-stack compliance reports to the AQCCC~~
- ~~• Inclusion of portal emissions and in-stack monitoring in the audit report~~

A summary table of the proposed public access requirements for air quality monitoring for the Cross City Tunnel as requested by DIPNR is attached.

If you or any of your officers would like any clarification on the issues raised, please contact myself on 9228 6192 or Mark Hather on 9228 6346.

Yours sincerely

Sam Haddad
Deputy Director General

? Not dated.
Early June 05.

Bridge St Office 23-33 Bridge St Sydney NSW 2000 GPO Box 39 Sydney NSW 2001.
Telephone (02) 9228 6111 Facsimile (02) 9228 6191 DX 10181 Sydney Stock Exchange
Website dipnr.nsw.gov.au



Cross City Tunnel Air Quality Monitoring Requirements (Requirements Requested by DIPNR)

Parameter	Real Time (Internet)	Regular Internet (Monthly) Reporting of data	Periodic (6-monthly) reports	Independent Audit (6 monthly)	Compliance Reporting to AQCCC meetings
Portal Emissions	(Yes)*	(Yes)*		(Yes)*	(Yes)
Ground Level	Yes	Yes	Yes	Yes	(Yes)
Elevated	(Yes)	Yes	Yes	Yes	(Yes)
In-Stack			(Yes)	(Yes)*	Yes+*
In-tunnel	Yes	Yes	(Yes)	Yes	Yes

* Provided to the AQCCC on a monthly basis regardless of the frequency of AQCCC meetings.

Yes As required under the Conditions

(Yes) Additional requirements as adopted by the RTA and provided to the AQCCC by the RTA at a meeting on the 24 May 2005.

(Yes) Subject to agreement by RTA

No response on Avoidit
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Re: question asked by the AQCCC 26 July 2005

1. RTA to outline its response to DIPNR's letter at the next meeting of the CCT AQCCC and explain the position they take in this letter.

The RTA provided a letter to the Director General DIPNR responding to DIPNR's letters of 27 May 2005 and 30 May 2005.

In the RTA's letter the Chief Executive, Paul Forward, stated that extensive consultation had been undertaken with a number of parties in relation to the reporting of air quality on the CCT project and gave an assurance that the CCT project will comply with the Conditions of Approval as set by DIPNR.

The RTA has provided air quality monitoring, auditing, hard copy and website reporting in addition to that required under the Minister's Conditions of Approval; and in consultation with the air quality community consultative committee.

We confirm our previous advice that publishing real-time portal emission data on Cross City Motorway's website is not required under the Conditions of Approval for the project.

However RTA has agreed to provide the air quality community consultative committee with operational information on portal emissions as provided to the RTA, Department of Planning and Department of Environment and Conservation by CCM under the requirements of the Conditions of Approval; on a monthly basis.

2. Will RTA require that the tunnel be shut during routine maintenance, as in the City Link Tunnel in Melbourne?

When maintenance is carried out on roads and in tunnels, lanes are sometimes closed for safety reasons; to allow safe access to equipment etc. This is a normal practice. To do this, an RTA 'Road Occupancy Licence' must be obtained which gives permission to shut the lane/s or tunnel.

CrossCity Motorways (CCM) can apply for a Road Occupancy License to enable them to close lanes in the tunnel, should this be necessary, in order to carry out maintenance works.

Planned maintenance closures are generally at night, when traffic volumes are low, to minimise disruption to the public. A similar situation is when maintenance is planned for bridges in the Sydney region.

The RTA understands that Melbourne's Citylink tunnel is operated in a similar manner.

The RTA does not expect CCM to close the tunnel to traffic during every instance of routine maintenance, on the basis that some maintenance activities can be carried out safely without closing the tunnel in accordance with procedures.



Cross City Tunnel



Baulderstone Hornibrook Pty Ltd
ACN 002 625 130

Level 1, 131 Cathedral Street
Woolloomooloo NSW 2011

Telephone: (02) 9033 3850
Fax (02) 9033 3851

Locked Bag 8500
Potts Point NSW 1335

Ref: 05-0089-AS

24 January 2006

Cross City Motorway
Level 2
131 Cathedral Street
WOOLLOOMOOLOO NSW 2011

**Attention: Mr Peter Sansom
Chief Executive Officer**

Dear Sir,

Re: Cross City Tunnel – In-tunnel, Stack and Portal Emissions Compliance Report

As per RTA/CCM/BHOM commitment made to AQCCC to continue reporting any in-tunnel, in-stack, ambient or portal emissions events should there be no AQCCC meeting convened during the month, please accept this correspondence denoting the following:

1. In-Tunnel - There were no exceedances of the MPA Condition 258 or 259 limits recorded during the December 2005 reporting period.
2. Stack - There were no exceedances of the MPA Condition 271 limits recorded during the December 2005 reporting period.
3. Ambient - There were no exceedances of the MPA Condition 267 limits recorded during the December 2005 reporting period.
4. Portal Emission - There were no portal emissions recorded during the December 2005 reporting period.

We request you forward this correspondence to AQCCC members for their information.

Yours faithfully
Baulderstone Hornibrook Pty Ltd

Chris Dando
CCT O&M Manager

cc: Rowena Lennings CCM

UNCORRECTED TRANSCRIPT

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CHAIR: It is up to the witness. He is aware that the matter has been referred to ICAC.

Mr HADDAD: I am aware. I have no hesitation in saying that the discussions or the assessment were done in a very transparent manner between the departments and the RTA in relation to the normal process. I can tell you that no discussions took place and no contact was made with contractors or with third parties that were negotiating anywhere. I can also tell you that the officers who were involved in that would not have had access to any third party. The process was a technical process evaluating alternative locations, advantages and disadvantages, including for that matter not only technical and environmental benefits and dis-benefits but also the cost and practicality of doing that. It is just one of the issues where we had to make a decision in meeting a requirement of the condition. There was a report, which is publicly available. On the basis of that report I made the decision about the final location of the stack. That was consistent with the requirement of the condition.

Ms LEE RHIANNON: We have been constantly told that the cross-city tunnel is an improvement on other tollway projects. Why then does the approval condition not include any monitoring of possible portal emissions? Why are there no fines for portal emissions in the cross-city tunnel despite regular portal emissions occurring from the M5 East tunnel? What process is in place to ensure that the lessons learned on one such project will be transferred to subsequent projects?

Mr HADDAD: I am happy, if you do not mind, to get back to you in relation to the monitoring around portal emissions. My recollection is that we were talking about some monitoring around portal emissions. Maybe that is not explicit in the condition, but I would like to take that question on notice, if possible, and clarify it. The condition in the policy was that there should be no emissions from portals.

I am observing that portal emissions are occurring in other circumstances elsewhere in the world. But in this case, together with the Department of Environment and Conservation and others, the decision was made that no portal emissions were to take place that might have implications on other ventilation systems and all the rest of it. If we need more monitoring to prove the point, we will try to do that. ~~But my recollection is that we had started discussions on monitoring around portals. I happy to come back to you with that information.~~

Ms CORBYN: There is an explicit condition that it should be designed and operated to avoid portal emissions.

Mr SMITH: The thing is that there is no point in wasting money monitoring air pollutants of portal emissions. You simply need to know whether there is a negative vacuum pressure in the tunnel because then you know that the air will come back through the ventilation system and out the stack where it is all monitored.

CHAIR: Is there any need for filtration? Filtration is not included now, is it?

Mr SMITH: No. It is not necessary to meet the air quality goals.

CHAIR: Would it be necessary in the future?

Mr SMITH: The conditions make provision for that in the future, if necessary. But the monitoring is in place. The modelling that we did before suggests it is unnecessary.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS: Will the Department of Planning propose any rail or light rail options for Sydney?

Mr HADDAD: If you do not mind, I will take that question on notice. I do not want to mislead the Committee now.

The Hon. Dr ARTHUR CHESTERFIELD-EVANS: Do you mean that you do not know?

Mr HADDAD: I know.

Tunnel mouths to vent M5 air

By MARK SCALA

January 24, 2006

FUMES from the M5 East tunnel will be vented straight from the tunnel entrances, under a plan that suggests the State Government has given up on air filtering.

Documents outlining the plan, obtained by *The Daily Telegraph*, reveal a push to allow emissions to be blasted from tunnel portals, while the Government sits on a final audit report on pollution.

This comes despite a promise not to vent through the entrances and continuing concerns about emission-monitoring equipment.

Last week Planning Minister Frank Sartor and Roads Minister Joe Tripodi met to discuss the audit report, completed in December, and revealed in draft format last year.

The documents leaked to the Opposition recommend the Planning Department and RTA allow tunnel air to be released from entrances to cut costs and disperse emissions.

Fans are currently used to stop polluted tunnel air from exiting through the entrances, forcing it back towards the ventilation stack.

24/01/2006

The audit report also calls for increased stack emission monitoring and finds seven occasions where polluted air was blasted from tunnel portals.

Opposition planning spokesman Chris Hartcher said the plan went against approvals.

Pollution was to be removed through the overwhelmed stack, with the portals only used during emergencies.

"It's a cheap option that dumps a major health problem directly into homes," he said.

"The decision doesn't even raise alternatives, it's so unimaginative and was rejected years ago, but is now being proposed on the grounds of cost."

The plan also comes despite more than \$500,000 being spent on tunnel filtration trials, criticised by the opposition as a costly PR stunt.

Mr Sartor did not respond to the claims.

Professor Ray Kearney from Residents Against Polluting Stacks, said the proposal raised serious concerns about other tunnel projects which have the same planning requirements.

"What the M5 operators have been doing, under supervision and full knowledge of the RTA, is discharge mainstream tunnel pollutants out of portals during peak hour," he said.

M5 East Air Quality Community Liaison Committee spokesman Mark Curran said residents of Bexley North reported increased illness following emission releases.

"They were telling us they were getting sick, with sore eyes and chest problems," he said.

"When the portal emissions stopped, so did the problems."

The report follows revelations M5 East tunnel monitoring equipment had been off-line or faulty over an 18-month period.

On three occasions instruments measuring nitrogen dioxide and particle emissions had been replaced following suspect readings.

Further, the tunnel should have been closed on at least five occasions when carbon monoxide reached dangerous levels

Response to Sam Haddad's answers to questions taken on notice dated 23 December 2005

Question 2. Was the ventilation tunnel subject to an exhibition period?

Mr Haddad responded that the ventilation tunnel was in the Preferred Activity Report which was publicly available, exhibited from 25 November 2002 to 31 January 2003.

We would like to draw to the committees attention-

The Preferred Activity Report is not open to comment from the public, that is, it was on public exhibition only as an information document. The ventilation tunnel was never proposed in the EIS, (which came before the Preferred Activity Report) so was not part of any public discussion.

Still to be answered-

Mr Haddad had said that he would come back to the committee with information regarding monitoring around portals. (page 38 of the uncorrected transcript 7 December 2005)