Fire & Rescue NSW

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Contact: A/Inspector Greg Purvis

11 December 2018

NSW Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam

F6 Extension Stage 1
Exhibition of Environmental Impact Statement (SSI 8931)

I refer to the above project's Environmental Impact Statement (EIS) which is currently on public exhibition. Fire & Rescue NSW (FRNSW) have reviewed aspects of the EIS and the following comments and recommendations are submitted to the NSW Department of Planning & Environment (the Department) for consideration.

FRNSW Recommended conditions of approval for F6 Stage 1

1) At least six months prior to the opening of the project, the proponent shall prepare an Emergency Response Plan, in consultation with Fire & Rescue NSW (FRNSW) and NSW Police. The plan shall include, but not necessarily be limited to:

   a) protocols and procedures to be followed during emergency situations associated with the operation of the project including vehicle collisions, fires and explosions including taking into account the needs of people with a disability or who may experience access problems in emergency situations.

   b) details of traffic management measures to be implemented during emergencies, where appropriate, to minimise the potential for escalation of the emergency.

   c) management and infrastructure measures to address the potential environmental impacts of an emergency situation, including measures for containment of contaminated fire-fighting water, fuel spills and gaseous combustion products.

   d) a training and testing program to ensure that all operational staff are familiar with the plan and coordination with FRNSW and NSW Police is regularly exercised.

   e) a simulated emergency response exercise in accordance with the approved Emergency Response Plan, including the proponent, FRNSW and NSW Police shall be undertaken on at least one occasion at least one month prior to the opening of the project to traffic.

   Note: FRNSW and NSW Police shall participate in the emergency response exercise at a time agreed with the proponent after being provided with at least one month notification of the exercise.

2) The proponent shall undertake an initial and ongoing annual Hazard Reviews of the project for the first five years of operation. The reviews must address all hazardous incidents that have occurred during the preceding period.

   a) The initial review shall be undertaken for the first three months of operation after the opening of the project to traffic.

   b) Subsequent reviews shall be undertaken for the following nine months and thereafter twelve monthly intervals.

   c) A report outlining the results of the hazard review, and any proposed additional safety measures to be implemented in response to the findings of the review, shall be submitted to FRNSW no later than one month after the review period.

   The proponent shall respond to FRNSW requirements in relation to the findings of the review, within such time as may be agreed by FRNSW. Where FRNSW continues to hold concerns, these are to be resolved to the satisfaction of RMS. FRNSW may direct the proponent to undertake further hazard review following any major incident in the tunnel.

3) The proponent shall develop a Fire Engineering Brief and Fire Engineering Reports to address fire and life safety in the tunnel. The reports shall outline fire protection systems and other tunnel equipment, systems, and operational protocols required for fire and smoke management. In developing the reports, the proponent shall undertake a detailed fire engineering study in accordance with the Australian Building Codes Board International Fire Engineering Guidelines, the Project Deed and in consultation with FRNSW.

   a) Detailed design of the tunnel shall incorporate the design and operational measures developed in the fire engineering study and in accordance with the Project Deed to minimise the potential for, and effect of, fire and hazardous material incidents in the tunnel.

   b) The reports shall be developed in consultation with FRNSW. The final design of the tunnel in relation to the fire and life safety features shall be verified against the fire engineering study and Project Deed in consultation with FRNSW by a suitably qualified independent person(s)/organisation. The proponent shall respond in writing to any recommendations made by FRNSW. Where FRNSW continues to hold concerns, these are to be resolved to the satisfaction of RMS.

4) Prior to the opening of the project to traffic, a full audit of the fire and life safety system as defined by the fire engineering study developed in Condition 3 above shall be undertaken by an independent person(s)/organisation and in consultation with FRNSW. The objective of the audit shall be to ensure that all design and operational measures outlined in the fire engineering study and Project Deed have been installed, are operational and achieve the required design criteria. The results of the safety audit shall be submitted to FRNSW prior to opening of the project to traffic. The proponent shall respond in writing to any recommendations resulting from FRNSW review of the audit. Where FRNSW continues to hold concerns, these are to be resolved to the satisfaction of RMS.

5) Fire simulation and hot smoke testing shall be undertaken as part of the simulated emergency response exercise to be staged prior to opening of the project to traffic. The proponent shall respond in writing to any recommendations made by FRNSW as a result of the exercise. Where FRNSW continues to hold concerns, these are to be resolved to the satisfaction of RMS.

6) A detailed maintenance-testing program outlining the methods of testing the fire and life safety systems and schedule for implementation shall be developed in consultation with FRNSW prior to opening of the project to traffic. The proponent shall respond in writing to any recommendations made by FRNSW. Where FRNSW continues to hold concerns, these are to be resolved to the satisfaction of RMS.

7) Maintenance testing of fire and life safety systems must be undertaken at least annually, or any other interval as required by the design engineer and FRNSW. Results of maintenance testing shall be made available to FRNSW for review and the proponent shall respond in writing to any additional requirements to ensure the reliability of the fire and life safety systems. Where FRNSW continues to hold concerns, these are to be resolved to the satisfaction of RMS.

8) That the F6 Stage 1 fire hydrant system incorporates motorised isolating valves (with local manual override actuation capability). Motorised isolating valves are to be installed in locations and configured such that when remotely actuated, restore emergency fire hydrant water supplies to the fire hydrant system while minimising disruptions to any potential FRNSW firefighting operational activities that may be in progress.

9) That the F6 Stage 1 fire hydrant system incorporates motorised isolating valves that can be remotely actuated and controlled from the tunnels control centre.

10) In addition, to ensure that hydraulic fire main failures can be quickly identified and isolated, FRNSW recommends that leak detection be incorporated into fire service mains that serve the tunnel's deluge and fire hydrant systems.

For further information please contact Greg Purvis of the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS18/3257. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours Sincerely

Superintendent Michael Henly
Manager
Infrastructure Liaison Unit