

Date: 14 March 2016

Our Ref: Modifications to Harbour Control Tower Demolition

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Sensitive

Dear Sara,

SafeWork NSW has reviewed the various documents in relation to the Modification Request for Barangaroo Headland Park & Northern Cove Main Works, Barangaroo (MP10_0048 MOD 8) – Demolition of Harbour Control Tower. In particular a review of the following documents has been undertaken:

- 160225_ HCT Modification Letter to DPE
- Barangaroo_HCTDemo_SOHI_v3_small_Apendix (Appendix 5)
- MOD 8 Attachment A_ Proposed Modifications
- MOD 8 Attachment B_ Demolition Work Plan
- MOD 8 Attachment C_ Traffic Management Plan
- MOD 8 Attachment D_ Noise and Vibration Assessment

SafeWork NSW believes that there is insufficient information in the demolition work plan to ascertain whether the demolition of the HCT can be undertaken safely. SafeWork NSW has the following comments in relation to the proposed demolition methodology.

Asbestos

- As per Clause 452 of the Work Health and Safety Regulation 2011, all asbestos that is likely to be disturbed must be identified and as far as is reasonably practicable removed prior to demolition. SafeWork NSW submits that asbestos removal work occur prior to any demolition work.

XL Platform

- No information on the structural capacity of the platforms for plant & equipment, personnel and demolition rubble and debris.
- No detail on adding inner section as transition to under the control room
- How will dust suppression occur on the XL platform?
- How will falling objects be controlled from the XL platform? Will there be gaps through which rubble can fall?
- No information on the interaction of the Alimak with the XL platform. How will access to the platform be designed without leaving rubble gaps?

Emergency Management

- No emergency procedures are attached in demolition work plan. Information such as emergency procedures if the Alimak fails.

Demolition

- There is insufficient information as to methodology used to demolish and remove the half trusses and how glass will be removed
- Engineering assessments been undertake to determine whether rubble from demolished floors falling onto slabs can sustain loads imposed (including live and dead loads)
- There is no information as to how the lift / stairs will be demolished therefore creating a demolition chute.
- On page 9 of the demolition work plan under the heading general demolition techniques it states that the majority of the demolition will be carried out by excavators ranging from 36 tonne to 70 tonne, all having purpose built demolition shears and attachments – systematically cutting and pulling the structures to the ground in a safe and controlled manner. This is in conflict with the proposed methodologies in Section 11 of the Demolition Work Plan and requires clarification.
- On page 16 of the demolition work plan under the heading “Core Footing” it states that the core footing of the tower will be removed by “inserting an explosive gas to blast and crack the footing”. The relevant blast management plan and other relevant documents have not been provided to SafeWork NSW for review by the Specialist Services Group.
- Where will operators of the two demolition robots be positioned whilst demolition work will be occurring?
- Although predominantly an EPA issue, noise from pulverising concrete (and hammering if pulverising is not effective) will result in noise exceedance. The noise and vibration assessment report states, *“Of the remaining methodologies, the structural dismantling option will result in the lowest number of demolished elements, minimising the overall risk exposure to surrounding community, number of exclusion zones and noise impacts to surrounding receivers, and hence is the preferred option”*.
- Will there be any mobile cranes used to lift items from the HCT (Lift Motors, Trusses?). Site access (Section 8.5) in the demolition work plan states that access via Merriman Street will only be required during the construction of the XL platform (11 days). The demolition work plan or the traffic management plan does not address these issues. The HTC Modification Letter advises that mobile cranes will be used to remove heavy plant items (i.e. lift motors).

If you have any questions or require further information relating to this letter, please contact State Inspector (Asbestos and Demolition) Steven Nikolovski at steven.nikolovski@safework.nsw.gov.au

Yours sincerely,



Kathryn Heiler

Director, Construction and Metropolitan Operations - Work Health and Safety Division