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File Ref. No:BFS16/2831 (12386)TRIM Doc. No:D17/10392Contact:Station Officer C. Wheatley

The Department of Planning & Environment C/- Pamela Morales GPO Box 39 SYDNEY NSW 2001 E: pamela.morales@planning.nsw.gov.au

28 February 2017

Dear Ms Morales

Vopak Terminals Sydney Pty Ltd Site B - Bulk Liquids Storage Terminal 1-9 and 20 Friendship Road, Port Botany (Project Approval MP 06_0089 MOD 2)

I refer to the above development proposal's Environmental Assessment (EA), which is currently on public exhibition. Fire & Rescue NSW (FRNSW) have reviewed the EA, in particular Section 6.3 and Appendix D – Site B Quantitative Risk Assessment.

In light of the information provided and the history of modifications prepared for the site as a whole, FRNSW recommends a Fire Safety Study (FSS) be prepared for submission and consultation. FRNSW would also like to encourage the proponent to undertake early consultation and we will actively facilitate timely dialogue.

To assist the proponent progress with design development and incorporate FRNSW expectations in regards to fire system design into the Front End Engineering Design documentation we submit the following comments and recommendations:

Comments/Recommendations

The following points outline matters which FRNSW require to be addressed as part of the FSS, in response to our review of EA. These would also address FRNSW expectations with respect to the minimum fire protection system and site resource capabilities that should be provided in order to enable FRNSW to safely and effectively resolve fire incidents regarding the proposed works:

1. While low likelihood fire scenarios may be considered non-credible, for example combustible liquid tank or bund fire scenarios, the occurrences of such incidents still have potential for significant consequences. FRNSW expects that appropriate mitigation measures are developed and implemented

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for low likelihood fire scenarios. For example, use of on-site portable foam monitors and fixed bund pourers.

- 2. FRNSW recommend an appropriately detailed meteorological analysis be undertaken and included in the FSS to determine the wind conditions that could produce the worst-case fire or release event.
- 3. Examine the individual and cumulative impacts associated with the establishment of the new road tanker unloading bays, the Vapour Recovery Unit upgrade, the amenities block and the warehouse extension.
- 4. The FSS should consider scenarios resulting from the increase in total site throughput. This includes (but not limited to) consideration of fire scenarios with larger quantities of spills and releases, the impact on accessibility of fire hydrants and all other fire brigade requirements.
- 5. Heat radiant and risk contours should also be provided in the FSS for each assessed scenario, including those identified to be of low likelihood, in order to allow FRNSW to assess the adequacy of the proposed fire safety safeguards on site.
- 6. Outline all proposed fire protection measures and procedures including (but not limited to) manual and/or automated systems, the fire hydrant system design proposed, detection systems, type of foam-based systems proposed and the procedures/systems available on site for call-out and liaison with the fire brigade.
- 7. In relation to flammable storage facilities at site B, the actuation of active fire suppression and cooling water systems is expected to be initiated automatically by appropriate automatic detection systems, complete with local and remote initiation redundancy.
- 8. The on-site Incident Management Team (IMT) and relevant subject matter experts (SME) are expected to be readily available for liaison with FRNSW. A timely IMT/SME response to the site during an incident will be required to assist FRNSW incident management teams during formulation of incident management strategies and implementation of tactics. IMT/SME are expected to be on-site and available for FRNSW liaison within 30 minutes for incidents that may occur outside of normal business hours.

For further information please contact Cameron Wheatley of the Fire Safety Assessment Unit, referencing FRNSW file number BFS16/2831 (12386). Please ensure that all correspondence in relation to this matter is submitted electronically to <u>firesafety@fire.nsw.gov.au</u>.

Yours singerer

Station Officer Mark Castelli Team Leader Fire Safety Assessment Unit