

L4, 2 Burbank PI, Norwest Business Park, Baulkham Hills 2153 Locked Bag 2906, Lisarow NSW 2250 Customer Service Centre 13 10 50 ABN 81 913 830 179 | www.safework.nsw.gov.au

Ms Pamela Morales Industry Assessments NSW Department of Planning and Environment GPO Box 39 Sydney NSW 2001 Dear Ms Morales,

3 March 2017

## Vopak Bulk liquids Storage facility, Port Botany – MP 06 0089 MOD 2

SafeWork NSW has reviewed the documents for the above project and the matters to be addressed in the response to submissions by the applicant are set out in the attachment to this letter.

If the proposed modification is approved, the Applicant will need to revise the current Safety Case for the facility under the provisions of the WHS regulation. However, it is essential that the final design of the modifications take into account the risk reduction measures to reduce the risks to So Far As is Reasonably Practicable..

## **Recommended conditions**

Recommended conditions of approval will be provided after SWNSW has reviewed the responses to the submissions.

Should you have any queries, please contact me on e mail <u>sohan.fernando@safework.nsw.gov.au</u> or telephone 88672747.

Yours sincerely,

Sohan Fernando Senior Safety Analyst Major Hazard Facilities Team SafeWork NSW

## VOPAK SITE B - MP 06\_0089 MOD 2) - Clarifications required by SafeWork NSW.

- <u>PHA clause 1.5</u>: Only existing controls have been taken into account. New controls have been left to be addressed at the safety case stage. Therefore, prior to completion of detailed design, the Applicant must carry out a risk assessment and identify all controls that could be included to achieve SFARP as required under the WHS legislation. Safety studies such as HAZOPs must identify possible controls to achieve SFARP. Controls to be included in the final design must be agreed with SWNSW prior to finalisation of detailed design.
- <u>PHA Clause 4</u>.2: With the proposed throughput increase, please clarify if velocities in pipelines will increase. If so, surge issues must be addressed prior to completion of detailed design and controls identified and included in the design. For new pipelines, surge issues must be included in the pipeline design and controls implemented.
- 3. <u>PHA Clause 4.2:</u> If pipeline velocities will remain as current and duty factors are increased, were the new duty factors included in the QRA ?
- 4. <u>PHA Clause 5.3.2:</u> This clause states that the release rate in the event of a pipe failure is taken as the normal pumping rate. In the event of a full bore pipe failure of the pump delivery line, particularly close to the pump, the spill rate can be very much higher for centrifugal pumps, as the pump would be delivering at close to zero head. Please confirm if consequences and secondary containment capacities were calculated on this basis.
- 5. <u>PHA Clause 5.3.3</u>: For full bore pipe failure scenario flor a tank bottom entry pumping line, should the spill rate be the pumping rate plus the tank outflow under tank head?
- 6. <u>PHA Clause 5.6</u> : If tank allocations between Diesel, Gasoline and Jet fuel can be changed from time to time, please justify factoring the ignition probabilities for jet fuel and diesel.