



Date: 10 June 2011  
Our Ref: 10037 / 2008/042627-02  
Your Ref: 08\_0129 MOD 1

Ms Felicity Greenway  
A/Manager – Industry, Mining & Infrastructure Projects  
Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Dear Ms Greenway

**Re: Exhibition of Modification Request for Orica Ammonium Nitrate Expansion Project**

Thank you for your letter to my colleague, Joanna Fielding (received by us on 5 May 2011) inviting a submission on this proposal. My thanks also to Hayley Rich for granting an extension to 10 June 2011 for our response.

Our comments are limited to some questions and observations about the Hazard and Risk Report contained in Orica's modification request.

1. In relation to the bulk ammonia storage tank (12,000 tonnes, -33°C):
  - a. the basis of consequence (vapour evaporation) estimates for the catastrophic failure of the tank is not stated
  - b. has Orica considered the issue of concrete bund overtopping in a potential catastrophic failure? If not, how will this affect its consequence estimates?
  - c. we understand that Orica is considering including a flare stack - has Orica include consideration of a flare stack in the Hazard and Risk Report?
2. Has Orica assessed the integrity of the tank and concrete bund wall in the case of an earthquake?
3. In relation to incidents, we note that some relevant incidents have not been included eg the rupture of a cryogenic ammonia tank (roll over due to warm ammonia) in Jonova, Lithuania (USSR) on 20 March 1989 (see [http://www.aria.developpement-durable.gouv.fr/ressources/aria\\_717\\_eng.pdf](http://www.aria.developpement-durable.gouv.fr/ressources/aria_717_eng.pdf))

I hope these comments are of assistance. If you wish to discuss them, please contact Mr Ragu Nayak, Senior Safety Analyst, Major Hazard Facilities Team on 02 8281 6303 or [raghava.nayak@workcover.nsw.gov.au](mailto:raghava.nayak@workcover.nsw.gov.au).

Yours sincerely

*C. Raghava Nayak*  
for  
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