

# **Attachment B**

Fire Department Memorandum



**CITY OF NEWPORT BEACH**  
**COMMUNITY DEVELOPMENT DEPARTMENT**

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## Memorandum

**To:** Seimone Jurjis, Community Development Department Director  
**From:** Kevin Bass, Fire Marshal  
**Date:** July 13, 2020  
**Re:** Anhydrous Ammonia Tank Enclosure - Uptown Newport Development

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The existing anhydrous ammonia tank servicing the TowerJazz semiconductor manufacturer is located adjacent to the Uptown Newport Development project area ("Uptown"). The Off-Site Consequence report (prepared for the Uptown Environmental Impact Report) required the relocation of the anhydrous ammonia tank in order to create a minimum safe distance to protect the future Uptown residents. However, there were concerns regarding the inability to "season" the relocated tank to provide the necessary levels of water purity for TowerJazz operational needs. Moving the tank would also create other operational challenges for TowerJazz. Since the tank relocation was difficult to implement, the property owner (Shopoff) submitted an engineering concept analysis to enclose the existing anhydrous ammonia tank in its current location. The proposal was intended to reduce and/or eliminate the off-site consequences of this hazardous material in the event of a release.

Anhydrous ammonia is a toxic gas that is harmful to human respiratory systems. However, anhydrous ammonia is neutralized when water is added to the gas. Once water is added, the gas becomes a liquid, and in this state it is no longer a health hazard. The existing anhydrous ammonia tank is currently protected by a water deluge system. However, the tank is not enclosed and is open to the atmosphere. Therefore, portions of any released gas will not be affected by the water system (i.e. the gas will escape before it is neutralized). By enclosing the tank, the gas will be contained within the room and neutralized by the water system. The proposed engineering analysis confirmed the containment concept, and an engineering peer review conducted for the Newport Beach Fire Department validated the applicant's methodology and conclusions.

The Newport Beach Fire Department recommends approval of the anhydrous ammonia tank enclosure and the modification of mitigation measures pertaining to this tank. The enclosure of the anhydrous ammonia tank provides improved protection to the surrounding community by containing and neutralizing any potential gas release, and it is more effective than the original mitigation measure to relocate the existing tank.