

# Memorandum

**To:** Mr. David Gessert, P.E., Consulting Fire Protection Engineer.

**CC:** Fire Chief Richard Curtis  
Mr. Bob Hyde, Port of Anacortes

**From:** Assistant Chief Dan Harju

**Date:** 2/3/2010

**Re:** Fire Department Questions and Concerns Regarding Proposed Prilled Sulfur Processes

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The Anacortes Fire Department has reviewed the materials submitted by the Port of Anacortes for the proposed Prilled Sulfur handling and shipping project. Subsequent to this review we have developed a list questions and concerns regarding this sulfur product, its handling processes and the information provided within the submittal. We are requesting your review of the concerns listed below, and request your professional comment and discussion on these points.

The Marsulex MSDS as provided appears to have some conflicting information when compared to the International Fire Code, 2006 Edition.

1. The MSDS first page, Section 2 classifies the product as a "Flammable Solid". The MSDS then indicates in Section 5 that the ignition temperature is 449 degrees F. The 2006 IFC, Chapter 36- Flammable Solids, Section 3602.1 defines flammable solid as having ignition temperatures below 212 degrees F. It also goes on to say, "A chemical shall be considered a flammable solid when tested in accordance with CPSC 16 CFR Part 1500.44, if it ignites and burns in a self sustained flame at a rate greater than 0.1 inch per second along it's major axis." *So please clarify under what standard this product is being classified as a flammable solid, and whether this product has been burn tested as specified in the code reference.*
2. Section 5 of the MSDS states "Easily ignitable, combustible solid." It also recommends isolation and an initial evacuation radius of one half mile in the event of a truck or tank fire." *Please comment as this would seem to imply a much more hazardous potential then the current practices being applied at the production and stock piling site on Farm-to-Market Road would lead one to believe exists.*
3. Evaluate and clarify the ship board plan for dealing with "ship-board hold fires" in the event one should occur. *Discuss this plan against industry standards for other shipping terminals where this product is handled.*
4. Section 8 of the MSDS discusses the use of personal protective clothing during normal use and exposure. It also directs the reader to use full protective clothing and a self-contained breathing apparatus in case of a fire. *Clarify whether the full PPE worn by fire fighters is adequate for providing physical protection from skin contact with this chemical in its heated and or melted form.*

5. MSDS Sections 8 and 11 list various exposure limits for this product. *Clarify what the expected exposure values should be for this product during normal every-day loading processes.*
6. MSDS Section 6 discusses how to handle spills of this product. It indicates and recommends a 100 meter (330 feet) down wind radius of separation during the clean-up. *Clarify how does this distance relates to the normal distance being provided by the port during normal open loading processes and the surrounding residential neighborhoods?*
7. *What is the Port's plan for monitoring and mitigating neighborhood complaints should sulfur odors be experienced by the adjoining residential neighborhood?*
8. NFPA Standard 655 and its sections address the handling of hazardous dust producing products and electrical equipment hazards associated with said products. *Evaluate the electrical wiring and equipment associated with the loading and transfer system in relation to NFPA Standard 655, Sections 4.3, 4.5, and 4.6.*
9. *Discuss the interventions being applied to contain and deal with fugitive dusts as described in NFPA 655, Sections 7.1 and 7.2.*
10. *Discuss and provide detailed plans for emergency response and employee training as referenced in NFPA 655, Section 8.1.*
11. *Discuss and provide detailed maintenance plans for items referenced in NFPA 655, Chapter 9.*
12. *Discuss any issues listed in Annex A of NFPA 655 that apply but may be not addressed in the above discussion points.*
13. *Provide detailed copies of the Port's Hazardous Material Inventory Statement and Management Plan, as required and described in Chapter 27 of the 2006 IFC.*
14. *Please comment on any other Chapters of the 2006 IFC that might apply to this situation and handling process.*