



Community Forum 15/12/08

Dust Issues and Actions



Issues on Alumina Loader Sat 12th Dec

- Reviewed security camera images of loader booming up at 3 different times.
- No real issues seen during raising operation which is normally highest potential for dusting.
- Major problem appears to be alumina “lifting” out of the holds due to swirling winds.
- Worst dusting that can be identified appears to be occurring when hatches are close to full and wind is skimming across the top of the alumina
- Investigation also showed inconsistent feed rates at times which can impact Cascade Chute efficiency
- Camera footage will be reviewed with operator and shift supervisor who were on duty and protocols reinforced



Protocols for Alumina Dust Suppression

- Procedure 716.012 developed for monitoring of dust during loading.
- Protocols are in place to cease loading if one or more of the following conditions occur.
 - Wind speed at the wharf reaches 22 knots.
 - Operator determination that visible emissions are unacceptable.
 - Loading rate to remain between 800 and 1200 tph to maximise efficiency of the cascade chute. If rate cannot be maintained, shutdown loader and build inventory level.
 - Dust collector must be at full operational capacity. If not, loading is to cease immediately
- Operators are empowered to cease loading based on their opinion of dust emissions and have done so on numerous occasions previously.



Current Alumina Dust Actions

- Full time Dust Technician in place and working continuously on dust systems
- Comprehensive audit of all Raw Materials dust collectors completed by HVAC and repair scopes developed
- HVAC about to commence major repairs on 1631 tower. (large tower next to Island A-Frame)
- Further repairs/improvements to continue through 2010.
- Geoff Mahon – Specialist Engineer in dust systems now working on sub performing transfer points
- Andy Carruthers – Specialist Engineer for cascade chutes will be seconded to QAL in early 2010 to work at maximising chute performance. Wharf Area Supervisor and trades personnel will be moved from normal duties to work on this project full time.



Trial Alumina Dust Curtain

- Attempt was made to use a curtain to prevent/capture fugitive dust from ships holds
- Limited success achieved
- Main issues encountered ;
 - Difficulty in raising curtain into place given size, weigh and impact of breeze on surface area.
 - Logistically difficult to move between hatches every 3-4 hours
 - Long set up and pull down times on each hatch
 - Ability to prevent swirling dust releasing was limited.
 - Potential difficulties with different ships configuration and attitude of ships Masters



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Coal Dust Actions

- Strategic coal stockpile is currently being rebuilt resulting in extra trains each week until 31/12.
- Dust issues have been addressed by ;
 - Full time water truck in use to dampen stockpile and surrounding work area
 - Additional water sprays installed at discharge head of conveyor leading to outside stockpile.
 - Additional water sprays onto conveyor leading to outside stockpile
- Longer Term actions are ;
 - Redesign of the discharge conveyor to the outside stockpile to install an upgraded chute reduce velocity and dust emissions.
 - Reduction of working stockpile volume as strategic stockpile is rebuilt.
 - Complete hydromulch of the strategic stockpile when shaping has been completed to fully cover all coal and eliminate dusting



Questions ?