



MOSH NOISE TEAM CIRCULAR NO. 5/13

(For communication and action)

PROPOSAL FOR AN INDUSTRY-WIDE BUY QUIET POLICY

Purpose: *The purpose of this document is to provide the Mining Industry Leaders with a consolidated industry-wide strategy for a Buy Quiet Policy as well as a practical path-forward to execute the strategy*

1. INTRODUCTION

The mining industry's zero harm vision and the commitment that mining companies have made towards elimination of noise hazards in mining is compelling. Despite the good work and progress made, mining industry did not manage to achieve the 2008 milestone that was set in 2003 and will regrettably also not do so by 2013. To effectively manage the noise hazard, there is a general consensus that the industry will have to focus most of their energies on source elimination initiatives and this sets the pretext and importance of collective leadership involvement in addressing the noise hazard.

Buy Quiet Policy definition

A standing decision from a mining company or the mining industry to procure only equipment and machinery that comply with specific noise emission requirements.

The motivation for an industry-wide Buy Quiet Policy is based on, amongst others, the following factors:

- In the last decade, individual mining companies have established Buy Quiet Policies. Also the mining companies procure equipment from a number of suppliers and unless industry motivates suppliers to invest specifically into the development of quieter equipment, the industry will remain reactive in elimination noise hazards. It has now become imperative for the mining industry to come-up with an industry-wide Buy Quiet Policy that will create a 'step change' in noise management;
- While individual Buy Quiet Policies from mining companies does help, it is only through the collective demand of the mining industry that suppliers will be motivated to focus on noise reduction as a critical part of their product development and performance;
- In order for industry to be sustainable in future and with the effects of globalization, the mining industry is going to become even more mechanized. As such it is imperative to manage noise at the design phase of the machinery/equipment. With equipment life of 5 to 10 years the industry will have to be proactive and play a collective facilitative role towards 'real innovation' that can significantly lower noise at source. Industry-wide co operation with suppliers will create a win-win result for both parties as suppliers will have the potential to offset their development cost against potential increase in market share;

- Industry has spent a substantial amount of money over the last decade to compensate for high noise emitted by machinery. Profitability and sustainability challenges make this scenario going forward very expensive. Industry should achieve source elimination results at a fraction of the cost if this strategy can be transformed into policy and practice; and
- It is substantially cheaper and weighty for mining companies to embark on an industry-wide Buy Quiet Policy initiative as opposed to individual company financing reactive engineering developments.

2. STRATEGY TOWARDS A MINING INDUSTRY WIDE BUY QUIET POLICY

To effectively setup an industry-wide Buy Quiet Policy, mining companies must meet the following strategic objectives:

- Know the noise sources: Identify and rank noise sources throughout the industry - Mining companies have done remarkably well in this regard and this information is readily available however it need to be collated and normalised;
- Establish ‘stretched’ noise emission targets per machine/ equipment;
- Determine approximate aggregate demand of specific machinery / equipment that mining companies use/will use over the next 10 years. This will greatly assist towards creating a value-case to engage the suppliers on;
- Engage with suppliers (multiple) at executive level to communicate and obtain commitments towards (b). Agree on milestones;
- Industry commits to only procure machinery/equipment that complies to (b) and (d);
- Manage progress towards the agreed milestones; and
- There might be a need to classify South African specific equipment / machinery so that noise hazard for global equipment / machinery can be addressed by global initiatives such as Earth Moving Equipment Safety Round Table (EMERST)

Critical steps towards the achievement of these strategic objectives include;

- Establish a mining industry Buy Quiet Policy Task Team with the sole mandate of executing the above objectives facilitated by the MOSH Learning Hub,
- Set-up executive Round Table discussions with the supplier groups to facilitate buy-in, support and formation of specific Task Teams,
- Establish specific policies based on equipment/machinery **life –cycle cost** as opposed to **purchase cost**. Develop standards for noise emission levels at the start-of-use (new equipment), mid-life use and end-of-life use. Requirements must also include

maintenance requirements for sustaining low noise emission during the operating life of equipment,

- iv. Task Teams and suppliers to establish realistic and equipment specific noise reduction targets and milestones, and
- v. Monitor and manage progress towards the milestones.

Based on these realities and necessities, it is important that an industry-wide Buy Quiet Policy be developed at - and with the active participation of mining industry executives. This on its own will be a step-change because the noise hazard is currently abdicated to Occupational Health departments without the effective involvement of Executives and integration of Engineering and Procurement departments.

3. CHALLENGES TO EXECUTING MINING INDUSTRY-WIDE BUY QUIET POLICY

Some of the potential pit-falls to realisation this proposed initiative are:

- Inability of the industry to stand together on this initiative;
- A fixation on the purchase cost as opposed to life cycle cost;
- Inability of the mining companies to sell this strategy to their individual operations;
- Suppliers resistance based on international product specifications and requirements;
- Suppliers resistance mainly due to upfront investments that might be required in some Research and Development initiatives and the targets set by Task Teams;
- Potential reduction of competition and monopoly issues; and
- Potential Intellectual property issues.

The above challenges require specific mitigation action and are surmountable.

4. CONCLUSION

Some of the mining industry's challenges require extensive industry-wide co-operation and low noise emitting machinery and equipment require this type of cooperation. Taking a leaf from other industries, the industry's collective buying power can energise suppliers to unleash innovation when it comes to noise hazard management.

The proposed strategy is focusing on eliminating noise at the '**real source**' and addressed at the appropriate place i.e. the design of equipment and machines. The approach is in-line with some of mining executives' vision of introducing new initiatives in the industry – *"...new processes would be put in place to reach outside the mining industry, which lagged the petroleum, manufacturing and aviation sectors ... There is no reason why our industry should not use the best from all of these restless innovators"* Mr. M. Cutifani (19/04/2012).

Only through a continuous process of As Low As Reasonably Possible (ALARP) can the mining industry realize its vision of ZERO HARM in the area of noise.

We look forward to your comments

Yours truly
Sharks Gumede

MOSH Principal Adoption Specialist
Chamber of Mines
Date: 30 April 2013