



Mining Industry Occupational Safety & Health



MOSH 2013 MILESTONES

M M M A – COUNCIL

18 FEBRUARY 2010

P J B BECKER

Chamber of Mines

HARD ROCK MINES COMMUNICATIONS FACILITATOR





Mining Industry Occupational Safety & Health



- **2013 Milestones – Objectives**
- **Statistics**
- **Historic review**
- **MOSH Task Teams**
- **COPA**
- **OHS Results**

Objective

- **Industry Target: Elimination of Fatalities and Injuries**
- ***Milestones:***
 - In the Gold Sector: By 2013 achieve safety performance levels equivalent to current international benchmarks for underground metalliferous mines, at the least.
 - In the Platinum, Coal and Other Sectors: By 2013 achieve constant and continuous improvement equivalent to current international benchmarks, at the least.



SILICA DUST -2013 MILESTONES



By December 2008, 95% of Individual exposures $< \text{OEL } 0,1 \text{ mg/m}^3$

After 2013, no new cases of **silicosis** amongst previously unexpected individuals , using current diagnostic methods

NOISE MILESTONES



After December 2008, the ***Hearing Conservation Program*** implemented by industry must ensure that there is no deterioration in hearing greater than 10% amongst occupationally exposed individuals

By December 2013, the total ***noise emitted*** by all equipment installed in any workplace must not exceed a sound pressure level of 110dB(A) at any location in that workplace (includes individual pieces of equipment)

Fatalities per commodity

	2008		2009		%
Sector	Deaths		Deaths		Year/Year
Gold	85		78		8
Platinum	36		42		14
Coal	20		16		20
Other	30		28		6
Total	171		164		4

Actual **Fatalities** & **Injuries** per commodity (2008 vs 2009)

Commodity	Fatalities*		Injuries*	
	Actual		Actual	
	1 Jan – 31 Dec 2008	1 Jan – 31 Dec 2009	1 Jan – 31 Dec 2008	1 Jan – 31 Dec 2009
Total	171	164	1 936	1 620
Gold	85	78	1936	1620
Coal	20	16	332	284
Platinum	36	42	1221	1241
Other	30	28	259	284

Actual Fatalities & Injuries per region (2008 vs 2009)

Region	Fatalities*		Injuries*	
	Actual		Actual	
	1 Jan – 31 Dec 2008	1 Jan – 31 Dec 2009	1 Jan – 31 Dec 2008	1 Jan – 31 Dec 2009
Total	171	164	3748	3429
Western Cape	2	3	22	14
Northern Cape	6	4	57	55
Free State	18	20	472	400
Eastern Cape	0	0	11	8
Kwa Zulu Natal	2	9	31	50
Mpumalanga	27	25	471	350
Limpopo	8	5	188	202
Gauteng	58	43	862	713
North-West	50	55	1634	1637

Risk?



Why?

Historic overview

- 2005 CEO commitment
 - 2006 MOSH Task Force established
 - 2007 Adoption System developed
 - 2008 Adoption System piloted
 - 2009/2010 Learning Hub established
- We must learn from each other
 - Adoption, rather than sharing, is problem



Promote adoption

- **Executive involvement is key**
- **Leading practice review process**
 - Gold Producers' Committee is piloting
- **Establish Communities of Practice for Adoption**
 - Agreed topics for discussion
 - FOG: Regional COPAs
 - Noise and dust: Single COPA
- **Training of mine-level adoption coordinators**
 - Identification of senior people
 - Through COPA and learning managers

What is a COPA?

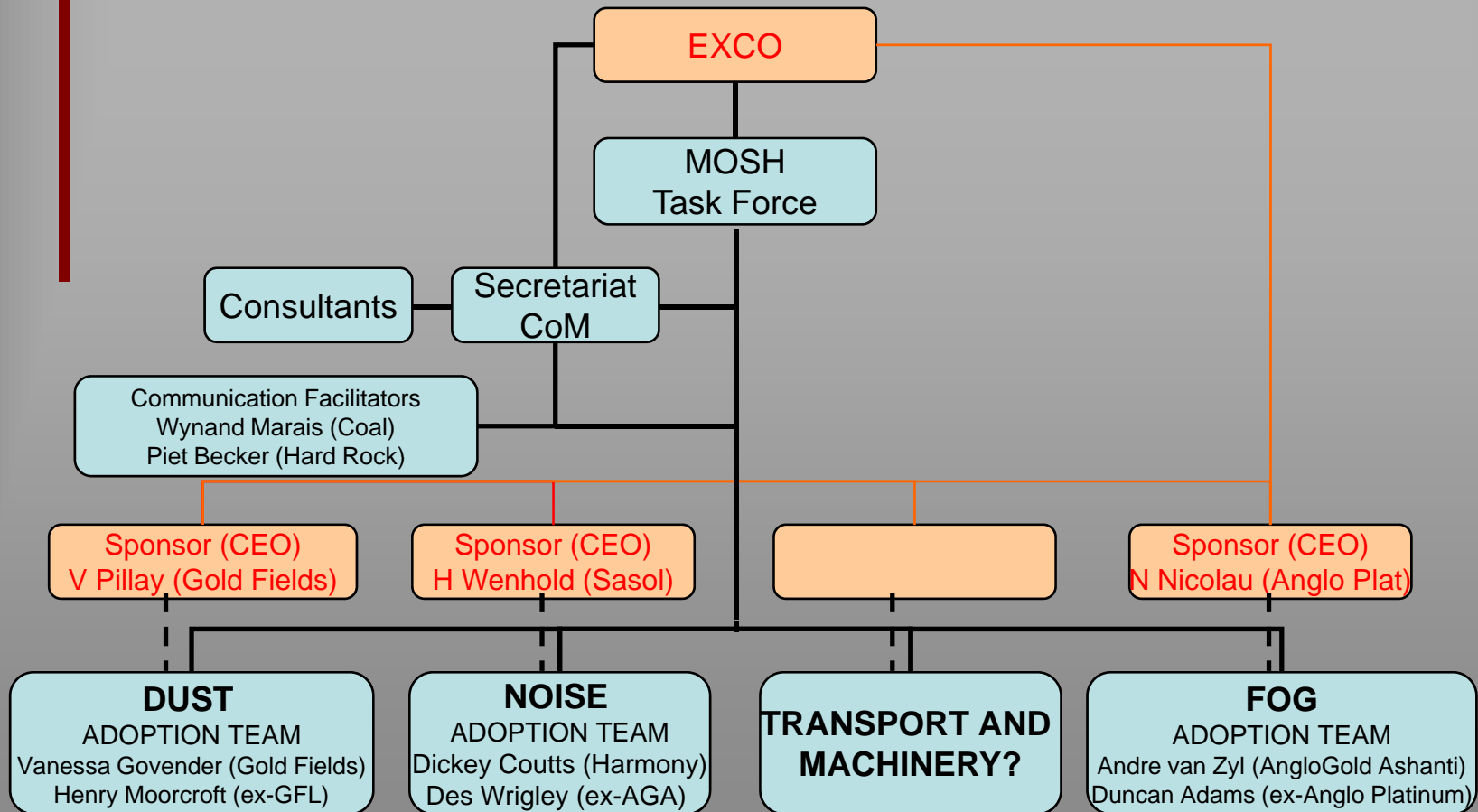
“A **COPA** is in essence a group of people who voluntarily agree to interact with each other in a relatively informal way to share ^{•Leading Practise} information helpful in overcoming implementation problems, and for bringing about continuous performance improvements”

Progress with pilot

	Identify (plan)	Test & document	Demonstrate	Promote adoption
Dust	√	√	√	>75 COPA members
Noise	√	√	√	>25 COPA members
FOG	√	√	√	>150 COPA members

Leading Practice Adoption

Support Structure



Voluntary company expert assistance for Adoption Teams

- Communities of Practice for Adoption



What makes this initiative different?

Adoption is all about people

- Extensive planning process to identify leading practices based on risk summary and review of SIMRAC work
- Comprehensive adoption guide
 - Based on source mine work and demonstration project
 - Including people issues
- Leadership behavior and behavioral communication plan
- Promote wide-spread adoption through:
 - Leading practice review process at mines
 - Community of Practice for Adoption (COPA)
 - Mine-level adoption coordinators

Behavioral communication

- Communication that aims to get people at all levels to appropriately modify their behavior
- Aim to do the right thing right
- Starts with interviews into what people think, believe, know, concerned about and why. etc.
- Plan explains why leading practice is necessary, how it will work, and benefits
 - Results: No negative perceptions, no vandalism of equipment

Challenges and spin-offs



- **Challenges**

- Production pressures
- High turn-over in management ranks
- No short cuts particularly on people issues
- Practice is part of system

- **Spin-offs**

- People's involvement in e.g. development of training materials
- Better stakeholder relations
- Suppliers coming to the party
- Stimulate innovation: measurement methods

From Pilot to Learning Hub

- Chamber EXCO 5-year commitment
- Strategies
 - Leading practice adoption with interaction with MHSC/suppliers/stakeholders
 - Support to small operators
 - Capacity-building

Stakeholders

- Mine Health and Safety Council
- Mine Health and Safety Inspectorate
- Mine Professional Associations
- Research institutions
- Suppliers
- Tripartite forums in regions, companies, etc.
- Unions

OHS results from piloting

- Noise
 - Electric drill: 5x quieter
- Dust
 - Fogger: Up to 90% reduction in harmful dust, depending on application
- FOG
 - Quality of examination and making safe improved



What do we ask from MMMA ?

	Does our operation do it?
• Provide energy and support	
• Encourage mines /operations to apply a leading practice review process	
• Encourage mines designate an adoption coordinator with clout, energy, time and understanding of adoption	
• Encourage mines/operations to join COPA, where applicable	
• Make learning part of Performance Management	

Conclusion

- The piloting was successful
- Improvement - health and safety, faster and more cost effective – 2013
- Contact details – MOSH Task Leaders
- *Communication* – pbecker@angloplat.com – 083 455 7194
- *FOG* – Avzyl@Anglogoldashanti.com – 082 782 4821
- *NOISE* – dlabuschagne@bullion.org.za – 082 828 1517
- *DUST* – Vanessa.Govender@Goldfields.co.za – 082 770 1681
- *WEB* - www.MOSH.co.za





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***Thanks for the
opportunity***

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