Anglo American Thermal Coal
Goedehoop Colliery
SACMA host mine presentation

About Goedehoop Colliery and the ‘Colour of Safety’
Goedehoop ‘parachute’ facts

- Mining boundaries cover an area of some 28 000 hectares
- Coal is mined through underground bord and pillar and opencast truck and shovel mining methods.
- 3 x Underground Mining complexes - Hope, Vlaklaagte & Simunye (10.5Mt ROM)
- 2 x Small opencast mining operations (minipits)
- 2 x Processing Plants - North & South (6.5Mt Saleable)
- 1500 permanent employees, +-1000 permanent contractors
- 99% Exported through Richards Bay
- Current life of mine runs until 2035 +

<table>
<thead>
<tr>
<th>GH Reserve (million tonnes)</th>
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<tr>
<td>- Total:</td>
<td>MTIS: 206.90</td>
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<table>
<thead>
<tr>
<th>GH Resource (million tonnes)</th>
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<tr>
<td>- Total:</td>
<td>MTIS: 272.21</td>
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Total = 310Mt
A little Goedehoop history

Conventional and Handgot mining methods

Bank No.2

Hope No.2

Springbok No.2

Hope No.5

Springbok No.5

Blesbok and Bank No.5

Vlak No.2

Vlak No.4

Bank 5 S  Springbok 5 S  Hope 5 S  Springbok 2 S  Hope 2 S  Schoonie 2 S  Bank 2 S  Vlaklaagte 2 S  Vlaklaagte 4 S

GH Established  CM's Intro  Merge


8 000 000

6 000 000

4 000 000

2 000 000

0  10 000 000  12 000 000  14 000 000
Governed by:
- Local and International legislation
- The Anglo American Safety, Occupational Health and Environmental Way
- Anglo Coal and Goedehoop Colliery based targets and objectives.
Against a declining frequency - severity remains a challenge
Goedehoop’s 2010 Safety Improvement Plan
The Color of Safety
High rate of accidents

Implemented Red/Green card system

Different form of VFL

Aim to change behavior

Team exercise & includes outside eyes (Industrial Blindness)

To get all employees to participate
“A change in our behavior is required…”
What is it about?

- Is all about **ADDRESSING UNSAFE ACTS** prior to the accident occurring.
- Is about identifying an **UNSAFE CONDITION**.
- The **PROACTIVE APPROACH** to safety is to become more visible and to have the effects of visibility felt by the workforce.
- It's about allowing the workforce to report and communicate to management.
- We must put emphasis on the **unsafe acts and conditions** and **ELIMINATE** them by immediate actions i.e. Stop and fix, coaching.
- It is about mutual participation “we are all in this game”
<table>
<thead>
<tr>
<th>The Structure</th>
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<tr>
<td>• Observation teams</td>
</tr>
<tr>
<td>• The tools</td>
</tr>
<tr>
<td>• Red card – Non-Compliance</td>
</tr>
<tr>
<td>• Green card - Compliance</td>
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<tr>
<td>• Yellow card - Open reporting</td>
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<tr>
<td>• Feedback meetings</td>
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<tr>
<td>• Stats feedback to safety</td>
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</table>
✓ BU Managers to form weekly teams
✓ “Outsiders,” i.e. Services department included as guest observers like before
✓ Teams to do at least one inspection per week
✓ All 3 shifts & weekend work to be covered
✓ Weekly reviews - Wednesdays at 06h00 at BU’s with HOD present
✓ Summaries to be forwarded to Safety dept.
✓ Summary & following week’s schedule will be discussed at GH focus + Dashboard
## The Observation Teams

### Fixed schedule

<table>
<thead>
<tr>
<th>Teams members are fixed</th>
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<table>
<thead>
<tr>
<th>Week 41</th>
<th>Week 42</th>
<th>Week 43</th>
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<tbody>
<tr>
<td>Name</td>
<td>Area</td>
<td>Name</td>
</tr>
<tr>
<td><strong>Night Shift Sections</strong></td>
<td></td>
<td></td>
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<tr>
<td>Shiftboss &amp; Chargehand</td>
<td></td>
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<tr>
<td>Soweto Sect 3</td>
<td>Emmanuel</td>
<td>Tankiso Sect 3</td>
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<tr>
<td>Masala Sect 3</td>
<td>Sarel</td>
<td>Sarel Sect 3</td>
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<tr>
<td><strong>Day Shift (and Bi-Weekly Maintenance)</strong></td>
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<tr>
<td>Shiftboss &amp; Chargehand</td>
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<tr>
<td>Alfred Sect 9</td>
<td>Ewi</td>
<td>Alfred Sect 9</td>
</tr>
<tr>
<td>Gerhard Sect 9</td>
<td>Sam</td>
<td>Gerhard Sect 9</td>
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<tr>
<td><strong>Day Shift (and Bi-Weekly Maintenance)</strong></td>
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<td>Shiftboss &amp; Chargehand</td>
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<td>Emmanuel Sect 3</td>
<td>Ewi</td>
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<td>Ewi Sect 3</td>
<td>Ewi</td>
<td>Ewi Sect 3</td>
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<tr>
<td><strong>Workshops</strong></td>
<td></td>
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<tr>
<td>12 GES Outby &amp; MO Outby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henry</td>
<td>Electrical</td>
<td>Henry</td>
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<tr>
<td>Doctor</td>
<td>Filter</td>
<td>Doctor</td>
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<td></td>
<td></td>
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<tr>
<td>13 Engineer &amp; Section Manager</td>
<td></td>
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<tr>
<td>Casper Le Cius</td>
<td>Boilermaker</td>
<td>Casper Le Cius</td>
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<tr>
<td>14 MCO &amp; Mining Planner</td>
<td></td>
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</tr>
<tr>
<td>Peter</td>
<td>Cables</td>
<td>Peter</td>
</tr>
<tr>
<td>Monica</td>
<td></td>
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<tr>
<td><strong>Daily Maintenance &amp; Belt Extensions</strong></td>
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<tr>
<td>10 Electrical Chargehand &amp; Belt Shiftboss</td>
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<td>Deon</td>
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<tr>
<td><strong>Outby Work</strong></td>
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<tr>
<td>9 Diesel Foreman &amp; Belt Shiftboss</td>
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<tr>
<td>Hennie</td>
<td>Hennie</td>
<td>Hennie</td>
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<tr>
<td>Julius</td>
<td>Julius</td>
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<tr>
<td><strong>Belt Work (Non-Belt Extension)</strong></td>
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<tr>
<td>11 Outby Foreman &amp; Outby Shiftboss</td>
<td></td>
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<tr>
<td>Kevin</td>
<td>Kevin</td>
<td>Kevin</td>
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<tr>
<td>Barry</td>
<td>Barry</td>
<td>Barry</td>
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<tr>
<td><strong>Saturday, Sunday, Public Holiday Work</strong></td>
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<tr>
<td>7 Standby Shiftboss &amp; Foreman</td>
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<tr>
<td><strong>Section Moves</strong></td>
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<tr>
<td>8 GES &amp; MO</td>
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The Tools

STOP, Danger, Don't go there, You behave unsafe

Caution, Warning, Something can go wrong

GO, Well done, Good effort, You can do it
Observation
• Non-compliance / unsafe act and conditions

Action
• STOP! Correct behaviour
• Coach
• Complete card
• Discuss at Wednesday meeting, decide on permanent action
• Give feedback to workforce
Observation
• Safe behaviour/Compliance

Action
• Discuss and praise
• Get commitment to work safe
• Green card discussed at Wednesday meeting
• Green card entered into lucky draw.
**Observation**
- All employees participate
- Report conditions and behaviour

**Action**
- Referee appointed in section
- Referee coordinate effort
- One Yellow card per shift
- End of half time complete one yellow card and throw in yellow box
- Yellow cards discuss for action on Wednesday meeting
The meeting

**Structure**
- Safety reps
- BU and Non-shaft personnel
- Management support

**Action**
- Red, Green and Yellow card feedback
- Decide on action
- Management complete compliance sheet and score
- Summery results send to Safety
- Capture on safety management database
Questions ?
Goedehoop Health Programs

- Annual medical examination **(COF)** for all employees & contractors at ACHH
- Continuous medical surveillance by local Clinic of employees diagnosed with Chronic illnesses (including HIV/AIDS monitoring)
- 98 % of employees have tested for VCT at Goedehoop
  - 84 % for 2010 thus far!
- 14 conversions, 1 x 1st time tester, total 310 HIV +ve and 136 on ART.
- Mail and Guardian ‘Investing in life’ award 2004
- Global Business Coalition 2005 Award (London)
- All employees on a medical aid (condition of employment)
- Contract with Careways to provide Employee Assistance Program services.
Health – Noise Milestones

From 2008: No new cases of Noise Induced Hearing Loss (NIHL) on occupationally exposed persons.

By 2013 – No machinery must emit noise > 110dB(A)

Machinery < 85 dB(A) – OUR GOAL!!!
FROM 2008, 95% of all personal exposure measurements < 0.1mg/m³ silica

By 2013 – No new cases of silicosis on previously unexposed persons
New employees after Dec 2008)
We are proudly ISO 14001: 2004 Certified & retained annually.
10 Performance Standards

- EMS
- S&EIA
- Rehabilitation
- Water
- Air
- Mine Closure
- Mineral Waste
- Non-Mineral Waste
- Hazardous Substances
- Biodiversity
Rehabilitation & Mine Closure

Springbok 1 Dump

Hope Dump

1978

1997

2000

2006
Goedehoop / Loskop-Black Footed Cat Breeding Program Success!! The birth of two Endangered Kittens on 02 December 2009.

Value Add of the Project:
- Endangered species assistance and building up a gene pool.
- Research and educational value to the public.
- Part of Goedehoop Colliery Biodiversity action Plan (BAP).
- Seen as a leader in biodiversity management
- Improved relations with Mpumalanga Parks Board.
Goedehoop Continuous Miner Sections

Section Key Facts:

- Mine to a Bord and Pillar pattern with between 7 and 9 roadways
- Requires a complement of 11 persons
  - 1 – Supervisory
  - 2 – Maintenance
  - 8 – Operations
- Produces at an average of 75 000 tons per month
- Ventilated at 40 m³/second
- Pillars provide primary support with 1.5m to 1.8m length chemical resin full column roofbolting providing secondary support system
- Coal is transported via conveyor belt system to Surface Plant
- Men and material are transported with a diesel fleet
  - Buses, LDV’s, LHD’s, Tractors and MPV’s

x 13 Sections

Roofbolter

Auxiliary Equip - LHD
Air view of Goede hoop’s South Plant

- Train loading
- Discard feed
- DMS plant
- Flotation plant
- ROM stocks
- Product stocks
- Hope # feed
- Vlaklaagte # feed
Social Performance Compliance

A significant part of our ‘license to operate’

- Guided by Mineral and Petroleum Resources Development Act, 2002 (Act No.28 of 2002 and Mining Charter

FOCUS AREAS OF CSI / LED AND SLP PROJECTS

- Education
- Welfare
- HIV and AIDS
- Sport, Recreation, Arts and Culture
- Environment and Safety
- Skills Development
- Social Labour Plan Projects
- Community Engagement/Stakeholders Relations

The Anglo Social Way

Anglo Engage with the Community

IDP/LED From the Municipality guides our implementation process

SEAT PROCESS
Community Development Projects Jan 2010 – April 2010

Education
- Teacher’s Development at Steve Tshwete Council
- 28 Teachers Trained in Maths, Science, Commerce and English
- 7 schools are attending Saturday Classes in Steve Tshwete
- 2009 education awards for the best performing learners and teachers in the area

Sport Development
- Anglo coal Flagship League is in progress and 40 teams of women and men are taking part in the league
- 30 administrators were trained on how to establish and manage sports teams.

HIV and AIDS Programme
- 50 Peer educators trained in the municipality
- 35 peer educators at workplace have been trained

Environmental Programme
- 10 schools went through environmental training programme
  (Teachers and learners at Steve Tshwete Municipality)

Safety Programme
- Anglo Coal Goedehoop donated traffic car
Thank you.