



## Mine Water Reclamation and Re-use Schemes – Obtaining Buy-In from Key Stakeholders

Wendy Mey  
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### Presentation Overview

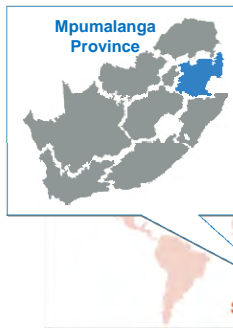


- Introduction
- Mine Water Reclamation in the Mpumalanga Coal Fields
- Mine Water Reclamation Project Endorsements and Approvals
- Funding Approval
- Licence and Permitting Approvals
- Closing Remarks
- Acknowledgements

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### Mpumalanga Coalfields

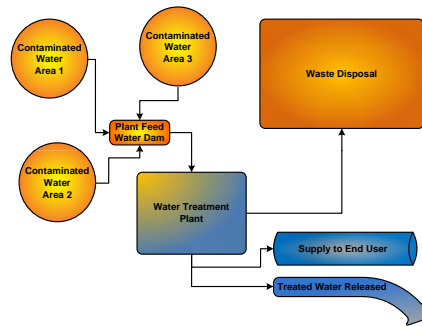


The Mpumalanga Coalfields are located in the Mpumalanga Province, South Africa.

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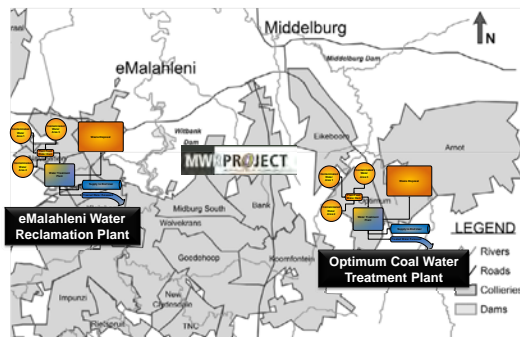
### Typical Mine Water Reclamation Scheme



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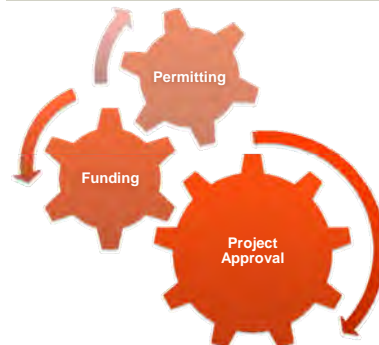
### Mine Water Reclamation Schemes in the Mpumalanga Coalfields



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### Mine Water Reclamation Project Approvals and Endorsements



Mine Water Reclamation Project approvals and endorsements are described in this paper in terms of **funding** and **permitting**.

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### Funding Approval



- The full impact of mining on the water resource was not understood or appreciated when mining started in the Mpumalanga Coalfields over a century ago.
- Despite the implementation of water management measures in terms of eliminating the impact, minimising the impact and re-use of impacted water, collieries in the Mpumalanga Coalfields are typically faced with a net surplus of water requiring treatment prior to discharge and/or additional re-use.
- Mine Water Reclamation and Re-Use Projects require substantial capital investment followed by operating and maintenance costs that extend into perpetuity.

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### Obtaining Buy-In for Funding



- The project must be aligned with the goals and objectives and business needs of the mining company;
- Widen the base of support for the project within the organisation;
- **At all levels entrench:**
  - An understanding of the water management problem and why the facility is required;
  - Acceptance of the establishment of the mine water reclamation and re-use scheme as the optimal solution to the problem;
  - Enthusiasm to see the project implemented.

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### Obtaining Buy-In for Funding

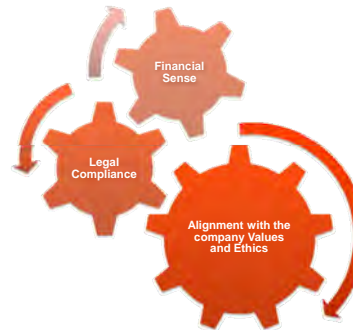


- Communicate project in the same language and terminology of the stakeholders;
- The project must not result in the creation of waste disposal sites that increase the risk of pollution to the environment and/or the closure liability of the mine.

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### Funding Approval



Funding Approval is dependant upon the motivation that the project:

- Makes financial sense;
- Enables the mine to maintain legal compliance;
- Is aligned with the mining company's business code of conduct.

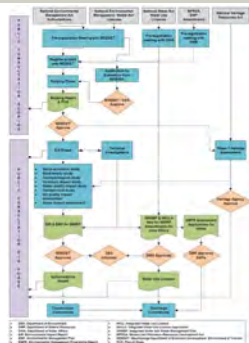
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### Licensing and Permitting Approvals



- In South Africa, the water, environment and mining sectors have relatively new enabling legislation and associated regulations.
- Mine Water Reclamation and Re-use Projects pose a challenge to the integration of the regulatory approval processes.



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### Obtaining Buy-In for Regulatory Approval



- There must be alignment between the project objectives and the regional and national strategies in place by the respective government departments;
- Mobilise and engage the different regulatory authorities in an integrated and coherent process;
- Ensure broad stakeholder involvement;
- Underpin the process with public participation and consultation with interested parties to secure public acceptance of the project.

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## Concluding Remarks



1

People may not get excited about the facts behind the idea, but they may embrace the story that surrounds the facts.

2

Understanding the audience is crucial to tailoring the motivation for project approval.

3

The narrative must be compelling and make intuitive sense to the stakeholder according to his or her view of the world.

## Acknowledgements



I would like to acknowledge my colleagues at BECSA who have worked tirelessly with me in translating the technical aspects of the mine water projects we have embarked on to date, into formats and terminology that has resulted in obtaining buy-in from our stakeholders.

I thank BHP Billiton Energy Coal for the opportunity to write and present this paper.