Keeping one step ahead: streamlining compliance data

Piers Higgs, Gaia Resources
Sam Nelson, Greenbase

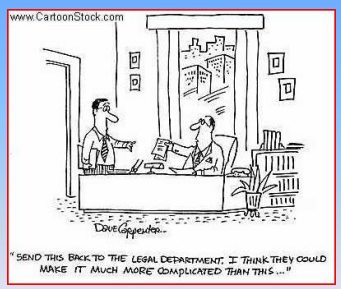
GREENBASE Pty Ltd GAIA RESOURCES

Introduction

- Why does compliance fail?
- In our experience, it fails at the operational level (the "coal face"), because of:
  - Business disruption from uncoordinated introduction of new compliance burdens
  - Staff isolation and misperceived social norms
  - Poor knowledge management

GREENBASE Pty Ltd GAIA RESOURCES

Introduction of New Burdens



GREENBASE Pty Ltd GAIA RESOURCES

Introduction of New Burdens

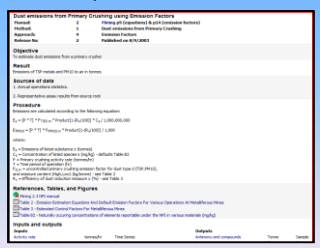
- Make the introduction coordinated

Phase	Exploration	Construction	Operation				Closure	Post-Closure
Compliance			Year 1	Year 2	Year 3	Year 4	Year 5		
EIA								
Initial EIA								
Monitoring								
Review								
Closure								
EEO								
AER								
- Disturbance								
- Conditions								
- Commitments								
- Water								
- Waste								
NPI								
GHG								

GREENBASE Pty Ltd GAIA RESOURCES

Introduction of New Burdens

- Map out the requirements



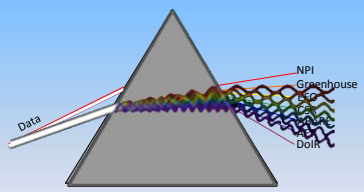
GREENBASE Pty Ltd GAIA RESOURCES

Isolation & Misperceived Norms

GREENBASE Pty Ltd GAIA RESOURCES

Isolation & Misperceived Norms

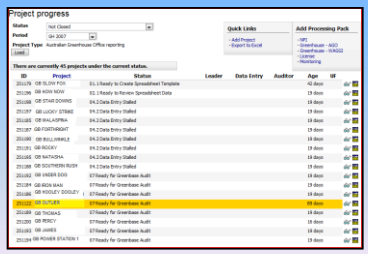
- Integrate with the rest of the operation



GREENBASE Pty Ltd GAIA RESOURCES

Isolation & Misperceived Norms

- Compare performance



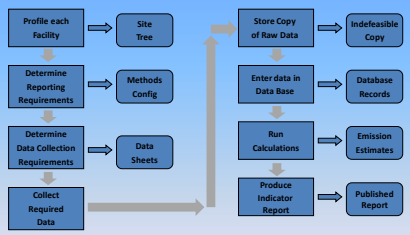
GREENBASE Pty Ltd GAIA RESOURCES

Poor Knowledge Management

- High staff turnover
- Role of consultants
- No systems to capture knowledge
- Poor data management practices

GREENBASE Pty Ltd GAIA RESOURCES

A Generic Process



GREENBASE Pty Ltd GAIA RESOURCES

Streamlining with Technology

- Now you're one step ahead via planning..
- Technology can assist you with streamlining via:
  - Data Collection
  - Data Management
  - Data Reporting
- Technology is not a solution in itself – it **enables a solution**

GREENBASE Pty Ltd GAIA RESOURCES

Data Collection

- PDAs can assist with data collection on a range of tasks
- **Hardware**: choose appropriately for the operating environment
- **Software**: consider compatibility with other systems

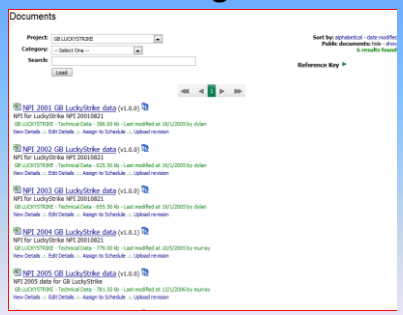
GREENBASE Pty Ltd GAIA RESOURCES

Data Management

- Various levels of investment – from standalone databases (eg. Microsoft Access) through to commercial databases (eg. Oracle)
- Web enabled databases provide more flexibility and multi-site access – and there are robust open source solutions out there
- Based on this, a number of on-line services exist…

GREENBASE Pty Ltd GAIA RESOURCES

Data Management



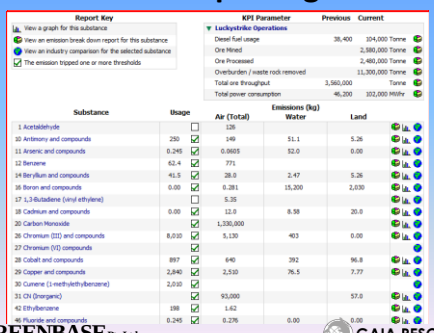
GREENBASE Pty Ltd GAIA RESOURCES

Data Reporting

- Data management systems can report as well! Build reports into your systems at the start.
- Consider all types of formats – XLS, PDF, RTF…
- Consider means other than tabular reporting – like Geographical Information Systems
- Maps can be 'plugged in' to web enabled databases

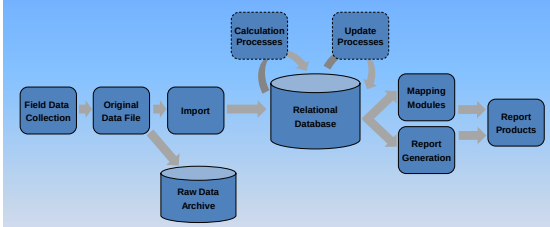
GREENBASE Pty Ltd GAIA RESOURCES

Data Reporting



GREENBASE Pty Ltd GAIA RESOURCES

A Generic System



GREENBASE Pty Ltd GAIA RESOURCES

Conclusion

- Plan effectively to stay **one step ahead**
- Technology can help to **streamline** data

BUT

- Use technology to **enable and empower people**

GREENBASE Pty Ltd GAIA RESOURCES