Gas and Strata Management System and Organizational Design for MG Complex

Context

Met Coal's EBITDA contribution to the Anglo American Burning Ambition is 26% of the target, the majority of which is delivered through taking the Moranbah/Grosvenor (MG) complex to 24MTPA ROM sustainable rates in 2022.

Production from the MG Complex is not currently stable, the main areas creating the instability stemming from gas, strata and structure issues in addition to equipment reliability. The current processes, systems, technology, and org design are not considered adequate to support a sustainable 24MTPA complex and as such require a full redesign.

The Anglo American Operating Model (AAOM) is currently being implemented in Met Coal as part of the Pathway to Excellence transformation program, and once implemented would trigger a process that would address these areas – the AAOM design themes are to produce stability, reduce variation, and provide clarity. The opportunity exists to accelerate this as part of the AAOM implementation, using the AAOM framework methodology for the task assignment itself, and designing the future state as an integrated part of the AAOM. The implementation of the Organizational Model has been integrated into the transformation program to ensure the most efficient and effective organizational structure for the AAOM design with clearly defined roles that reflect the appropriate Level of Work (LoW).

This task assignment will define the processes, systems and organization to address the current instability on gas, strata/structure. This process will not deliver any technical solutions or breakthrough, but will provide the platform to identify the issues, generate the workstreams to resolve and embed them in the business processes. Separate task assignments to resolve current technical challenges and management review routines that will link to the new processes.

Achieving MG24 requires a significant capital investment in the Coal Handling and Preparation Plant (CHPP), the timing of which necessitates a financial commitment at the end of 2020. This commitment will require confidence in Met Coal's ability to produce 24MTPA ROM from stable operations, and as such this work task assignment needs support this requirement from a quality and timing perspective.

<u>Purpose</u>

To design and implement the suite of systems and processes (including IM systems, technology) and Organizational requirements to eliminate unscheduled delays due to gas, strata and structure.

Quantity

This task requires a redesign approach to management processes and accountability for the management gas, strata and structure by taking a blank sheet of paper and designing for best practice to meet the requirements of the business going forward, particularly the requirement for 24MTPA ROM from MG. For clarity, the task is not to identify and close gaps in our current approach, but to design from new. The design will include:

Technical Standards & Governance

- The outputs from this task assignment needs to define the technical standards and governance that are considered best practice
- These technical standards / processes are to be documented in an Operations Management Standard or similar as is deemed appropriate

AAOM integration.

The new approach must be aligned with and integrated in the AAOM and is to be considered as an acceleration of the AAOM implementation to address a pressing business requirement. The solution must include the Operational Planning, Work Management, and Feedback elements of the AAOM. Below are some guidance / minimum requirements for how the outcomes should be integrated in to the AAOM:

Operational Planning

- Gas, strata, and structure should be embedded in to the BSP and set performance targets processes, with the measures for these processes linking directly back to the measures defined in Feedback.
- Any technical standards / solutions should be included in either Set Production Strategy or Set Service Strategy (ie what is our gas production strategy and the work packages to execute that strategy? What is our strata risk mitigation strategy? Etc...)
- Operating Master Schedule. For example, the lead times for gas drainage for a LW block should be on the OMS, including its anticipated date for acceptable gas levels required for development and LW activity in that area. Similarly strata and structure management for each block should be integrated in to the OMS for example a LW block will only be deemed ready for development and subsequently LW activity once all the gas / strata / structure requirements are approved at the appropriate level, and this process should be tracked via the OMS in our monthly routines

Work Management

- All gas, strata and structure related work is to be held in an appropriate Work Management platform – this may be SAP and/or some alternative that is fit for purpose for this type of work.
- The technical solutions / standards are to be embedded in all relevant work management activity, be that technical or operational.
- The ability to generate, approve, plan and execute any ad-hoc requirements through the work management process, including any link back to the measures and Out of Control Escalation Procedures.

Feedback

- Measures for gas, strata and structure management are to be developed so that the Out of Control Escalation Procedures are effective. The measures should include Effectiveness, Efficiency, and Sustainable elements, and provide a high level of transparency to all levels of the business on our performance in gas, strata and structure
- The Out of Control Escalation Procedures are to be clearly defined, and linked back to the IM Systems / Technology and People workstreams of this Task Assignment

Management Routines

- The appropriate information & decisions will be embedded to the various management routines that make up the AAOM
- Any management routines required outside of the AAOM are to be designed & implemented and mapped back to the AAOM routines.

IM Systems / Technology.

- Identify and recommend the IM Systems that are required to support the management of gas, strata and structure. This will include how we capture, store, process and access data in a way that drives the right decisions at the right level with the right amount of lead time
- Identify and recommend how to close the gaps in the data / data flows to enable informed decisions to be made
- Identify current and future technologies that Anglo needs to implement as part of its strategy to eliminate unscheduled delays in gas, strata, and structure. Initial estimates of cost, benefit, time & effort to implement, and technology readiness should be included.

Organization and Decision Making

- A clear understanding of the decisions that need to be taken in business as usual going forward, and authority levels / decision rights for the decisions are at the right level
- A review of the work that needs to be done and where the work needs to be completed, ie at site, BCO, or external
- Full review of the organization design to support business processes
- What roles are required to complete the work, what decision rights / authority levels the roles include, and what the capability / experience of the individuals in those roles needs to be to complete the work to the required standard and make the necessary decisions

Legislative requirements

- In all elements listed above, any legislative requirements are to be understood and embedded in the proposed approach
- Where legislative requirements currently inhibit our ability to manage gas, strata and structure more effectively (and safely), these opportunities are to be identified and included for addressing as part of this task assignment.

Quality

The AAOM is to be used to guide a structured approach to this task assignment. It is expected that this task is also run as a "mini transformation" project, and as such needs to include change management, project schedules, governance, organization design, human resources etc that is appropriate for a project of this magnitude.

The AAOM is not expected to provide the technical solutions for this task assignment, however the technical solutions arrived at from this task assignment are to be integrated and embedded in the AAOM.

The final process design and organization/accountability structure will be consistent with the AAOM/Organizational model development and implementation for the broader work streams in Met Coal

This is to be run as two integrated projects (Gas & Strata Management) following a standard system design process consistent with the AAOM and Organization principles. The two teams will be managed by two MCLT members that will report through to a steering committee as a subset of the MCLT lead by the CEO.

Resourcing

Steering Committee:

- Tyler Mitchelson Chair
- Glen Britton
- Warwick Jones
- Dan Reynolds
- Luca Rocchi
- Andrea Rutley
- Adriaan Esterhuizen
- Andrew Marxsen

Common Resources:

- Head of Transformation: Project set up and support
- AAOM PMO: Leandro Pires, Wessel Wessels, Marc Fickling
 - \circ $\;$ Process discipline and support to ensure consistency with AAOM/Org Model
- AAOM UG Implementation teams
 - Integration to current AAOM work
- Program Support Full Time resource 6 months
 - AAOM design expertise to support standard processes across the two integrated projects – ensure common processes and outcome consistent with AAOM design
- MNM & Grosvenor TSM, HRM, technical experts as needed
- BCO Technical Experts: Gas, Geoscience Strata, Geotech

Gas Management:

- MCLT Lead: Luca Rocchi
- Gas Management Project Manager: Dan Teal (external)

Strata Management:

- MCLT Lead: Andrea Rutley
- Strata Management Project Manager: Georgina Rees

<u>Timing</u>

The project is to commence immediately, with key milestones:

- Project Alignment and Set Up: by Feb 26th
- Detailed Project Scope and Timeline: March 25th
- Analysis of as-is state and root cause identification: April 15th
- Future state designed and validated June 22nd
- Implementation and stabilisation May to December 5th (anticipates some early wins in Q2)

AAMC.001.031.0151

The Steering team with begin with a weekly cadence during the set up phase and then determined frequency required.